

# 98th & 99th Avenue North - Public Utilities Renewal

Located in Collier County, Florida  
Section 28, Township 48 South, Range 25 East.

Collier County Project No:

98th Avenue North- Water and Wastewater: 70120.5.1

98th Avenue North - Stormwater: 60139.5.1

99th Avenue North - Water and Wastewater: 70120.5.2

99th Avenue North - Stormwater: 60139.5.2

Bid Plans

Plans Prepared For:



Engineering and Project Management Division  
Senior Project Manager: Diana Dueri, PMP  
3339 Tamiami Trail E  
Suite 303  
Naples, FL 34112  
Tel: (239) 252-4218  
Fax: (239) 252-3989

**GOVERNING SPECIFICATIONS:**

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, F.D.O.T. DESIGN STANDARDS DATED F.Y. 2020-2021, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED F.Y. 2020-2021.

COLLIER COUNTY UTILITY STANDARDS MANUAL, DATED JULY, 2018



Know what's below.  
Call before you dig.



**Location Map**

N.T.S.

Prepared by:



Civil Engineers • Land Surveyors • Planners • Landscape Architects  
Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 2600266  
Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

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

**Sheet Index**

Sheet Number	Sheet Title
1	Cover Sheet
2	General Notes
3	General Notes
4	Index Sheet - Utility Improvements
5	Utility Improvements: 98th Ave. N. - Utility Plan & Profile
6	Sta. 0+00.00 to 6+00.00
7	Sta. 6+00.00 to 12+00.00
8	Sta. 12+00.00 to 18+00.00
9	Sta. 18+00.00 to 24+00.00
10	Sta. 24+00.00 to 30+00.00
11	Sta. 30+00.00 to 36+00.00
12	Sta. 36+00.00 to 42+00.00
13	Sta. 42+00.00 to 48+00.00
14	Sta. 48+00.00 to 52+00.00
15	Utility Improvements: 99th Ave. N. - Utility Plan & Profile
16	Sta. 0+00.00 to 6+00.00
17	Sta. 6+00.00 to 12+00.00
18	Sta. 12+00.00 to 18+00.00
19	Sta. 18+00.00 to 24+00.00
20	Sta. 24+00.00 to 30+00.00
21	Sta. 30+00.00 to 36+00.00
22	Sta. 36+00.00 to 42+00.00
23	Sta. 42+00.00 to 48+00.00
24	Sta. 48+00.00 to 52+00.00
25	Utility Improvements: 6th St. N. - Utility Plan & Profile
26	Sta. 0+00.00 to 5+00.00
27	Sta. 5+00.00 to 9+90.00
28	Utility Improvements: 7th St. N. - Utility Plan & Profile
29	Sta. 0+00.00 to 5+00.00
30	Sta. 5+00.00 to 9+90.00
31	Utility Improvements: 8th St. N. - Utility Plan & Profile
32	Sta. 0+00.00 to 5+00.00
33	Sta. 5+00.00 to 9+90.00
34	Stormwater Improvements
35	Index Sheet - Stormwater Improvements
36	Stormwater Improvements: 98th Ave. N. - North Drainage Plan & Profile
37	Sta. 0+00.00 to 6+00.00
38	Sta. 6+00.00 to 12+00.00
39	Sta. 12+00.00 to 18+00.00
40	Sta. 18+00.00 to 24+00.00
41	Sta. 24+00.00 to 30+00.00
42	Sta. 30+00.00 to 36+00.00
43	Sta. 36+00.00 to 42+00.00
44	Sta. 42+00.00 to 48+00.00
45	Sta. 48+00.00 to 52+00.00
46	Stormwater Improvements: 99th Ave. N. - North Drainage Plan & Profile
47	Sta. 0+00.00 to 6+00.00
48	Sta. 6+00.00 to 12+00.00
49	Sta. 12+00.00 to 18+00.00
50	Sta. 18+00.00 to 24+00.00
51	Sta. 24+00.00 to 30+00.00
52	Sta. 30+00.00 to 36+00.00
53	Sta. 36+00.00 to 42+00.00
54	Sta. 42+00.00 to 48+00.00
55	Sta. 48+00.00 to 52+00.00
56	Stormwater Improvements: 98th Ave. N. - South Drainage Plan & Profile
57	Sta. 0+00.00 to 6+00.00
58	Sta. 6+00.00 to 12+00.00
59	Sta. 12+00.00 to 18+00.00
60	Sta. 18+00.00 to 24+00.00
61	Sta. 24+00.00 to 30+00.00
62	Sta. 30+00.00 to 36+00.00
63	Sta. 36+00.00 to 42+00.00
64	Sta. 42+00.00 to 48+00.00
65	Sta. 48+00.00 to 52+00.00
66	Stormwater Improvements: 6th St. N. - West Drainage Plan & Profile
67	Sta. 0+00.00 to 5+00.00
68	Sta. 5+00.00 to 9+90.00
69	Stormwater Improvements: 6th St. N. - East Drainage Plan & Profile
70	Sta. 0+00.00 to 5+00.00
71	Sta. 5+00.00 to 9+90.00
72	Stormwater Improvements: 7th St. N. - West Drainage Plan & Profile
73	Sta. 0+00.00 to 5+00.00
74	Sta. 5+00.00 to 9+90.00
75	Stormwater Improvements: 7th St. N. - East Drainage Plan & Profile
76	Sta. 0+00.00 to 5+00.00
77	Sta. 5+00.00 to 9+90.00
78	Grading and Paving Improvements
79	Index Sheet - Grading and Paving Improvements
80	Grading and Paving Improvements: 98th Ave. N. - Grading and Paving Plan
81	Sta. 0+00.00 to 12+00.00
82	Sta. 12+00.00 to 24+00.00
83	Sta. 24+00.00 to 36+00.00
84	Sta. 36+00.00 to 48+00.00
85	Sta. 48+00.00 to 52+00.00
86	Grading and Paving Improvements: 99th Ave. N. - Grading and Paving Plan
87	Sta. 0+00.00 to 12+00.00
88	Sta. 12+00.00 to 24+00.00
89	Sta. 24+00.00 to 36+00.00
90	Sta. 36+00.00 to 48+00.00
91	Sta. 48+00.00 to 52+00.00
92	Grading and Paving Improvements: 6th St. N. - Grading and Paving Plan
93	Sta. 0+00.00 to 5+00.00
94	Grading and Paving Improvements: 7th St. N. - Grading and Paving Plan
95	Sta. 0+00.00 to 5+00.00
96	Grading and Paving Improvements: 8th St. N. - Grading and Paving Plan
97	Sta. 0+00.00 to 5+00.00
98	Grading and Paving Improvements: 98th Ave. N. - Grading and Paving Plan
99	Sta. 0+00.00 to 12+00.00

**Sheet Index**

Sheet Number	Sheet Title
92	Water Details
93	Sanitary Sewer Details
94	General Details
95	Miscellaneous Details
96	Miscellaneous Details
97	Miscellaneous Details
98	Signing and Pavement Marking Details
99	Signing and Pavement Marking Details



Digitally signed by Justin A. Frederiksen, P.E.  
Date: 2023.05.03 08:03:42 -04'00'

Approved By:

JUSTIN A. FREDERIKSEN, P.E.  
O. GRADY MINOR & ASSOC., P.A.  
3800 VIA DEL REY  
BONITA SPRINGS, FL 34134  
FLORIDA P.E. LICENSE NO. 66086  
EB/LB 0005151



98th & 99th Avenue North  
Public Utilities Renewal

SUBMITTAL Bid

DATE: MARCH, 2022  
FILE NAME: CCU285 98th-99th - COVER.DWG  
JOB CODE: CCU285  
SHEET NUMBER 1 OF 99



**GENERAL NOTES:**

- ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D. 29).
- THE CONTRACTOR SHALL POT HOLE TO LOCATE (HORIZONTALLY AND VERTICALLY) ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND PROVIDE IN WRITING ANY DISCREPANCIES TO THE COUNTY. EXTREME CAUTION TO BE USED WHEN EXCAVATING, AS NUMBER AND LOCATION OF EXISTING UTILITIES ARE BASED ON RECORD INFORMATION THAT HAS NOT BEEN FIELD VERIFIED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY DURING CONSTRUCTION TO PROTECT ANY EXISTING UTILITIES. DAMAGE TO EXISTING UTILITIES AND PROPERTY DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE COUNTY.
- THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY OWNERS PRIOR TO THE BEGINNING OF CONSTRUCTION AND COORDINATE WITH ALL UTILITY OWNERS IN THE AREA PRIOR TO AND DURING CONSTRUCTION. THE UTILITY OWNERS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:  

SERVICE PROVIDER	UTILITY COMPANY	TELEPHONE/EMAIL
ELECTRIC	FLORIDA POWER & LIGHT (24 HOUR EMERGENCY)	239-353-6047
TELEPHONE	CENTURY LINK / LUMEN	(239) 336-2030 / relocations@centurylink.com
CABLE TV	COMCAST	(239) 318-1524
UNDERGROUND FACILITY LOCATION SERVICES	SUNSHINE ONE CALL	811 or 1-800-432-4770
WASTEWATER	COLLIER COUNTY	(239) 252-6886
WATER	COLLIER COUNTY	(239) 252-6245
GAS	TECO ENERGY	(239) 313-8554
COMMUNICATIONS	CROWN CASTLE FIBER	(239) 410-4220
COMMUNICATIONS	SUMMIT BROADBAND	(239) 404-8289
STORMWATER	COLLIER COUNTY	(239) 252-6924
- EXISTING FACILITIES INCLUDING DRIVEWAYS, SIDEWALKS, UTILITIES AND OTHER EXISTING FACILITIES SHALL BE RESTORED TO A CONDITION EQUAL OR BETTER THAN WHAT EXISTED PRIOR TO COMMENCING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER, TO THE SATISFACTION OF THE COUNTY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE/REPAIR ANY EXISTING LANDSCAPING/PRIVATE IMPROVEMENTS WITHIN THE R/W, E.G. SOD, BUSHES, AND TREES, SPRINKLER PIPING, SPRINKLER HEADS, IRRIGATION SYSTEMS, AND FENCING THAT MAY HAVE BEEN DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COSTS TO THE OWNER. CONTRACTOR TO REPLACE OR REPAIR DAMAGED PROPERTY OR IMPROVEMENTS TO A CONDITION EQUAL TO OR BETTER THAN EXISTED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL TEMPORARILY CONNECT IRRIGATION COMPONENTS DURING CONSTRUCTION TO ENSURE IRRIGATION SYSTEMS CONTINUED USE DURING CONSTRUCTION.
- ANY SURVEY MONUMENTS INCLUDING PROPERTY CORNERS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. IF A MONUMENT IS IN DANGER OF BEING DISTURBED, THE CONTRACTOR SHALL PROPERLY REFERENCE ITS LOCATION AND RESET THE MONUMENT AS REQUIRED BY THE CONTRACTOR'S FLORIDA LICENSED SURVEYOR, AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS REQUIRED TO ADJUST ALL VALVE BOXES, MANHOLE RIMS, GRATES, ETC. AS NECESSARY TO MATCH PROPOSED GRADES. PAVEMENT AROUND VALVES, MANHOLES, AND METER BOXES SHALL BE FLUSH WITH ACCESS TO ALL UTILITIES MAINTAINED AT ALL TIMES. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK AS THE COST IS INCIDENTAL TO THE COST OF CONSTRUCTION.
- CONTRACTOR SHALL RELOCATE OR ADJUST MAILBOXES, MANHOLES, VALVES, GRATES, SIGNS, ETC. IN CONFLICT WITH THE PROPOSED CONSTRUCTION AND SHALL REPAIR, ADJUST, AND/OR REPLACE ITEM AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. MAILBOXES REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE AT A MINIMUM TEMPORARILY REINSTALLED AND/OR REPLACED PER FDOT STANDARD INDEX NO. 532 OR TO MATCH THE PRECONSTRUCTION CONDITION AS APPROVED BY THE OWNER. TEMPORARILY REPLACED AND/OR REINSTALLED MAILBOX SHALL BE INSTALLED PER USPS GUIDELINES (41-45" ABOVE GRADE TO BOTTOM OF MAILBOX WITH THE FRONT OF THE MAILBOX 6-8" FROM THE EDGE OF PAVEMENT).
- THE CONTRACTOR SHALL NOTIFY THE COUNTY PROJECT MANAGER OF ANY ENCROACHMENT ONTO PRIVATE PROPERTY A MINIMUM OF 14 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL NOTIFY COLLIER COUNTY UTILITIES DEPARTMENT AT LEAST 10 CALENDAR DAYS IN ADVANCE OF ALL PLANNED SERVICE INTERRUPTIONS & REQUESTS FOR VALVE OPERATION, AND RECEIVE COUNTY PROJECT MANAGER'S APPROVAL BEFORE PROCEEDING WITH PLANNED INTERRUPTIONS. ONLY COUNTY EMPLOYEES ARE PERMITTED TO OPERATE VALVES.
- THE CONTRACTOR SHALL PROVIDE A 10 DAY WRITTEN NOTICE TO THE ENGINEER OF RECORD, OWNER'S CEI REPRESENTATIVE, AND COLLIER COUNTY PROJECT MANAGER PRIOR TO THE FOLLOWING ACTIVITIES:
  - COMMENCEMENT OF CONSTRUCTION
  - CHANGES TO APPROVED SCHEDULES, SUBCONTRACTORS, AND RESIDENT SUPERINTENDENT
  - WATER SYSTEM
    - HOT TAPS
    - PRESSURE TESTS
  - CHLORINATION OF WATER MAINS
  - FLUSHING
  - BACTERIOLOGICAL SAMPLING
  - FINAL CONNECTION OF NEW MAINS
  - BEGINNING AC PIPE REMOVAL
  - FINAL ABANDONMENT OF EXISTING MAINS
  - WATER SERVICE AND WATER METER SWITCH OVER
  - BACKFLOW DEVICE INSTALLATION
  - WASTEWATER SYSTEM
    - TESTING OF BYPASS PUMP STATION
    - INFILTRATION/EXFILTRATION TESTS
    - LAMPING OF SEWER LINE
    - TELEVISION VIDEO TAPING OF SEWER LINES
- CONTRACTOR TO PROVIDE SILT FENCE, STACKED SYNTHETIC BALES AND OTHER APPROPRIATE MEASURES TO EFFECT THE FILTRATION OF SURFACE WATER FLOWS AND TO PROVIDE EROSION PROTECTION DURING CONSTRUCTION ACTIVITIES. PROTECTION IS TO BE MAINTAINED DURING THE CONSTRUCTION PERIOD UNTIL DISTURBED SOILS HAVE BEEN STABILIZED WITH GRASS OR SUITABLE EROSION PROTECTION TREATMENT.
- EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
- SHOP DRAWINGS FOR ANY EQUIPMENT AND MATERIAL MUST BE APPROVED BY EOR AND COLLIER COUNTY PRIOR TO FABRICATION AND INSTALLATION.
- CONTRACTOR SHALL RETAIN, ON THE WORK SITE, COPIES OF ALL PERMITS NECESSARY FOR CONSTRUCTION.
- CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER OF RECORD AND COUNTY PROJECT MANAGER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS. ALL PROPOSED AND APPROVED DEVIATIONS SHALL BE AT NO ADDITIONAL COST TO THE COUNTY.
- CONTRACTOR SHALL REPORT ALL FIELD CHANGES TO THE ENGINEER OF RECORD, CEI REPRESENTATIVE, AND COUNTY PROJECT MANAGER WITHIN 24 HOURS.
- CLEARING AND GRUBBING SHALL BE LIMITED TO THE RIGHT-OF-WAY ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL AREAS DISTURBED BY THEIR WORK. ALL DISTURBED AREAS SHALL BE SODDED TO MATCH EXISTING CONDITIONS WITH SOD SET NO MORE THAN 1/2" BELOW ADJACENT DRIVEWAYS. WHERE NEW SOD IS INSTALLED, THE YARD WILL FIRST BE EVALUATED BY CONTRACTOR, PROJECT CEI INSPECTOR, AND COLLIER COUNTY REPRESENTATIVE TO DETERMINE THE PERCENTAGE OF COVERAGE AND SPECIES OF SOD INSTALLED IN THE SUBJECT LAWN. (SEE PRECONSTRUCTION ASSESSMENT FORM). IF THE EXISTING LAWN HAS 50% OR GREATER MAJORITY OF ONE SPECIFIC SOD SPECIES, THEN THAT SPECIES WILL BE REINSTALLED IN DISTURBED AREAS. IF THERE IS ANY QUESTION CONCERNING SOD TYPE TO BE USED, THE CONTRACTOR SHALL COORDINATE WITH COUNTY AND/OR PROPERTY OWNER. NEWLY INSTALLED SOD SHALL BE WATERED UNTIL ESTABLISHED/ROOTED. IF SOD IS REQUIRED TO BE REINSTALLED DURING THE COURSE OF CONSTRUCTION FOR WHATEVER REASON, CONTRACTOR SHALL BE REQUIRED TO WATER REINSTALLED SECTIONS UNTIL THEY ARE ESTABLISHED/ROOTED.
- AFTER SUBSTANTIAL COMPLETION AND PRIOR TO FINAL COMPLETION, THE CONTRACTOR SHALL ACCURATELY RECORD AND PLOT THE LOCATIONS AND DEPTHS OF ALL IMPROVEMENTS INSTALLED ON A FINAL SET OF RECORD DRAWINGS WHICH SHALL BE DELIVERED TO THE ENGINEER OF RECORD, CEI REPRESENTATIVE, AND COLLIER COUNTY.

- SURVEY LAYOUT AND RECORD DRAWINGS ARE TO BE PERFORMED BY A FLORIDA LICENSED LAND SURVEYOR PROVIDED BY THE CONTRACTOR AND SHALL INCLUDE PROPERTY CORNERS AND RIGHT-OF-WAY LINES. ALL ELEVATIONS MUST REFER TO N.G.V.D.-29. AS-BUILTS/RECORD DRAWINGS SHALL INCLUDE VALVE & HYDRANT MANUFACTURER, SIZE, & MODEL NUMBER. IN ADDITION TO THE SURVEYED RECORD DRAWINGS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER A COMPLETE SET OF REDLINES DEPICTING ALL CHANGES MADE TO THE CONTRACT DRAWINGS.
- CONTRACTOR SHALL STAKE THE LOCATION OF EACH PROPERTY CORNER AT THE RIGHT-OF-WAY LINE ALONG THE ENTIRE PROJECT WITHIN 10 DAYS OF NTP AND MAINTAIN THE STAKES THROUGHOUT THE DURATION OF THE PROJECT.
- CONTRACTORS WILL BE RESPONSIBLE FOR STORING ALL MATERIALS FOR THE PROJECT, INCLUDING ALL MATERIALS PURCHASED BY COLLIER COUNTY IN A SECURED, FENCED IN STORAGE AREA. CONTRACTOR IS TO PROVIDE LEASE AGREEMENT WITH PROPERTY OWNER, RIGHT-OF-WAY PERMITS, AND TEMPORARY USE PERMITS TO THE ENGINEER AND COUNTY WITHIN TEN (10) DAYS OF THE ISSUED NOTICE TO PROCEED. NO MATERIAL MAY BE STORED WITHIN THE RIGHT-OF-WAY. ALL MATERIAL STORED SHALL BE COVERED, PER THE MANUFACTURER'S RECOMMENDATIONS AND COUNTY SPECIFICATIONS.
- ALL STORAGE LOTS USED FOR THE PROJECT MUST BE MAINTAINED DAILY INCLUDING, BUT NOT LIMITED TO; MOWING AND WEEDING, LITTER REMOVAL, FENCE AND SCREEN REPAIR AS NEEDED, DAILY SWEEPING AND DUST CONTROL, AND PERMIT RENEWAL AS REQUIRED.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING UTILITY SERVICE AT ALL TIMES DURING CONSTRUCTION WITHIN THE PROJECT LIMITS. THIS INCLUDES HAVING A SUPPLY OF REPAIR MATERIALS ONSITE THAT MATCHES EXISTING IN THE EVENT OF A BREAK.
- CONTRACTOR MUST PROVIDE A TWO (2) WEEK LOOK AHEAD FOR ALL CONSTRUCTION ACTIVITIES EVERY TWO (2) WEEKS AND ATTEND ALL MEETINGS AT THE COUNTY'S DISCRETION. ADDITIONALLY, THE CONTRACTOR SHALL PROVIDE AN UPDATED, COMPLETE PROJECT GANTT SCHEDULE WITH EVERY MONTHLY PAY APPLICATION.
- CONTRACTOR SHALL NOT LEAVE TRENCHES OR HOLES OPEN OVER NIGHT OR OVER WEEKENDS/HOLIDAYS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A THIRD-PARTY INDEPENDENT CONSULTANT (WITH 5 YEARS MINIMUM EXPERIENCE IN VIBRATION MONITORING) TO PERFORM VIBRATION MONITORING ADJACENT TO EXISTING HOMES AND STRUCTURES DURING ALL CONSTRUCTION ACTIVITIES. THE MONITORING EQUIPMENT SHALL BE LOCATED WITHIN THE EQUIPMENT MANUFACTURER'S ALLOWABLE TOLERANCE DISTANCE FROM CONSTRUCTION ACTIVITIES AT ALL TIMES. ALL MONITORING SHALL BE DONE AT THE LIMITS OF THE RIGHT-OF-WAY. REPORTS SHALL INCLUDE LOCATION OF THE EQUIPMENT, TIME, AND MAXIMUM PPV. EITHER ONCE PER DAY, IF THE VIBRATION MONITOR IS NOT RELOCATED, OR UPON EACH RELOCATION OF THE VIBRATION MONITORING DEVICE. UPON EITHER DETECTING VIBRATION LEVELS REACHING 0.5 INCHES PER SECOND OR DAMAGE TO THE STRUCTURE, IMMEDIATELY STOP THE SOURCE OF VIBRATIONS, BACKFILL ANY OPEN EXCAVATIONS, NOTIFY THE ENGINEER AND PROVIDE A CORRECTIVE ACTION PLAN FOR ACCEPTANCE BY THE ENGINEER. VIBRATION MONITORING AND REPORTING SHALL FOLLOW THE U.S. BUREAU OF MINES STANDARDS AND REPORTS SHALL BE SIGNED AND SEALED BY A STATE OF FLORIDA PROFESSIONAL ENGINEER AND DELIVERED WEEKLY TO THE COUNTY, EOR, AND CEI. THE CONTRACTOR'S THIRD-PARTY INDEPENDENT CONSULTANT SHALL BE THE ONLY PARTY ALLOWED TO DETERMINE THE PROPER LOCATION FOR MONITORING AND SETTING UP THE VIBRATION MONITORING EQUIPMENT. CONTRACTOR'S PAY APPLICATIONS SHALL BE REJECTED IF UP TO DATE SIGNED AND SEALED VIBRATION MONITORING REPORTS ARE NOT RECEIVED WEEKLY.
- ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
- WORK AREAS ARE TO BE CLEANED ON A DAILY BASIS INCLUDING, BUT NOT LIMITED TO LITTER COLLECTION, TO SWEEPING STREETS AND DAILY WATERING. (TO BE COMPLETED THROUGHOUT THE WORK DAY AS NEEDED), INCLUDING LOT STORAGE AREAS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING RIGHT-OF-WAY, TREE REMOVAL, AND DEWATERING PERMITS.
- ALL CONTRACTORS AND REPRESENTATIVES ON-SITE MUST HAVE COLLIER COUNTY CONTRACTOR IDENTIFICATION BADGES ON THEIR PERSON, CLEARLY DISPLAYED, AT ALL TIMES.
- AT THE CONCLUSION OF EACH WORK DAY, CONTRACTOR TO ENSURE ALL ROADS AND DRIVEWAYS ARE RETURNED TO AN OPERABLE MANNER.

**TRAFFIC CONTROL NOTES:**

- ACCESS ONTO EXISTING STREETS AND DRIVES SHALL BE MAINTAINED AT ALL TIMES TO LOCAL TRAFFIC, DELIVERY VEHICLES, POSTAL VEHICLES, EMERGENCY VEHICLES, PUBLIC TRANSPORTATION, SOLID WASTE & RECYCLING VEHICLES, AND PROPERTY OWNERS, RESPECTIVELY. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES ON PUBLIC OR PRIVATE ROADWAYS.
- TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH FDOT STANDARD PLANS, INDEX 102-600 SERIES.
- WHERE FLAGGER AND WORKER SIGNS ARE USED, THE SIGNS SHALL BE COVERED OR REMOVED DURING PERIODS WHEN CONSTRUCTION OPERATIONS ARE SUSPENDED SUCH AS NIGHTS, WEEKENDS, AND HOLIDAYS.
- PLACEMENT OF ALL CONSTRUCTION SIGNS SHALL BE FIELD LOCATED TO NOT BE IN CONFLICT WITH EXISTING SIGNS. EXISTING SIGNS NOT IN USE OR IN CONFLICT WITH LANE OR ROAD CLOSURE SHALL BE COVERED TEMPORARILY.
- LANE CLOSURES SHALL BE SCHEDULED AS FOLLOWS:
  - ONE TRAVEL LANE SHALL BE KEPT OPEN FOR EACH DIRECTION WITHIN THE WORK AREA THROUGHOUT THE DURATION OF CONSTRUCTION, EXCEPT WHEN A ROAD CLOSURE IS PERMITTED BY THE COUNTY.
  - THE LOCATION AND DURATION OF EACH LANE CLOSURE INCLUDING TURN LANES, SHALL BE APPROVED BY THE COUNTY NO WORK SHALL BE DONE REQUIRING A LANE CLOSURE BETWEEN THE FOLLOWING HOURS:
    - FROM 7:00 AM TO 9:00 AM, AND 4:00PM TO 6:00 PM, MONDAY THROUGH FRIDAY, UNLESS APPROVED BY COUNTY.
    - WEEKENDS, HOLIDAYS, AND SPECIAL EVENT DAYS, AS PERMITTED BY THE COUNTY.
    - EMERGENCIES AS DEEMED NECESSARY BY COLLIER COUNTY EMERGENCY MANAGEMENT, LAW ENFORCEMENT AUTHORITIES OR THE COUNTY
  - IF A ROAD CLOSURE IS AUTHORIZED BY COLLIER COUNTY, NO OTHER LANE BLOCKAGE IS ALLOWED WITHIN THE BLOCK OF THE ROADWAY BEING CLOSED.
- THE MINIMUM WIDTH OF ANY TRAVEL LANE AT ANY TIME SHALL BE 10 FEET.
- LEFT TURN LANES SHALL BE PROVIDED DURING ALL PHASES OF CONSTRUCTION WHERE A LEFT TURN LANE IS EXISTING.
- THE CONTRACTOR SHALL PHASE CONSTRUCTION OPERATIONS IN SUCH A WAY THAT WILL MAINTAIN EXISTING ACCESS TO ALL SIDE STREETS AND DRIVEWAYS AT ALL TIMES. A FLAGGER SHALL BE USED WHEN 2-WAY ACCESS, E.G. LANE CLOSURES TO A SIDE STREET IS NOT PROVIDED TO DIRECT VEHICLES ENTERING OR EXITING THE SIDE STREET. ADDITIONAL FLAGGERS MAY BE NECESSARY WHEN THE WORK ZONE INCLUDES A SIDE STREET.
- UTILITY RELOCATION WORK SHALL BE COORDINATED BY THE CONTRACTOR TO AVOID ANY CONFLICT WITH THE VARIOUS PHASES OF THE TRAFFIC CONTROL PLAN.
- EXISTING ROADWAY PATCHING SHALL BE COMPLETE IN CONJUNCTION WITH WATER, STORMWATER, AND WASTEWATER CONSTRUCTION. FINAL OVERLAY SHALL NOT BE STARTED UNTIL ALL TESTING OF WATER & WASTEWATER SYSTEMS ARE COMPLETED. NEW SERVICES (WATER & WASTEWATER) ARE INSTALLED, & EXISTING WATER, WASTEWATER, & STORMWATER MAINS ARE ABANDONED OR REMOVED. EXISTING PAVEMENT SHALL BE MILLED ADJACENT TO CURB, CUTTERS, & OTHER IDENTIFIED LOCATIONS. SEE STRIPING PLANS FOR STRIPING REQUIREMENTS. TEMPORARY STRIPING (PAINTED) SHALL BE INSTALLED IMMEDIATELY FOLLOWING OVERLAY. FOLLOWING 30 DAY ASPHALT CURING TIME, THE PERMANENT THERMO-PLASTIC STRIPING SHALL BE INSTALLED. CONTRACTOR SHALL FIELD VERIFY REQUIREMENTS WITH OWNER & COLLIER COUNTY RIGHT-OF-WAY PRIOR TO STRIPING.
- ALL SIGN RELATED WORK TO BE COORDINATED WITH FELIX BURGOS, 239-252-5179, TO MAINTAIN INTEGRITY OF OUR SIGN ASSET DATABASE. CONTRACTOR TO FOLLOW TRAFFIC OPERATIONS SIGNING AND PAVEMENT MARKINGS SPECIAL PROVISION DETAILS WHICH INDICATE USING A 2.5' X 2.5' GALVANIZED METAL SQUARE TUBULAR SIGN POST.
- THE CONTRACTOR SHALL REPLACE ALL SIGNS WITH NEW SIGNS, POSTS, AND HARDWARE TO MEET CURRENT COLLIER COUNTY AND FDOT SPECIFICATIONS/STANDARDS. ALL REMOVED SIGNS SHALL BE RETURNED TO COLLIER COUNTY TRAFFIC OPERATIONS AT 2885 HORSESHOE DRIVE SOUTH, NAPLES, FL 34104.

**DRIVEWAY NOTES:**

- CONSTRUCTION JOINTS SHALL BE PROVIDED DIRECTLY OVER CULVERT PIPES IF LESS THAN 9" OF COVER IS PROVIDED OVER CULVERT PIPES.
- EXISTING DRIVEWAY APRONS SHALL BE REMOVED & REPLACED AS SHOWN ON PLANS. CONCRETE DRIVE APRONS SHALL BE SAW CUT OR REMOVED TO CONSTRUCTION JOINT AS DIRECTED BY COLLIER COUNTY, CEI, AND/OR ENGINEER OF RECORD.
- EXISTING PAVER BLOCK DRIVES SHALL BE REMOVED & EXISTING PAVER BLOCKS STOCKPILED, SHRINK WRAPPED AND PROTECTED FROM DAMAGE ON SITE. UPON COMPLETION OF UTILITY IMPROVEMENTS AT SPECIFIC LOCATION, THE PAVER BLOCK DRIVE SHALL BE IMMEDIATELY RESTORED IN ACCORDANCE WITH THE REQUIREMENTS & SPECIFICATIONS OF THE COLLIER COUNTY ISSUED RIGHT-OF-WAY PERMIT. ANY DAMAGED PAVER BLOCKS SHALL BE REPLACED TO MATCH EXISTING.
- EXISTING GRAVEL, DIRT, & CONCRETE DRIVEWAYS SHALL BE RESTORED WITH REINFORCED CONCRETE TO THE EDGE OF THE RIGHT-OF-WAY, UNLESS OTHERWISE DIRECTED BY THE COUNTY. ASPHALT DRIVEWAYS SHALL BE REPLACED WITH ASPHALT. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS & SPECIFICATIONS OF THE COLLIER COUNTY RIGHT-OF-WAY PERMIT. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MINIMUM WIDTH AND TAPER CRITERIA AS REQUIRED AND MATERIALS OF CONSTRUCTION. GRADE OF DRIVEWAYS AND ADJACENT SURFACE SHALL BE ADJUSTED FOR DRAINAGE IMPROVEMENTS.
- ALL REMOVED DRIVEWAYS SHALL HAVE LIMEROCK, #57 STONE, OR TEMPORARY ASPHALT PLACED TO PROVIDE A STABILIZED SURFACE DURING CONSTRUCTION ON THE SAME DAY THE DRIVEWAY IS REMOVED. THE CONTRACTOR SHALL MAINTAIN THE TEMPORARY DRIVEWAY SURFACES THROUGHOUT THE DURATION OF CONSTRUCTION UNTIL THE DRIVEWAY SURFACES ARE REPLACED TO MATCH PRECONSTRUCTION CONDITIONS (OR BETTER).
- SOD SHALL BE PLACED SUCH THAT THE FINISHED (CUT) ELEVATION OF THE SOD IS LOWER THAN THE FINISHED ELEVATION OF ALL DRIVEWAYS, ROADWAYS, AND SIDEWALKS.

**STORMWATER NOTES:**

- THIS SET OF PLANS HAD BEEN PREPARED IN GENERAL ACCORDANCE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, LATEST EDITION.
- THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- THE OWNER HAS OBTAINED THE S.F.W.M.D. PERMIT AS REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN F.D.E.P. GENERIC STORMWATER NOI PERMIT FOR THE PROJECT & A COLLIER COUNTY RIGHT-OF-WAY PERMIT (COUNTY R.O.W HAS PRE-REVIEWED THE PLANS AND OWNER WILL PROVIDE SIGNED & SEALED COPIES FOR THE R.O.W. PERMIT). COPIES OF ALL PERMITS SHALL BE PROVIDED TO THE OWNER.
- FILL SHALL BE PROVIDED AS NECESSARY TO TRANSITION UP TO DRIVEWAYS, ADJACENT TO EXISTING DRAINAGE FEATURES (CATCH BASINS, DITCHES) AND TO MATCH EXISTING LAWN GRADES. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK, THE COST IS INCIDENTAL TO THE DRAINAGE IMPROVEMENT CONSTRUCTION.
- CONTRACTOR SHALL RELOCATE OR ADJUST UTILITY VALVES, ELECTRICAL POLES, AND FENCES IN CONFLICT WITH THE PROPOSED STORMWATER CONSTRUCTION. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK; THE COST IS INCIDENTAL TO DRAINAGE IMPROVEMENT CONSTRUCTION.
- WHERE NEW DRAINAGE STRUCTURES AND PIPES ARE INSTALLED, EXISTING SWALES SHALL BE REGRADED AS REQUIRED FOR A UNIFORM SLOPE OF NO GREATER THAN 6:1, UNLESS OTHERWISE NOTED.
- DRAINAGE SHALL GENERALLY CONFORM TO EXISTING GRADE AND SHALL NOT CAUSE RESTRICTIONS TO OVERLAND FLOW OF DIRECTED BY THE OWNER.
- ALL EXISTING CULVERT PIPES DESIGNATED TO REMAIN SHALL BE INSPECTED BY THE CONTRACTOR, COUNTY R/W, AND OWNER. ALL CULVERT PIPE SHALL BE CLEANED AS NECESSARY AND DIRECTED. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING EXISTING AND NEW CULVERT PIPE CLEAN OF ALL SILT UNTIL ACCEPTANCE OF THE PROJECT.
- ALL SWALE GRADES ARE FINISHED, SODDED GRADES.
- THE SLOPE OF ALL MITERED END SECTIONS (M.E.S.) ARE TO MATCH THE GRADED SLOPE OF THE ADJACENT DITCH BANK UP TO A MAXIMUM SLOPE OF 2.5 TO 1, HORIZONTAL TO VERTICAL.
- PIPE SOCK - SHALL BE DELIVERED AND INSTALLED PER FDOT SPECIFICATION 948-B - FILTER FABRIC SOCK FOR USE WITH UNDERDRAIN. FIELD REPAIRS TO THE SOCK SHALL BE MADE PER MANUFACTURER'S SPECIFICATIONS.
- ALL CATCH BASINS WILL INCLUDE A TWO (2) FOOT DEEP SUMP, UNLESS OTHERWISE DEPICTED.
- ALL CATCH BASIN GRATES WILL BE CAST IRON (UNLESS OTHERWISE SPECIFIED) WITH LOCKING CHAINS, IN ACCORDANCE WITH FDOT INDEX 425.
- EXISTING DRAINAGE STRUCTURES & PIPING WITHIN THE CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED IN THESE PLANS OR AS SPECIFIED BY THE ENGINEER. CARE SHALL BE TAKEN IN ALL WORK NEAR EXISTING FACILITIES.
- EXISTING DRAINAGE SWALES SHALL BE REGRADED AS INDICATED ON THESE PLANS & AS NECESSARY AS A RESULT OF THE UTILITY PLANS OR AS SPECIFIED BY THE ENGINEER. CARE SHALL BE TAKEN IN ALL WORK NEAR EXISTING FACILITIES.
- LD RIM ELEVATIONS DEPICTED IN THE DRAWINGS ARE APPROXIMATE, THE EXACT RIM ELEVATIONS SHALL BE FIELD DETERMINED PER THE MAXIMUM SLOPES AS DEFINED IN THE CONTRACT DOCUMENTS.



REVISION	DATE	DESCRIPTION

DESIGNED BY:	J.N.D.
DRAWN BY:	R.A.K.
APPROVED:	J.A.F.
JOB CODE:	CCU285
22X34 SCALE:	N/A
11X17 SCALE:	N/A



**GradyMinor**

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

Civil Engineers • Land Surveyors • Planners • Landscape Architects  
Cert. of Auth. EB 0005151    Cert. of Auth. LB 0005151    Business LC 26000266

Bonita Springs: 239.947.1144    [www.GradyMinor.com](http://www.GradyMinor.com)    Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**

---

GENERAL NOTES

---

ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY:	COLLIER COUNTY
SEC/TWN/RGE:	28/48/25
DATE:	MARCH, 2022
SUBMITTAL TYPE:	BID
SHEET	2 OF 99

JUSTIN A. FREDERIKSEN, P.E. FLORIDA P.E. LICENSE NO. 66086
---

C:\ENGINEERING\PROJ-ENG\CCU285\01DWGSS\SUBMITTALTYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - COVER.dwg 4/21/2023 11:14 AM



**WATER and WASTEWATER NOTES:**

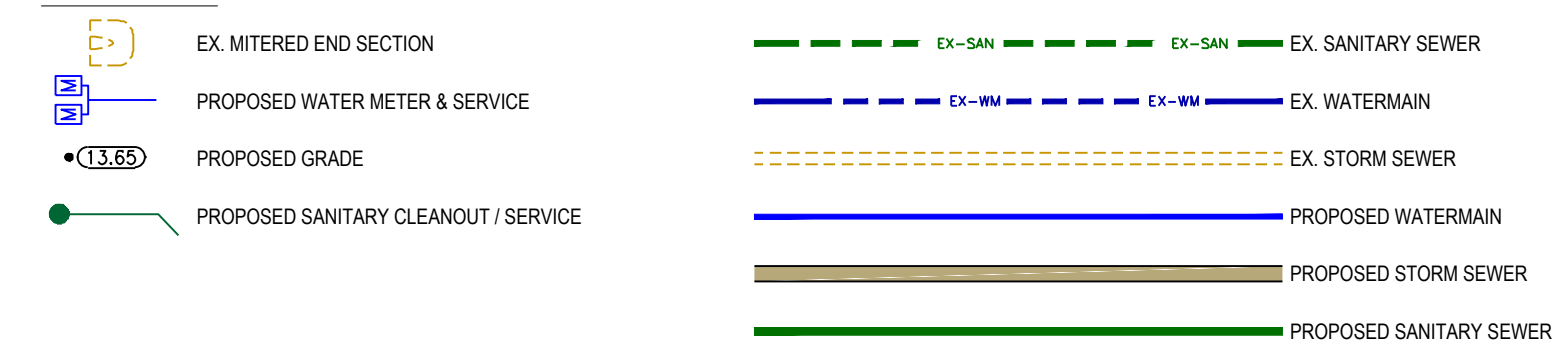
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC STANDARDS, (LATEST EDITION), COLLIER COUNTY'S DEVELOPMENT STANDARDS AND SPECIFICATIONS, AND COLLIER COUNTY WATER-SEWER DISTRICT UTILITIES STANDARDS MANUAL.
- OWNER HAS OBTAINED ALL F.D.E.P. WATER AND WASTEWATER CONSTRUCTION PERMITS.
- ALL COLLIER COUNTY WATER-SEWER DISTRICT UTILITIES (DESIGN CRITERIA, SPECIFICATIONS, AND DETAILS) ARE APPLICABLE TO THIS PROJECT AND ARE MADE PART OF THE CONTRACT DOCUMENTS BY REFERENCE TO CURRENT COUNTY UTILITY STANDARDS, LOCATED AT THE FOLLOWING WEB ADDRESS: <https://www.colliercountyfl.gov/government/public-utilities/water-sewer-district/engineering-and-project-management/resources> IN THE EVENT OF CONFLICT BETWEEN THE COUNTY UTILITY STANDARDS AND DRAWINGS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- ADJUST ALL WATER METER LOCATIONS TO PROPERTY LINE PER DETAIL W-12, LOCATED ON THE WATER DETAILS SHEET. CONTRACTOR SHALL AT NO ADDITIONAL COST HAVE A LICENSED PLUMBER RELOCATE SERVICE PIPING ON PRIVATE PROPERTY FROM EXISTING METER LOCATION TO PROPOSED METER LOCATION WITH SCH. 80 P.V.C. PIPING, MATCH EXISTING SIZE, 1" MINIMUM. ALL SERVICE PIPING UNDER DRIVEWAYS SHALL BE WITHIN A 4" SCH. 80 CASING.
- ALL VACANT PROPERTIES SHALL RECEIVE A SERVICE LINE AND METER BOX WITH A LOCKED CURB STOP IN THE METER BOX.
- ALL WATER SERVICES (METER, METER BOX, BACKFLOW, ETC.) SHALL BE LEVELED AND PLUMBED AFTER INSTALLATION. METER BOXES SHALL BE KEPT FREE OF DEBRIS AND METERS SHALL REMAIN ACCESSIBLE THROUGHOUT THE DURATION OF THE PROJECT. WATER SERVICE PIPING SHALL BE DEFLECTED/ADJUSTED AS NEEDED AROUND PROPOSED STORMWATER IMPROVEMENTS, INCLUDING STRUCTURES.
- NEW WATER MAIN AND SERVICE PIPING (FROM MAIN TO CURB STOP AT METER) SHALL BE CONSTRUCTED, PRESSURE TESTED, FULL BORE FLUSHED, & BACTERIOLOGICALLY CLEARED FROM F.D.E.P. CONTRACTOR SHALL COORDINATE ALL WATER SYSTEM SAMPLING WITH COUNTY. UPON F.D.E.P. CLEARANCE, WATER MAIN SHALL BE PLACED INTO SERVICE. NEW WATER SERVICES SHALL BE CONNECTED TO THE PRIVATE WATER SERVICE PIPING (COORDINATE TEMPORARY SHUTDOWNS WITH INDIVIDUAL OWNERS) ONCE THE WATER SYSTEM IS CLEARED FOR USE. EXISTING WATER MAINS SHALL REMAIN IN SERVICE FOR ONE (1) WEEK TO ALLOW VERIFICATION OF RECONNECTION OF ALL SERVICES (COUNTY WILL TEMPORARILY SHUT DOWN LINE FOR VERIFICATION). UPON VERIFICATION, CONTRACTOR CAN COMPLETE ABANDONMENT OF EXISTING WATER MAINS. PRIOR TO BEGINNING PRESSURE TESTING OF WATER MAINS, CONTRACTOR TO ENSURE ALL AIR HAS BEEN REMOVED FROM THE MAIN AND THE WATER MAIN HAS PASSED A TWO (2) HOUR MINIMUM PRETEST.
- WATER MAIN DISINFECTION SHALL BE PER AWWA C651 (CURRENT EDITION) AND COLLIER COUNTY TECHNICAL SPECIFICATION 025400, WHICH REQUIRES BACTERIAL SAMPLING POINTS AT THE BEGINNING OF EACH NEW MAIN TO BE CLEARED FOR USE, AT 1000-FOOT INTERVALS, AND ALL DEAD ENDS. PERMANENT SAMPLING POINTS ARE REQUIRED EVERY 3000 FEET OR ONE AT 2/3 OF THE LENGTH FROM THE POINT OF CONNECTION IF THE NEW WATER MAIN IS LESS THAN 3000 FEET LONG.
- ALL POTABLE LINES 4" OR LARGER SHALL BE AWWA C-900 OR DR-18 P.V.C., UNLESS OTHERWISE NOTED. ALL LINES SMALLER THAN 4" SHALL BE SCH 80 POTABLE WATER LINES LOCATED UNDER PAVEMENT AND NON-RESIDENTIAL DRIVEWAYS SHALL BE AWWA C-900, CLASS 200, DR18, UNLESS OTHERWISE NOTED. WATER SERVICES SHALL BE POLYETHYLENE ONE AND A HALF INCHES IN DIAMETER.
- CONTRACTOR SHALL USE 45° BENDS WITH MEGALUGS AT CONFLICTS WITH RESTRAINTS PER DETAIL G-4.
- NOT ALL PROPOSED BENDS ARE SHOWN IN THE PROPOSED WATER LINE. ADDITIONAL FITTINGS MAY BE REQUIRED TO BEND THE WATER LINE AS REQUIRED.
- PROPOSED FIRE HYDRANTS SHALL BE LOCATED AS SHOWN ON UTILITY DETAIL SHEETS. THE CONTRACTOR SHALL PROVIDE AND INSTALL REFLECTIVE PAVEMENT MARKERS PER COLLIER COUNTY STANDARDS AT PROPOSED FIRE HYDRANTS.
- THE TOP OF ALL WATER LINES SHALL BE LOCATED A MINIMUM OF 30" AND A MAXIMUM OF 48" BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED.
- ALL WATER SERVICE TAPING SADDLES SHALL BE STAINLESS STEEL FORD MODEL FS313 OR ROMAX MODEL 306.
- EXISTING ASBESTOS CEMENT (A.C.) PIPE IS TO BE REMOVED AND DISPOSED OF PER COLLIER COUNTY REQUIREMENTS AND AT AN APPROVED F.D.E.P. SITE. ALL PROCEDURES FOR EXCAVATION, LISTING OF SAFETY EQUIPMENT, TRACKING TO A LANDFILL, AND LOADING OF THE WATER MAIN SHALL BE PROVIDED TO THE COUNTY WASTE STAFF FOR APPROVAL PRIOR TO WORK STARTING ON THE PROJECT. EACH INDIVIDUAL PIECE OF EXISTING WATER MAIN SHALL BE INDIVIDUALLY DOUBLE WRAPPED PER COLLIER COUNTY STANDARDS.
- THE CONTRACTOR SHALL PLACE PROPOSED VALVES AS SHOWN. THE VALVE BOX SHALL NOT BE PLACED IN PAVEMENT OF DRIVEWAY AREAS, UNLESS OTHERWISE NOTED.
- AFTER SERVICES ARE CONNECTED TO A RESIDENCE, THE CONTRACTOR SHALL FLUSH THE SYSTEM USING A SPOIGT LOCATED ON THE OUTSIDE OF THE HOME, WITH THE PROPERTY OWNERS PERMISSION.
- IN CASE OF ANY SERVICE INTERRUPTION DUE TO THE CONTRACTOR'S ACTIVITIES, THE WATER DEPARTMENT WILL CALL THE CONTRACTOR, AND IF THEY DO NOT RESPOND VIA PHONE WITHIN 1 HOUR AND ARRIVE WITHIN THE SECOND HOUR, THE COUNTY WILL COMPLETE THE REPAIR AND INVOICE THE CONTRACTOR. THE CONTRACTOR WILL BE INVOICED ON A TIME AND MATERIAL (T&M) BASIS, WITH A MINIMUM OF 2 HOURS AT \$82 AN HOUR. PRIVATE WATER CHARGES AS A RESULT OF THE CONTRACTORS WORK SHALL BE PAID FOR BY THE CONTRACTOR.
- LOCATION MARKERS ARE TO BE PLACED AT THE FOLLOWING LOCATIONS:
  - EVERY ON HUNDRED (100) FEET ALONG THE PROPOSED WATER MAIN
  - ONE (1) AT EVERY SERVICE LATERAL END
  - ONE (1) AT EVERY FITTING, BEND, OR CHANGE IN ALIGNMENT, AND VALVES
  - TWO (2) ON LONG SERVICES ONE AT MAIN, ONE NEAR ROAD
  - ONE (1) ON SHORT SERVICES NEAR THE ROAD
- NOT ALL KNOWN EXISTING SANITARY LATERALS AND WATER SERVICES ARE SHOWN. THE CONTRACTOR SHALL RECONNECT ALL EXISTING LATERALS AND SERVICES WHETHER SHOWN OR NOT. ALL LATERALS AND SERVICES SHALL BE REPLACED WITH NEW MATERIAL TO THE RIGHT-OF-WAY AND INCLUDE A CLEANOUT ON EACH SEWER LATERAL. WHEN CLAY LATERALS ARE ENCOUNTERED, THEY SHALL BE REPLACED WITH P.V.C. UNTIL PVC IS ENCOUNTERED OR TO THE HOUSE CLEANOUT, AS DIRECTED BY THE EOR AND COUNTY. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER AND COLLIER COUNTY FOR ACCESS TO PRIVATE PROPERTY VIA SIGNED RIGHT OF ENTRY FORMS.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL LOCATE (HORIZONTAL & VERTICAL) ALL EXISTING SANITARY SEWER LATERALS AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCY BETWEEN THE LOCATIONS DEPICTED IN THE DRAWINGS. PROPOSED SANITARY SEWER LATERAL LOCATIONS SHALL BE MODIFIED BY THE CONTRACTOR AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. ADDITIONALLY, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ANY CONFLICTS BETWEEN THE EXISTING OR PROPOSED SANITARY SEWER LATERALS AND EXISTING OR PROPOSED WATER, WASTEWATER, OF STORMWATER FACILITIES (INCLUDING STORMWATER STRUCTURES). PROPOSED FACILITIES SHALL BE ADJUSTED BY THE CONTRACTOR AS NECESSARY TO AVOID EXISTING OR PROPOSED SANITARY SEWER LATERALS AT NO ADDITIONAL COST TO THE OWNER. MOLDED P.V.C. FITTINGS SHALL BE USED TO CONNECT THE SERVICE LATERAL TO THE EXISTING P.V.C. PRIVATE SEWER SERVICE. NEOPRENE BOOTS MAY ONLY BE USED IF THE PRIVATE SEWER LATERAL IS CLAY AT THE CONNECTION POINT DETERMINED BY THE EOR AND OWNER.
- CONTRACTOR TO VERIFY ELEVATIONS OF EXISTING AND PROPOSED PIPE INVERTS CONNECTING TO MANHOLES PRIOR TO MANHOLE FABRICATION.
- DESIGN IS BASED UPON A SURVEY PERFORMED BY GRADYMINOR FROM 2021. DESIGN IS ALSO BASED ON GRAVITY SEWER RECORD DRAWINGS DATED 1976.
- CONTRACTOR TO UTILIZE METALIZED TAPE AND MARKER BALLS FOR ALL UNDERGROUND PIPING PER COUNTY STANDARDS. ADDITIONALLY, ALL PRESSURE PIPING AND SERVICES LARGER THAN 2" SHALL BE INSTALLED WITH A #12 AWG LOCATING TONE WIRE.
- CONTRACTOR SHALL INSTALL AIR RELEASE VALVES AT ALL HIGH POINTS AS DETERMINED BY THE APPROVED AS-BUILT PROFILE IN ADDITION TO THE AIR RELEASE VALVES SHOWN ON THE DRAWINGS.
- CONTRACTOR TO LOCATE EXISTING/PROPOSED SAN. SEWER SERVICES, AS WELL AS ANY STORMWATER CONFLICTS, AND DEFLECT WATER MAIN AS REQUIRED TO AVOID CONFLICTS.
- ALL REINFORCED POLYMER CONCRETE MANHOLES SHALL HAVE A 2-INCH (MINIMUM) FACTORY CAST CONCRETE COLLAR AT THE MANHOLE BASE.
- MINIMUM ACCESS DIAMETER FOR MANHOLES RING AND COVERS IS 24-INCHES PER FDEP REQUIREMENTS.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL LOCATE BY POT HOLING OR SOFT DIGGING ALL UTILITIES WITHIN THE LIMITS OF THE PROJECT AND PROVIDE THE COUNTY, EOR, AND CEI A REPORT (BEFORE CONSTRUCTION) OF THE FINDINGS AT EACH LOCATION THAT INCLUDES THE STATION AND OFFSET, LOCATION, UTILITY TYPE, DEPTH FROM GRADE, SIZE, MATERIAL, DATE, TIME, AND A MINIMUM OF (2) PICTURES (AN OVERALL SITE PICTURE AND A PICTURE OF THE UTILITY FOUND). THE CONTRACTOR SHALL MARK THE FOUND UTILITY WITH A WOODEN LATH AND RIBBON, WITH THE UTILITY TYPE FOUND, SIZE, AND DEPTH WRITTEN ON THE LATH.

GRADY MINOR STANDARD ABBREVIATIONS		L.F.	LINEAR FEET
AC	ASBESTOS CEMENT	LME	LAKE MAINTENANCE EASEMENT
ARV	AIR RELEASE VALVE	MES	MITERED END SECTION
BFW	BUTT FUSION WELD	MH	MANHOLE
BL	BASELINE	M.J.	MECHANICAL JOINT
BLVD.	BOULEVARD	MIN.	MINIMUM
BOC	BACK OF CURB	NGVD	NATIONAL GEODETIC VERTICAL DATUM
BSP	BACTERIAL SAMPLE POINT	NIC	NOT IN CONTRACT
CATV	CABLE TELEVISION	NTP	NOTICE TO PROCEED
CB	CATCH BASIN	OFF.	OFFSET
CEI	CONSTRUCTION ENGINEERING INSPECTION	PBSP	PERMANENT BACTERIAL SAMPLE POINT
CL	CENTERLINE	PL	PROPERTY LINE
CMP	CORRUGATED METAL PIPE	POT.	POTABLE
CO	CLEAN OUT	PROP.	PROPOSED
CONC.	CONCRETE	PVC	POLYVINYL CHLORIDE PIPE
CUE	COUNTY UTILITY EASEMENT	PVI	POINT OF VERTICAL INTERSECTION
DE	DRAINAGE EASEMENT	PWMT.	PAVEMENT
DIP	DUCTILE IRON PIPE	P.S.	PUMP STATION
EL. OR ELEV.	ELEVATION	RED.	REDUCER
EOP	EDGE OF PAVEMENT	RCF	REINFORCED CONCRETE PIPE
EOR	ENGINEER OF RECORD	RHW	RIGHT-OF-WAY
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	SAN.	SANITARY
EXIST. or EX	EXISTING	SB	SOIL BORING
FDC	FIRE DEPARTMENT CONNECTION	SMH	SANITARY MANHOLE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	ST.	STREET
FE	FLARED END	STA.	STATION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	SWK	SIDEWALK
FFE	FINISHED FLOOR ELEVATION	SWR.	SEWER
F.H.	FIRE HYDRANT	TBSP	TEMPORARY BACTERIAL SAMPLE POINT
FLG	FLANGED FITTING	TEMP.	TEMPORARY
FM	FORCE MAIN	TOB	TOP OF BANK
FPL OR FP&L	FLORIDA POWER & LIGHT	TOS	TOE OF SLOPE
GV	GATE VALVE	TYP.	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE	UE	UTILITY EASEMENT
HORIZ.	HORIZONTAL	VERT.	VERTICAL
HW	HEADWALL	VCP	VITRIFIED CLAY PIPE
INC.	INCORPORATED	VG	VALLEY GUTTER
INV.	INVERT	W	WITH
IRR.	IRRIGATION	WCS	WATER CONTROL STRUCTURE
JB	JUNCTION BOX	WM	WATER MAIN
LBR	LANDSCAPE BUFFER EASEMENT	YD	YARD DRAIN

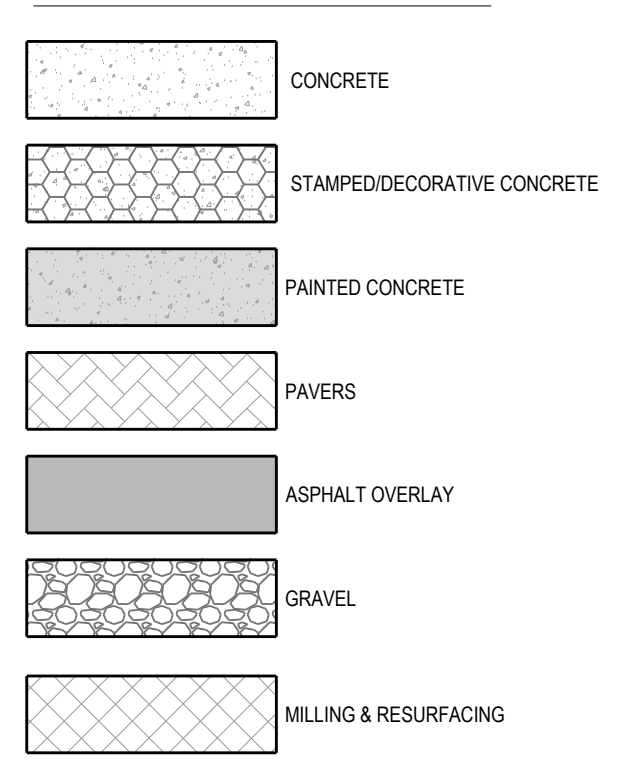
SURVEY KEY DESCRIPTIONS			
CODE	DESCRIPTION	CODE	DESCRIPTION
AC_	AIR CONDITIONING UNIT	FMN_	FOUND MAG NAIL_SIZE_LB# OR NOID
ARL_	ARROW LEFT	FNL_	FOUND NAIL_SIZE_LB# OR NOID
ARR_	ARROW RIGHT	FOC_	FACE OF CURB_TYPE (A, D, E, F, VG)
ARS_	ARROW STRAIGHT	FPK_	FOUND P/K NAIL_SIZE_LB# OR NOID
ARV_	AIR RELEASE VALVE	FRM_	FLORIDA POWER AND LIGHT FORCE MAIN_U(UNDERGROUND), A(ABOVE GROUND)
BM_	BENCHMARK (START w/BM or FOLLOWS MON. CODE)		
BC_	BUILDING CORNER	FSE_	FINISH SECOND FLOOR ELEVATION
BFP_	BACK FLOW PREVENTOR	FWD_	FENCE WOOD
BKR_	BIKE RACK	GA_	GUY ANCHOR
BOC_	BACK OF CURB_TYPE (A, D, E, F, VG)	GB_	GRADE BREAK
BOL_	BOLLARD_TYPE	GMM_	GAS MAIN MARKER
BPL_	BLUE PAINT LINE	GP_	GENERATOR PAD
BPR_	BRICK PAVER	GR_	GUIDE RAIL
BRA_	BRIDGE ABUTMENT	GSL_	UNDERGROUND GAS LINE
BS_	BACK SITE_POINT #	GSM_	GAS METER
BTS_	BOTTOM OF STEP	GT_	GREASE TRAP
BUF_	BURIED UTILITY FLAG	GUMB_	GUMBO_TREE_SIZE_#(IF CLUSTER)
BW_	BOTTOM OF WALL		
CALC_	CALCULATED COORDINATE POINT	GV_	GAS VALVE
CB_	CATCH BASIN_PIPE_SIZE_INVERT	HA_	HAND HOLE
CHW_	CONCRETE HEADWALL	HPM_	HANDICAP MAN SYMBOL
CLH_	CENTERLINE HEDGE_WIDTH	IRR_	IRRIGATION METER
CMP_	CORRUGATED METAL PIPE_SIZE	IRV_	IRRIGATION VALVE
CNP_	CONCRETE PAD	LDA_	LANDSCAPE PLANTING AREA
CO_	CLEANOUT	LIT_	LITTORAL SHELF
OPP_	CORRUGATED PLASTIC PIPE_SIZE	LPL_	LIGHT POLE_TYPE (WOOD, METAL, FIBERGLASS, CONCRETE)
CS_	CONTROL STRUCTURE		
CK_	DOCK OR DECK	LA_	LANDSCAPE LIGHT
DKP_	DOCK OR DECK PILING OR POLE	MAL_	MALLUKA TREE_SIZE_#(IF CLUSTER)
DP_	DUMPSITER PAD	MB_	MAILBOX
EB_	ELECTRIC BOX(IN GROUND)	MES_	MITERED END SECTION_PIPE SIZE (SHOT AT END OF PIPE AT INVERT)
ELC_	ELECTRIC LINE	MHD_	DRAINAGE MANHOLE_DEPTH
ELR_	ELECTRIC RISER	MHE_	ELECTRIC MANHOLE
EM_	ELECTRIC METER	MHS_	SANITARY MANHOLE_DEPTH
EOC_	EDGE OF CONCRETE	MHT_	TELEPHONE MANHOLE
EOG_	EDGE OF GRAVEL	MHWL_	MEAN HIGH WATER LINE
EOP_	EDGE OF PAVEMENT		
EOW_	EDGE OF WATER	MHW_	MANHOLE WATER
ESW_	EDGE SIDEWALK	MNGO	MANGO TREE_SIZE_#(IF CLUSTER)
ETP_	ELECTRIC TRANSFORMER PAD	MPL	MAPLE TREE_SIZE_#(IF CLUSTER)
FCL_	FENCE CHAIN LINK	NS_	NATURAL GRADE (DIRT, GRASS, ETC.)
FCM_	FOUND CONCRETE MONUMENT_SIZE_LB# OR NOID	OHV	OVERHEAD WIRES
FCR_	FENCE CORNER	OHV_	OVERHEAD WIRES
FDC_	FIRE DEPARTMENT CONTROL	PALM	PALM TREE_SIZE_#(IF CLUSTER)
FDH_	FOUND DRILL HOLE	PBID	PELICAN BAY IMPROVEMENT DISTRICT
FFE_	FINISHED FLOOR ELEVATION	PINE	PINE TREE_SIZE_#(IF CLUSTER)
FG_	FINISHED GARAGE FLOOR	POL_	POINT ON LINE
FGP_	FENCE GATEGATE POST	PPR_	PAPER TREE
FH_	FIRE HYDRANT	RCP_	REINFORCED CONCRETE PIPE_SIZE
FIP_	FOUND IRON PIPE_SIZE_LB# OR NOID	RMP_	HANDICAP RAMP
FIR_	FOUND IRON ROD_SIZE_LB# OR NOID	SB_	STOP BAR STRIPING
FLGP_	FLAG POLE	SCM_	SET CONCRETE MONUMENT
		SDH_	SET DRILL HOLE

— DENOTES A SPACE AFTER CODE AND PRIOR TO ADDITIONAL INFORMATION

**LEGEND:**



**PAVEMENT PATTERNS:**



REVISION	DATE	DESCRIPTION	BY

**DESIGNED BY:** J.N.D.  
**DRAWN BY:** R.A.K.  
**APPROVED:** J.A.F.  
**JOB CODE:** CCU285  
**22X34 SCALE:** N/A  
**11X17 SCALE:** N/A

**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**

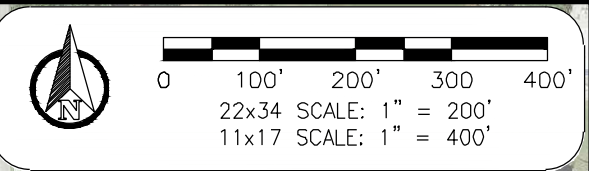
**GENERAL NOTES**

ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29) CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

MUNICIPALITY:	COLLIER COUNTY
SEC/TWN/RGE:	28/48/25
DATE:	MARCH, 2022
SUBMITTAL TYPE:	BID
SHEET	3 OF 99





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE: 1" = 200'  
 11X17 SCALE: 1" = 400'

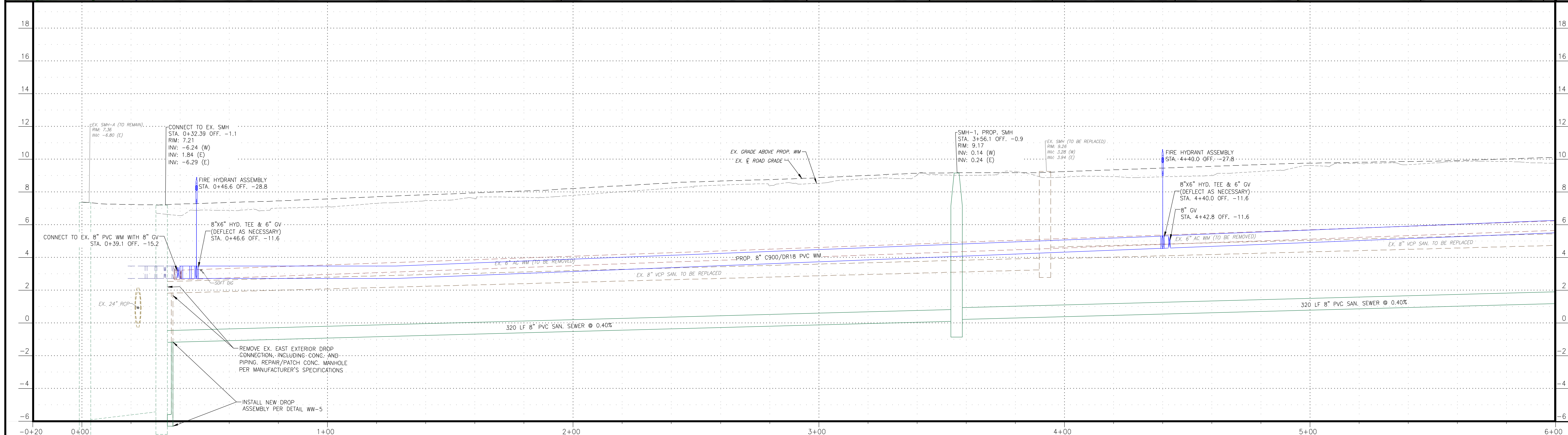
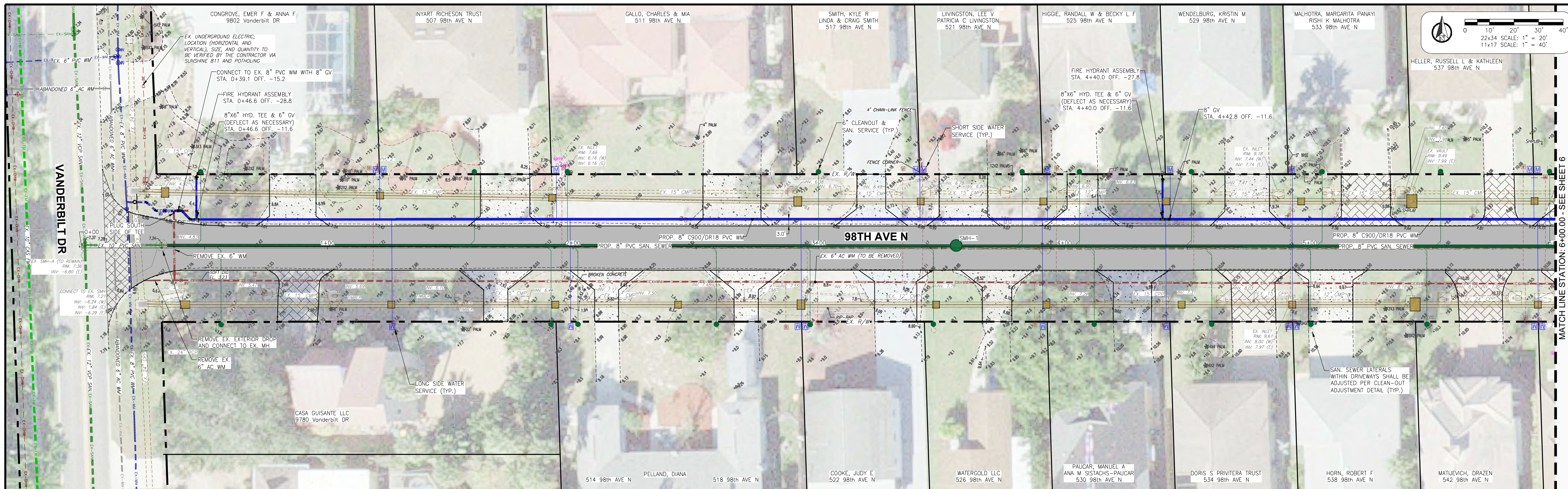
**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**  
**INDEX SHEET - UTILITY IMPROVEMENTS**  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY
SEC/TWN/RGE: 28/48/25
DATE: MARCH, 2022
SUBMITTAL TYPE: BID
SHEET 4 OF 99

G:\ENGINEERING\PROJ-ENG\CCU285\01DWGSS\SUBMITTAL TYPE CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - AERIAL - 4/21/2023 11:14 AM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285

**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

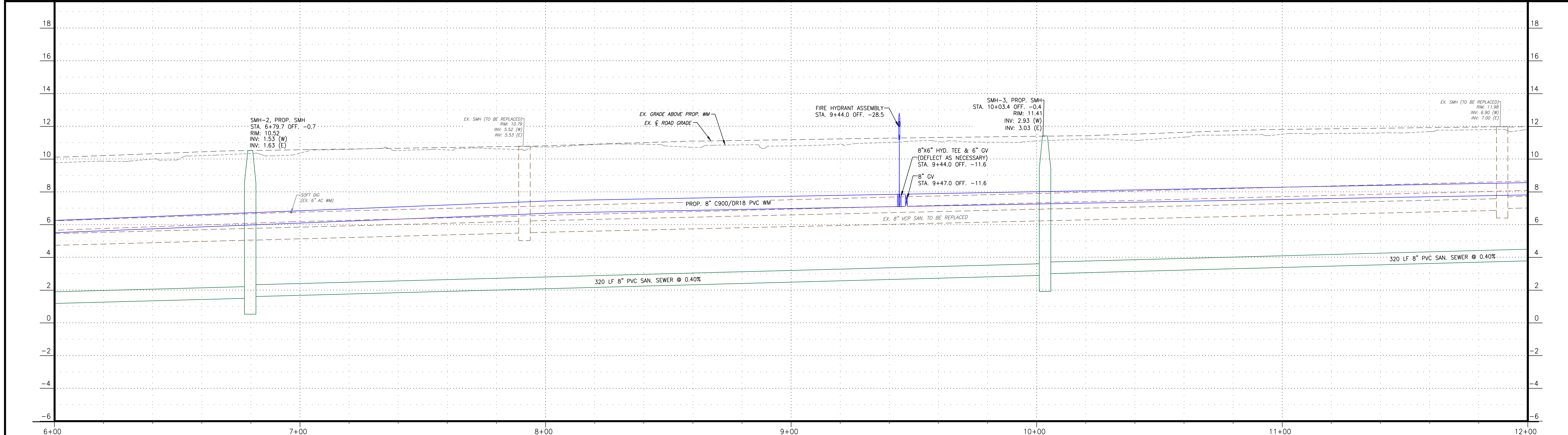
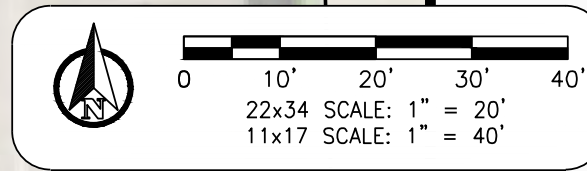
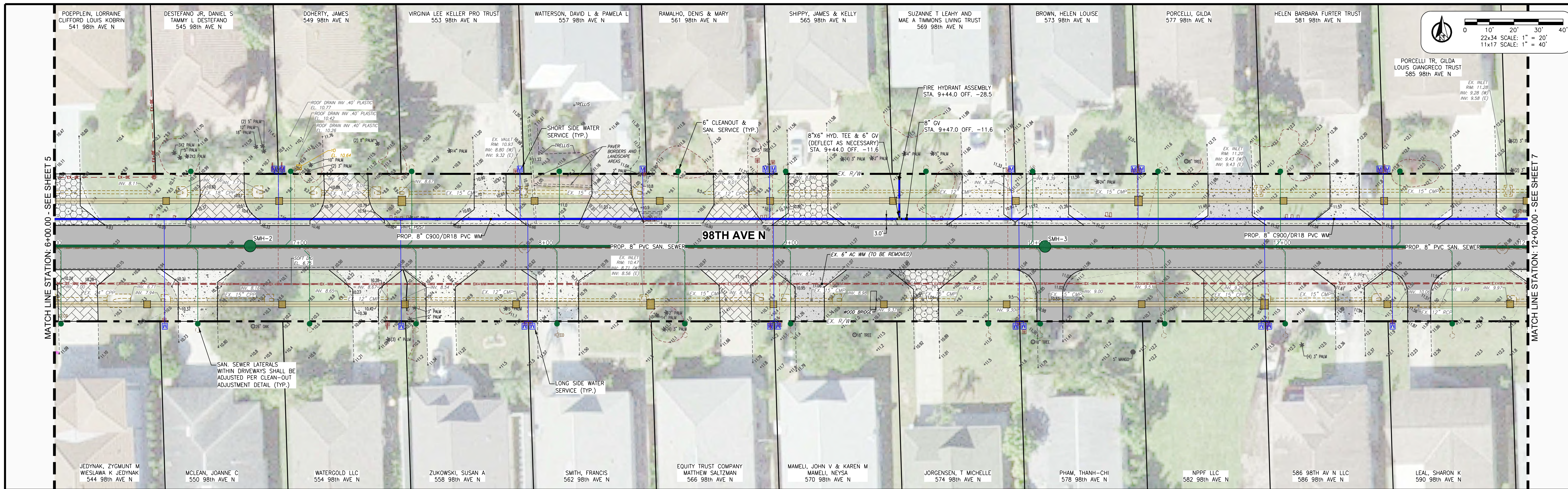
**98th & 99th Avenue North - Public Utilities Renewal**  
 98TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 0+00.00 TO 6+00.00

ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY:	COLLIER COUNTY
SEC/TWN/RGE:	28/48/25
DATE:	MARCH, 2022
SUBMITTAL TYPE:	BID
SHEET	5 OF 99

C:\ENGINEERING\PROG-ENG\CCU285\SUBMITTAL\CONSTRUCTION PLANS\98TH & 99TH AVE\CCU285\_98TH-99TH - UTILITY.PKX: 4/21/2023 11:15 AM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285

22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**

98TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 6+00.00 TO 12+00.00

ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 28/48/25  
 DATE: MARCH, 2022  
 SUBMITTAL TYPE: BID  
 SHEET 6 OF 99

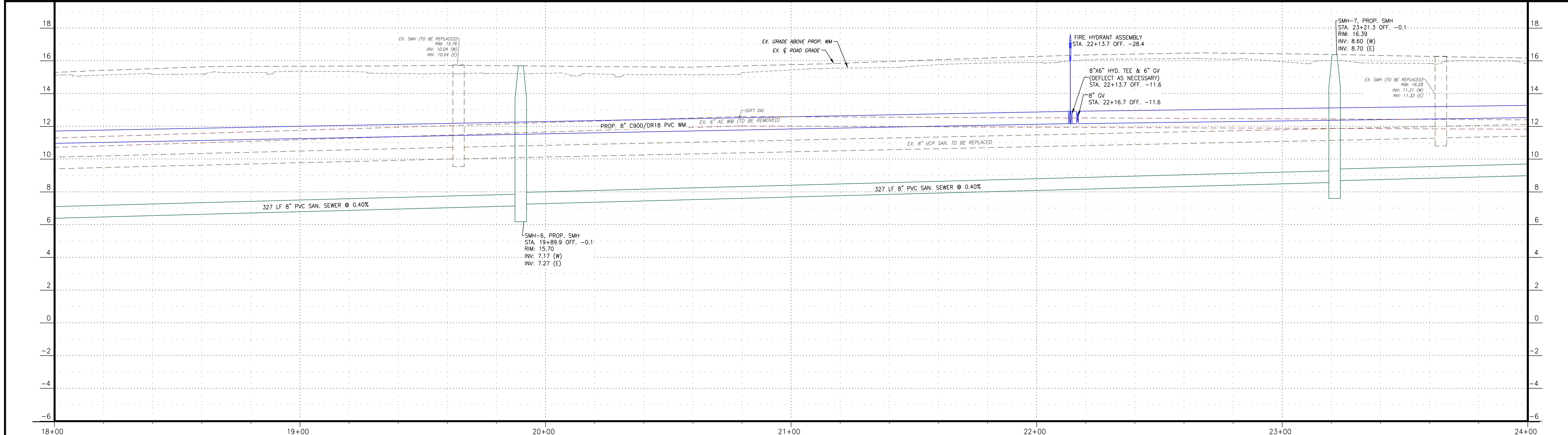
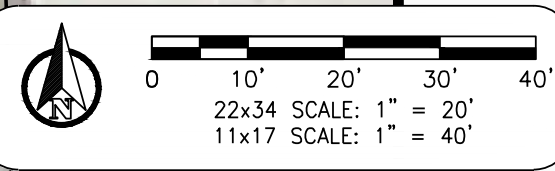
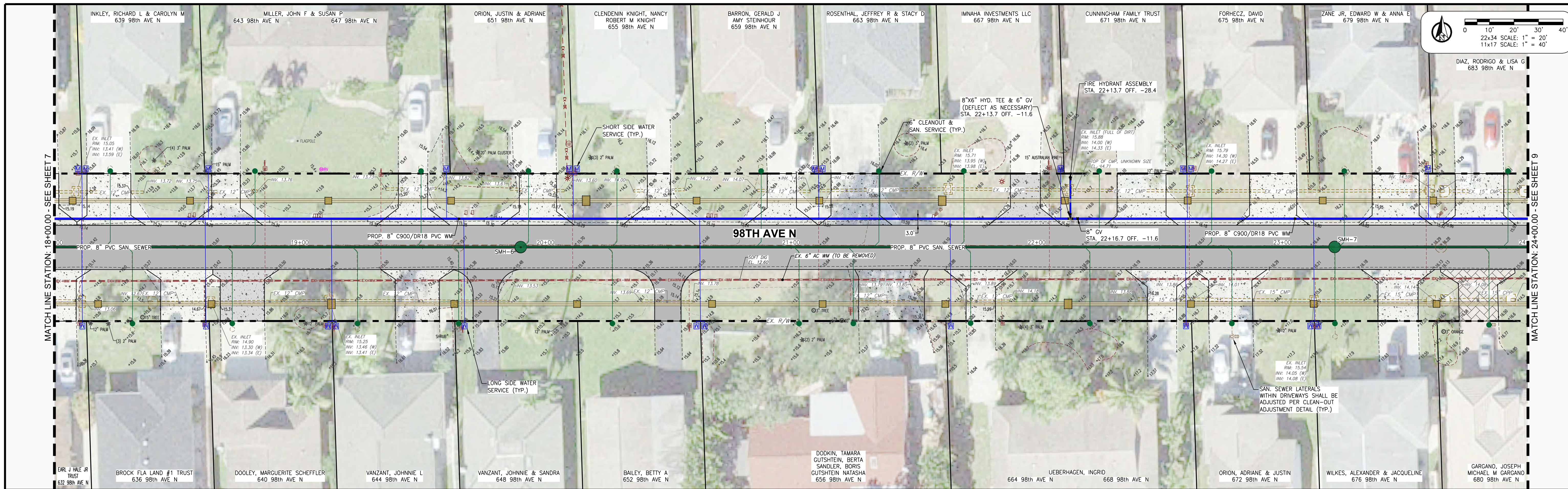
JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

C:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE - 4/21/2023 11:16 AM









REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

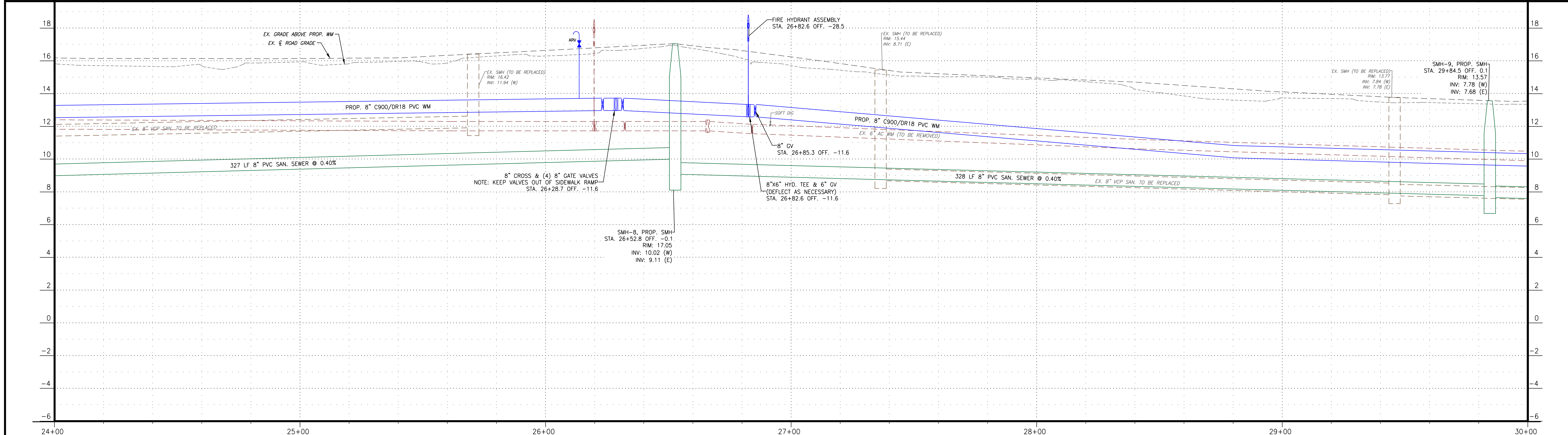
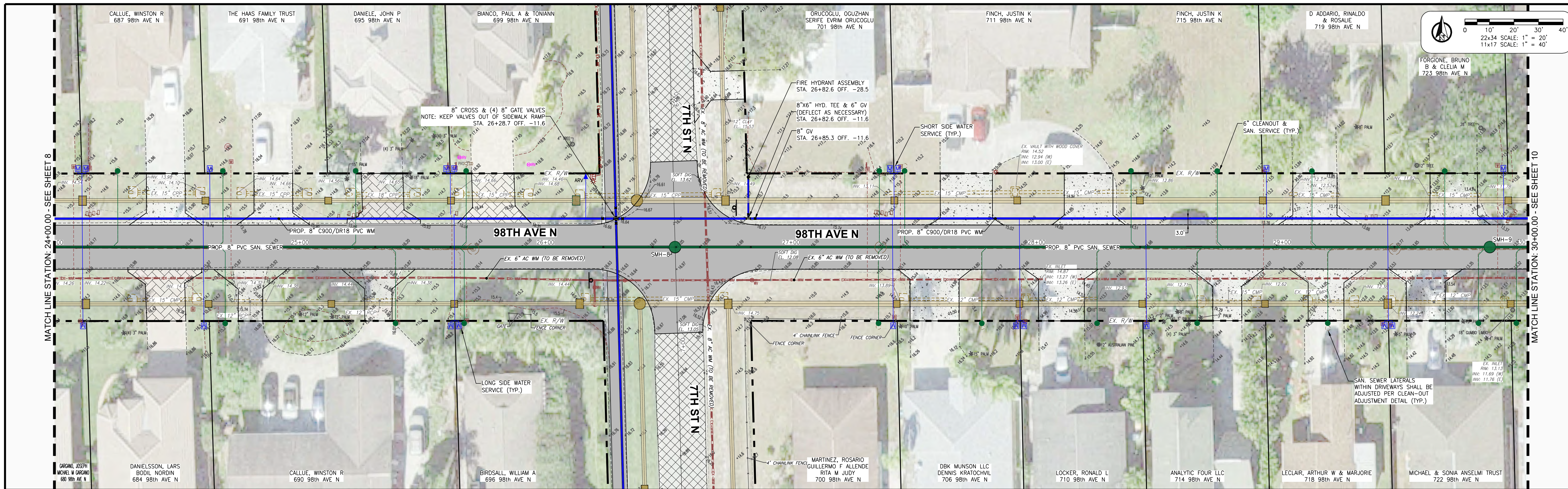

**GradyMinor**  
 Q. Grady Minor and Associates, P.A.  
 3800 Via Del Rey  
 Bonita Springs, Florida 34134  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Fort Myers: 239.947.1144 www.GradyMinor.com

**98th & 99th Avenue North - Public Utilities Renewal**  
**98TH AVE. N. - UTILITY PLAN & PROFILE**  
**STA. 18+00.00 TO 24+00.00**  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY:  
 COLLIER COUNTY  
 SEC/TWN/RGE:  
 28/48/25  
 DATE:  
 MARCH, 2022  
 SUBMITTAL TYPE:  
 BID  
 SHEET 8 OF 99

C:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE.dwg 4/21/2023 11:19 AM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**  
 98TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 24+00.00 TO 30+00.00  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

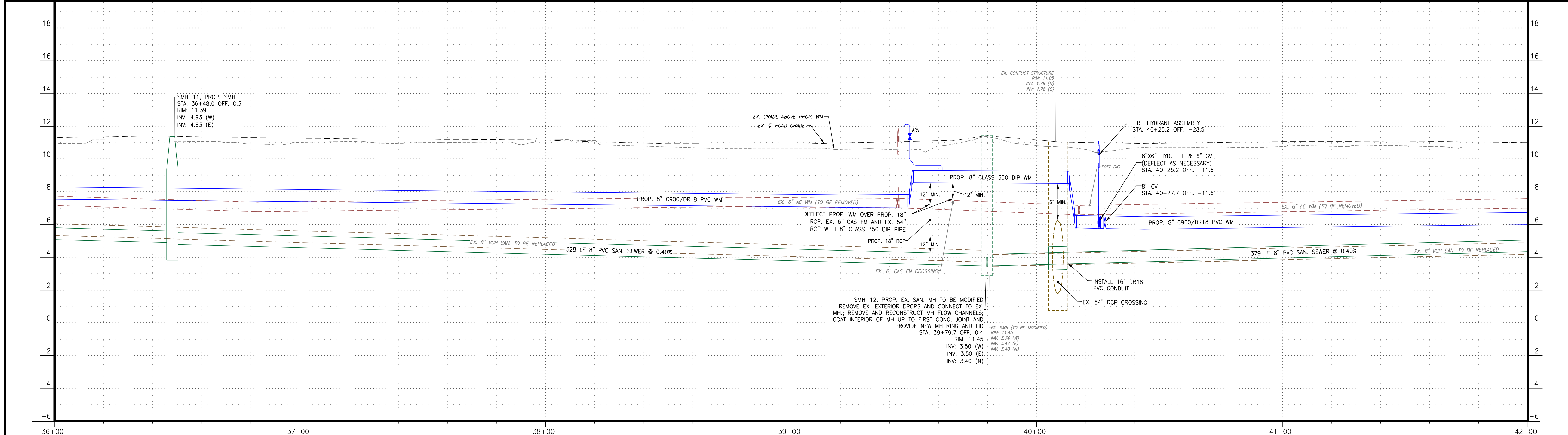
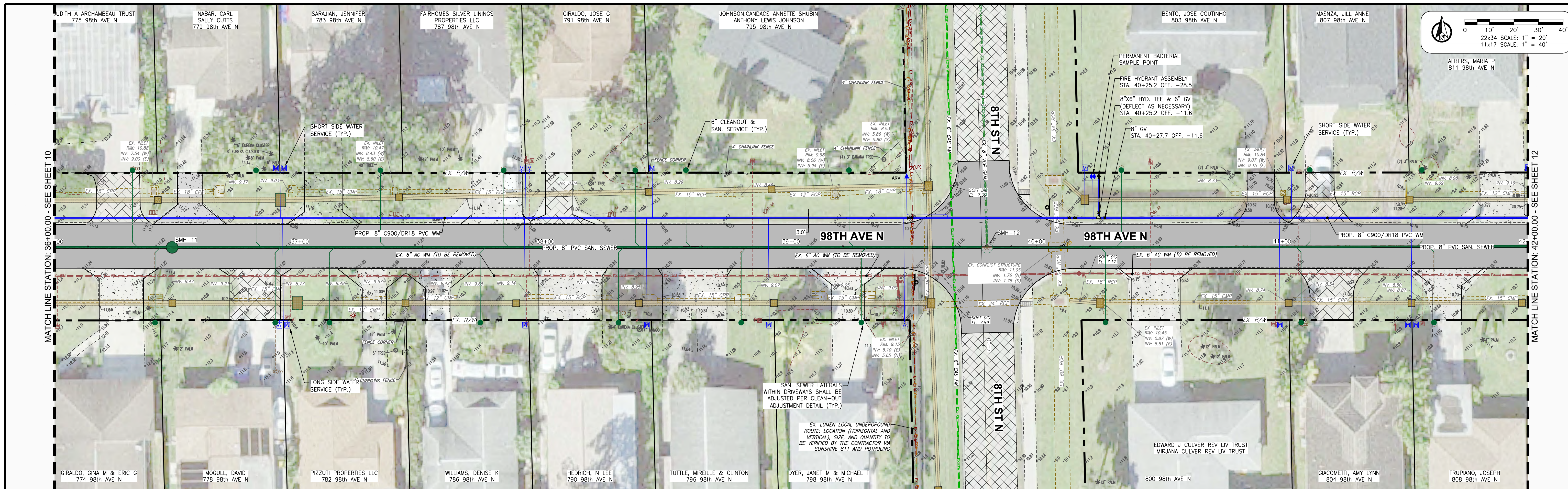
MUNICIPALITY: COLLIER COUNTY
SEC/TWN/RGE: 28/48/25
DATE: MARCH, 2022
SUBMITTAL TYPE: BID
SHEET 9 OF 99

G:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE 4/21/2023 11:20 AM









REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE: VERTICAL 1" = 6', HORIZONTAL 1" = 40'  
 11X17 SCALE: VERTICAL 1" = 3', HORIZONTAL 1" = 20'

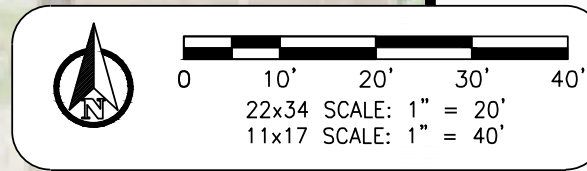
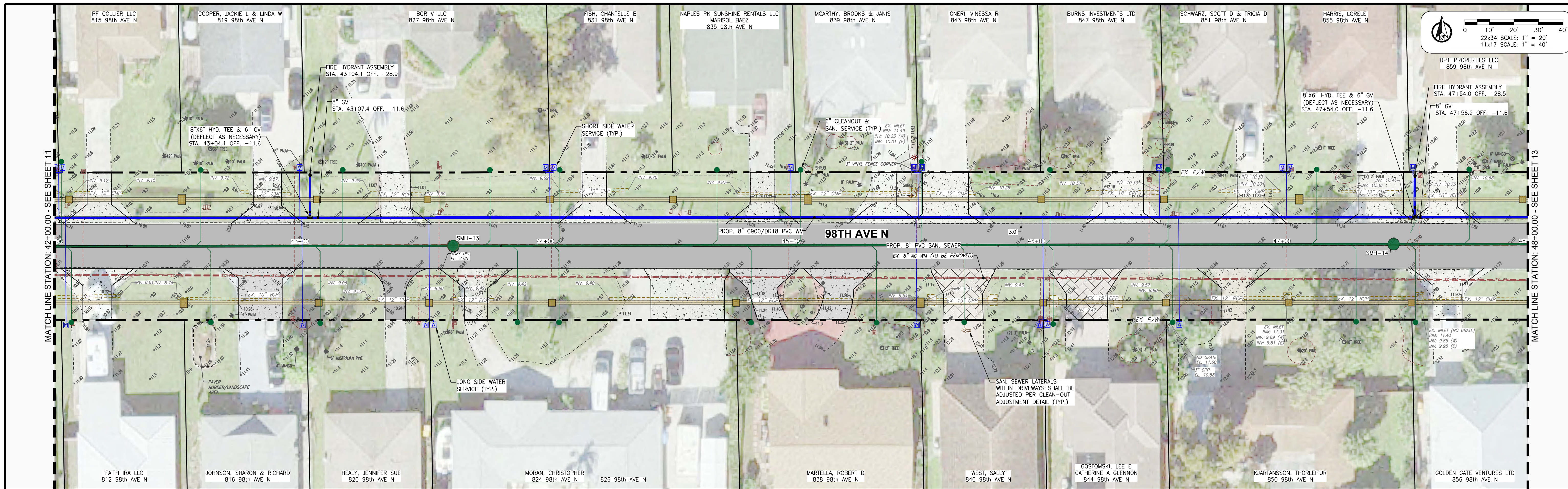
**GradyMinor**  
 O. Grady Minor and Associates, P.A.  
 3800 Via Del Rey  
 Bonita Springs, Florida 34134  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Fort Myers: 239.947.1144 www.GradyMinor.com

**98th & 99th Avenue North - Public Utilities Renewal**  
**98TH AVE. N. - UTILITY PLAN & PROFILE**  
**STA. 36+00.00 TO 42+00.00**  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY
SEC/TWN/RGE: 28/48/25
DATE: MARCH, 2022
SUBMITTAL TYPE: BID
SHEET 11 OF 99

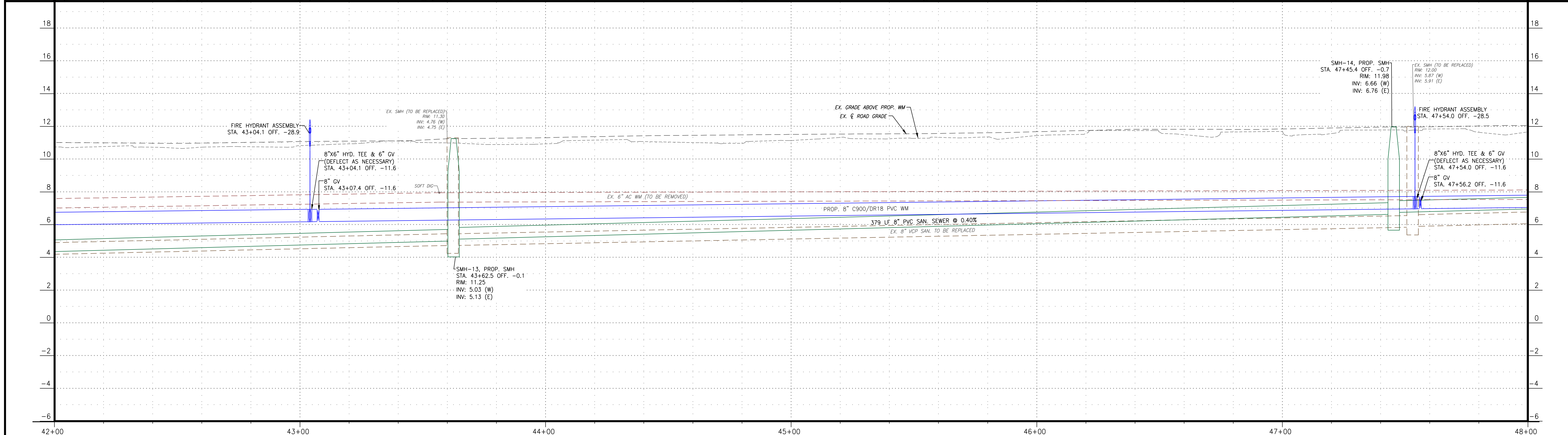
CC:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE.dwg 4/21/2023 11:22 AM





MATCH LINE STATION: 42+00.00 - SEE SHEET 11

MATCH LINE STATION: 48+00.00 - SEE SHEET 13



REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

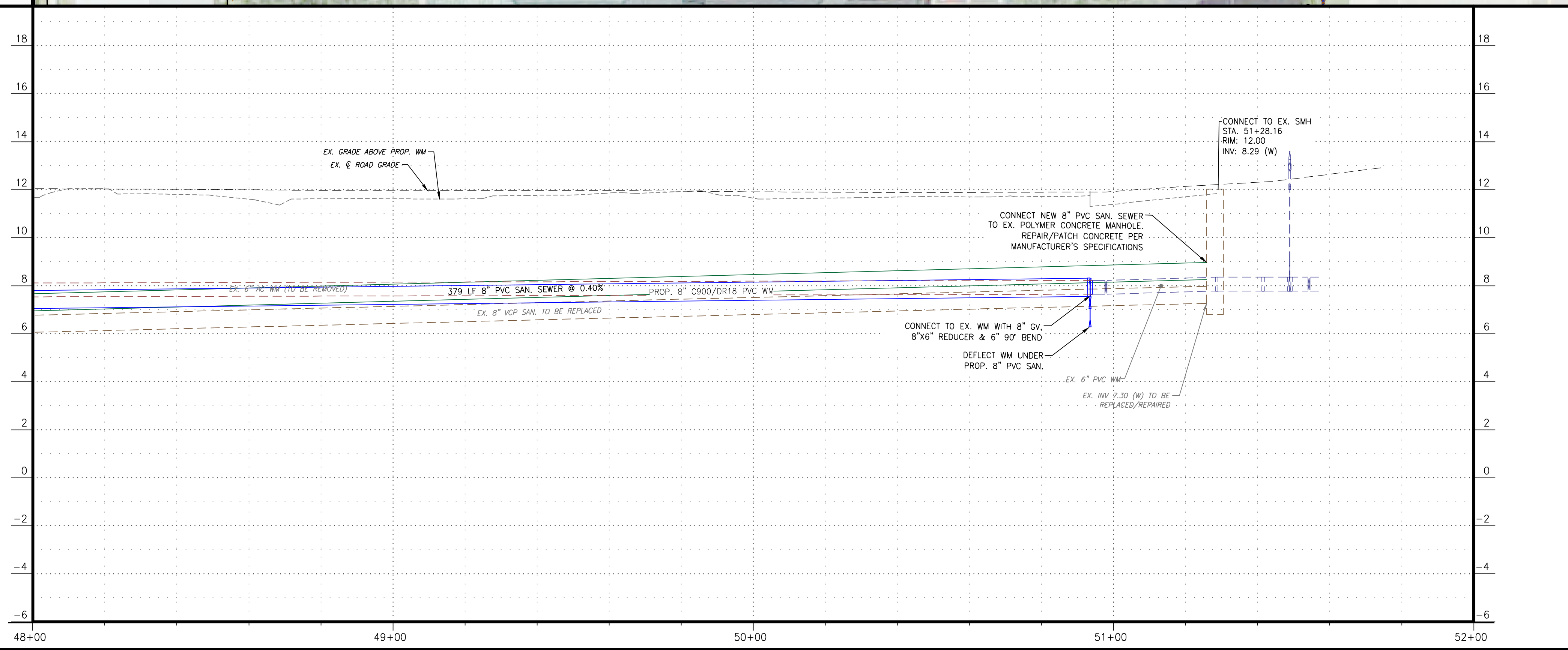
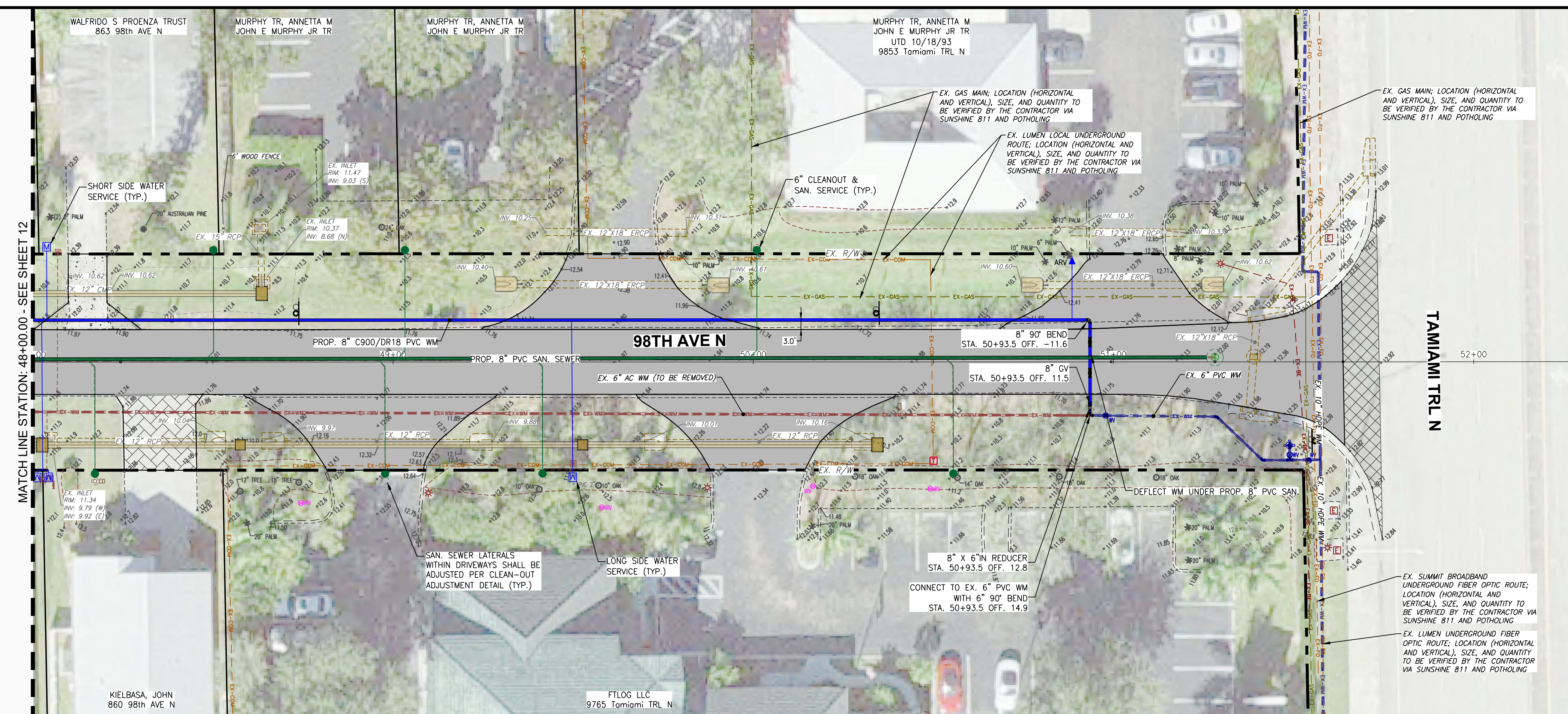
**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs, Florida 34134  
 Fort Myers: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**  
 98TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 42+00.00 TO 48+00.00  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 28/48/25  
 DATE: MARCH, 2022  
 SUBMITTAL TYPE: BID  
 SHEET 12 OF 99  
 JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

C:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE.dwg 4/21/2023 11:23 AM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

Q. Grady Minor and Associates, P.A.  
 3800 Via Del Rey  
 Bonita Springs, Florida 34134  
 Business LC 26000266

**98th & 99th Avenue North - Public Utilities Renewal**  
 98TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 48+00.00 TO 52+00.00  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

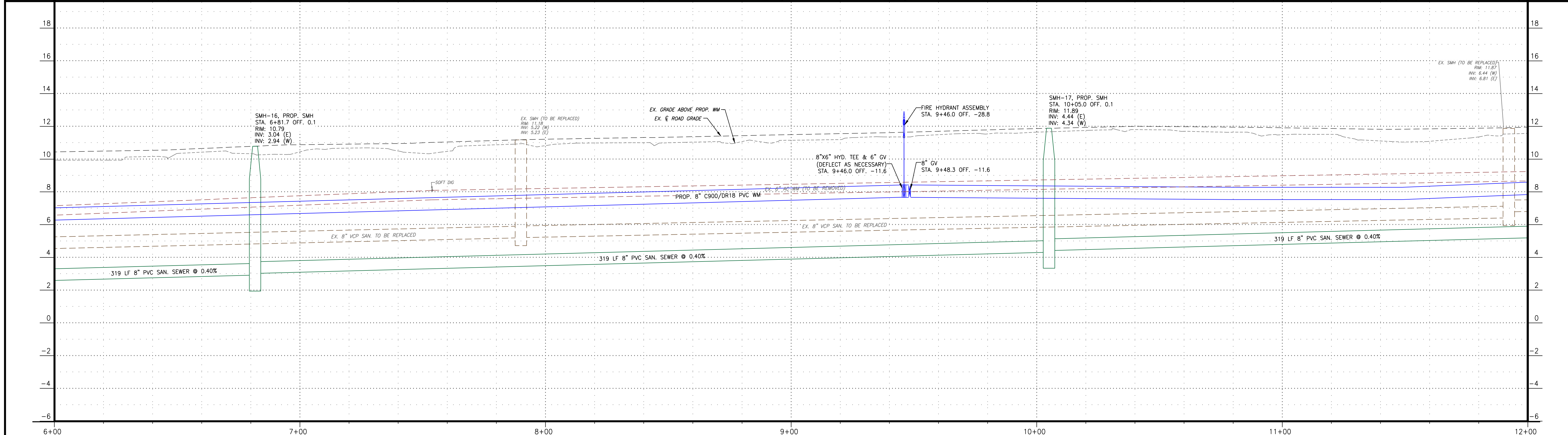
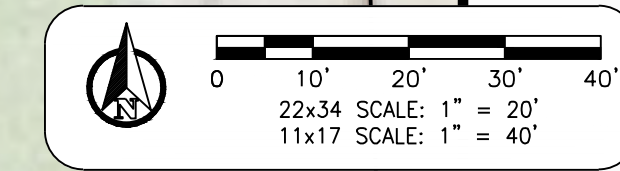
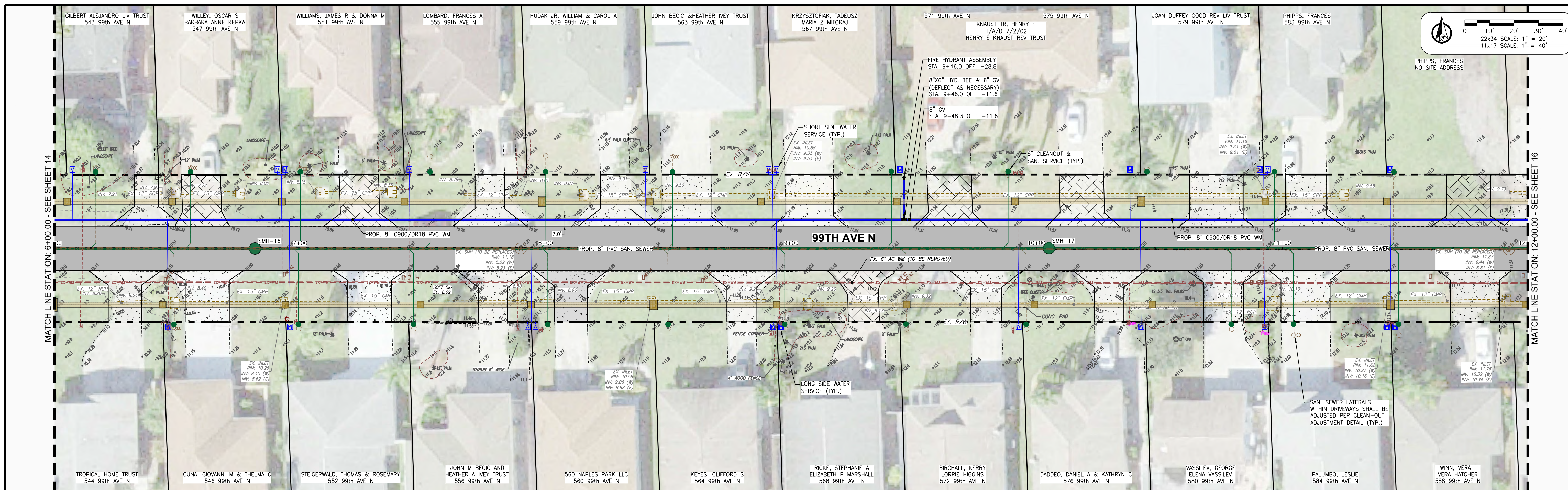
MUNICIPALITY: COLLIER COUNTY
SEC/TWN/RGE: 28/48/25
DATE: MARCH, 2022
SUBMITTAL TYPE: BID
SHEET 13 OF 99

G:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY.PKGE 4/21/2023 11:24 AM









REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

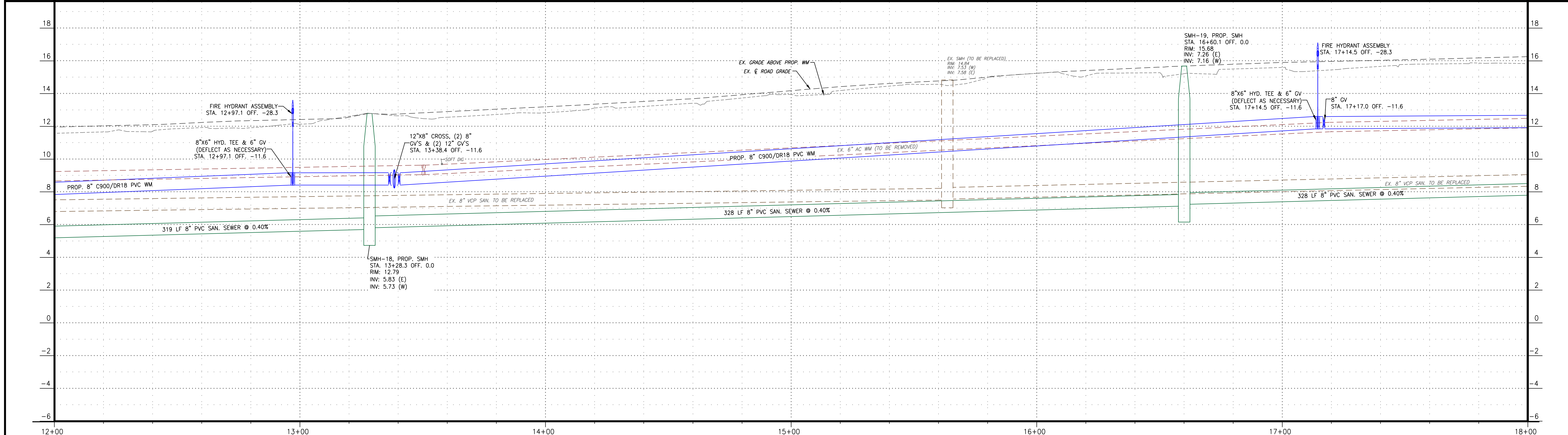
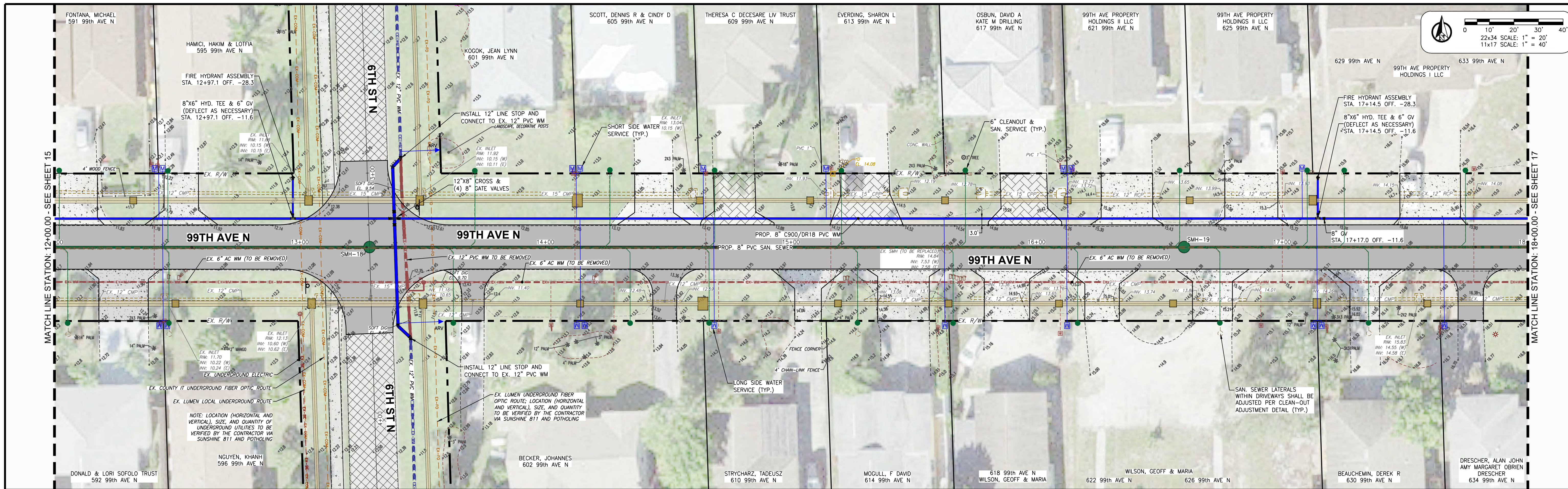
O. Grady Minor and Associates, P.A.  
 3800 Via Del Rey  
 Bonita Springs, Florida 34134  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**  
**99TH AVE. N. - UTILITY PLAN & PROFILE**  
**STA. 6+00.00 TO 12+00.00**  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY
SEC/TWN/RGE: 28/48/25
DATE: MARCH, 2022
SUBMITTAL TYPE: BID
SHEET 15 OF 99

C:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE.dwg 4/21/2023 2:01 PM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

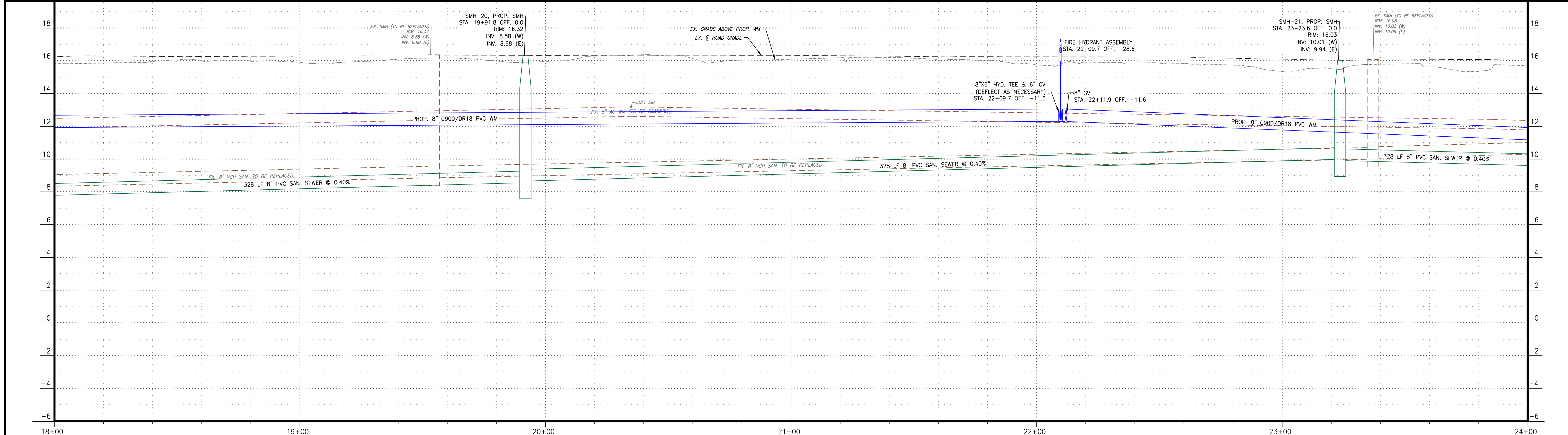
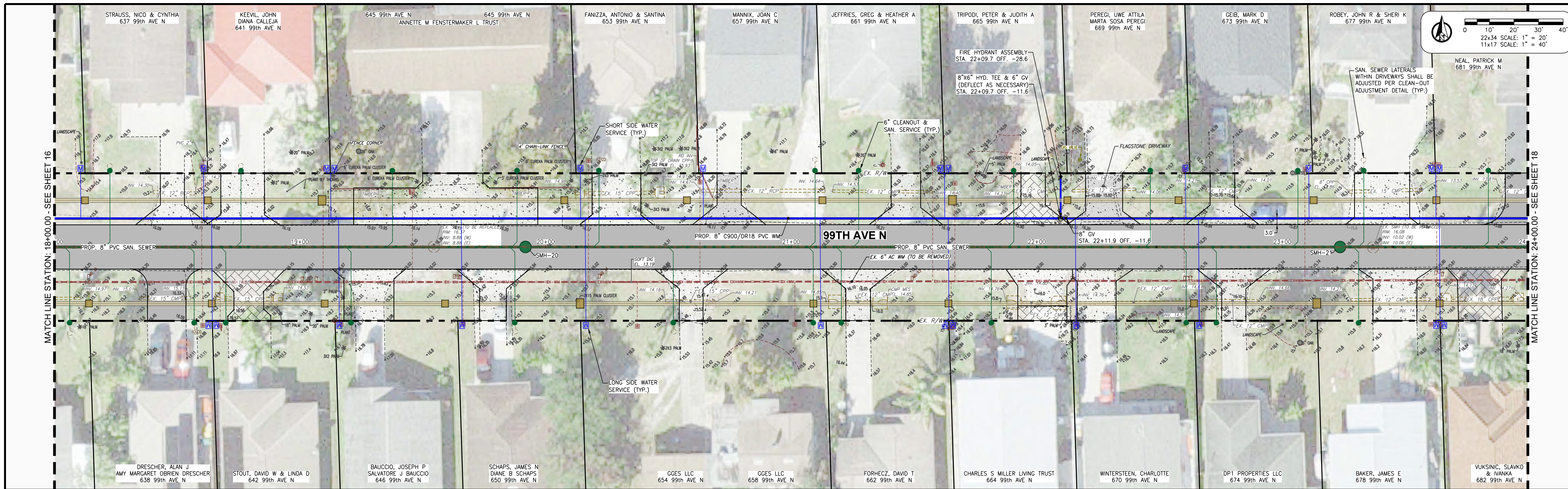

**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs, Florida 34134  
 Fort Myers: 239.947.1144 www.GradyMinor.com

**99th & 99th Avenue North - Public Utilities Renewal**  
 99TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 12+00.00 TO 18+00.00  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 28/48/25  
 DATE: MARCH, 2022  
 SUBMITTAL TYPE: BID  
 SHEET 16 OF 99  
 JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

G:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL TYPE\CONSTRUCTION PLANS\99TH & 99TH AVE UTILITY PLAN & PROFILE - UTILITY PLAN & PROFILE - 4/21/2023 2:02 PM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE: VERTICAL 1" = 6', HORIZONTAL 1" = 40'  
 11X17 SCALE: VERTICAL 1" = 3', HORIZONTAL 1" = 20'

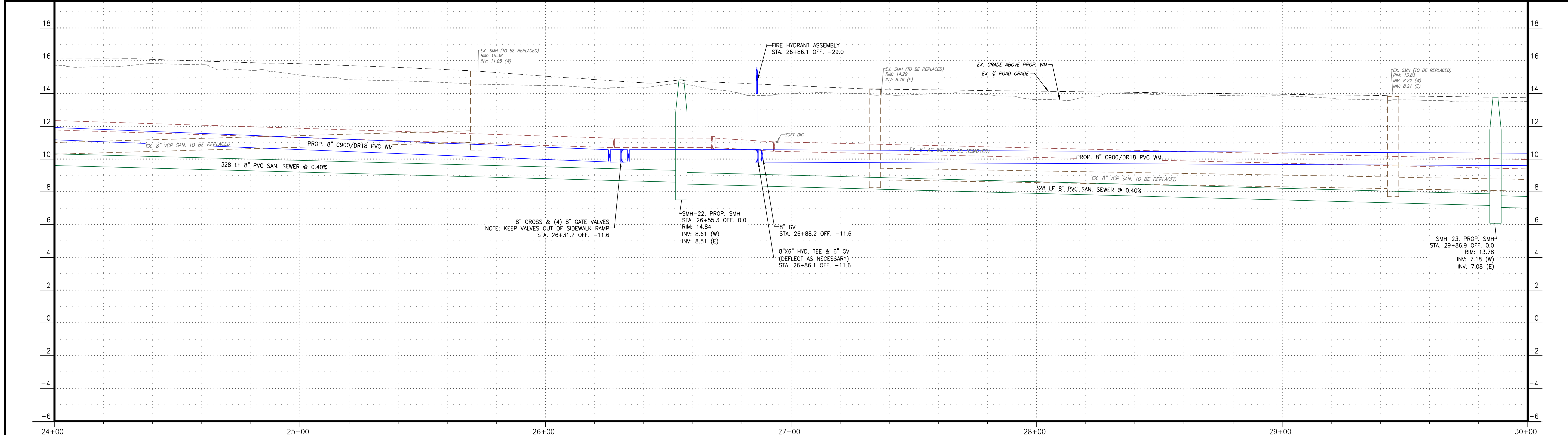
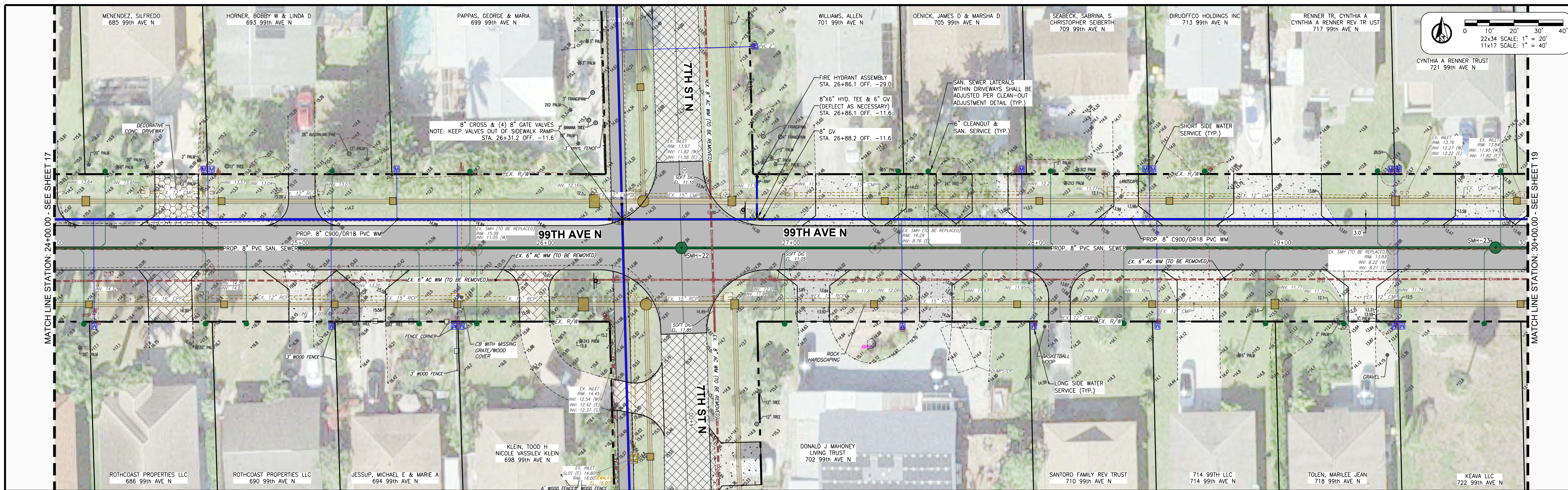
**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**  
 99TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 18+00.00 TO 24+00.00  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 28/48/25  
 DATE: MARCH, 2022  
 SUBMITTAL TYPE: BID  
 SHEET 17 OF 99

G:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE CONSTRUCTION PLANS\98TH & 99TH AVE\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE - 4/21/2023 2:04 PM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

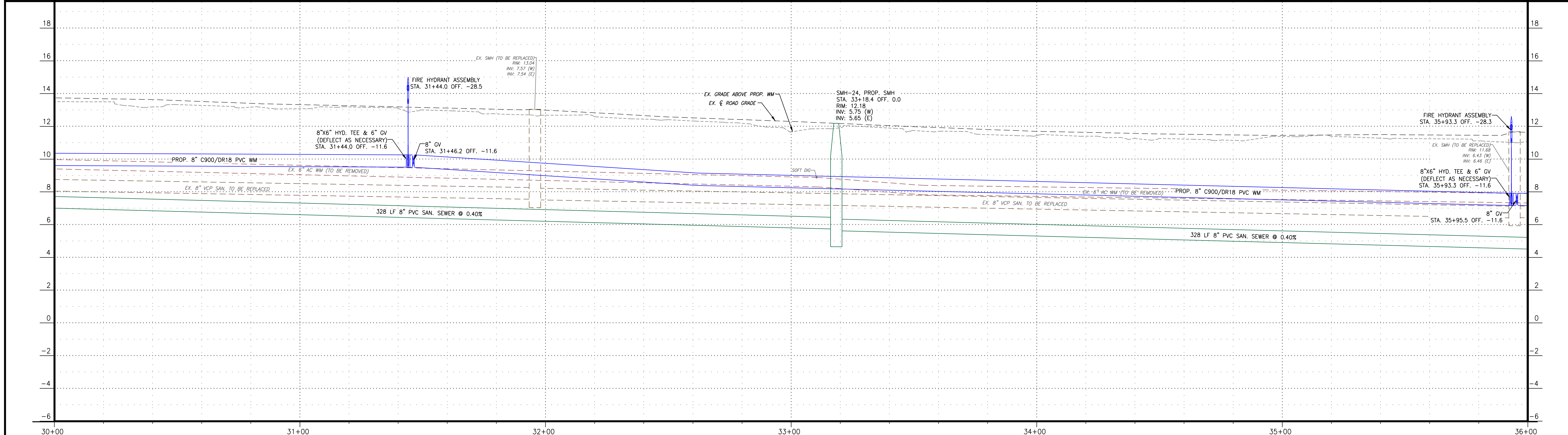
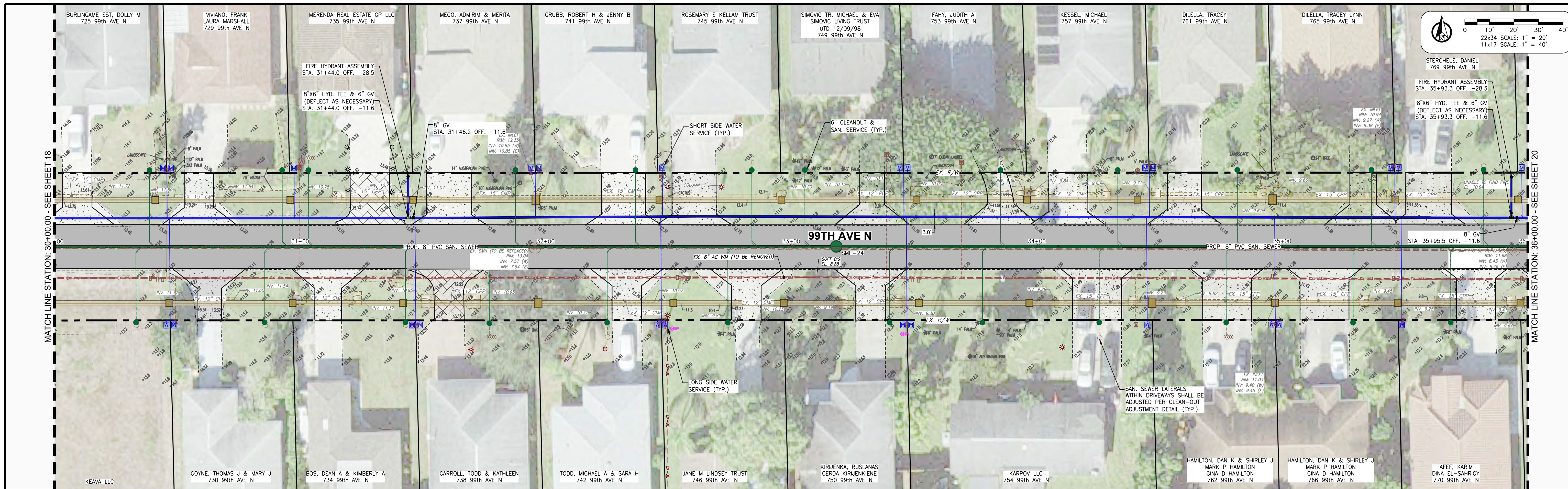
**GradyMinor**  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Bonita Springs, Florida 34134  
 Fort Myers: 239.947.1144    www.GradyMinor.com    Fort Myers: 239.690.4380

**98th & 99th Avenue North - Public Utilities Renewal**  
 99TH AVE. N. - UTILITY PLAN & PROFILE  
 STA. 24+00.00 TO 30+00.00  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 28/48/25  
 DATE: MARCH, 2022  
 SUBMITTAL TYPE: BID  
 SHEET 18 OF 99  
 JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

G:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL TYPE\CONSTRUCTION PLANS\98TH & 99TH\CCU285\_98TH-99TH - UTILITY PLAN & PROFILE.dwg 4/21/2023 2:05 PM





REVISION	DATE	DESCRIPTION	BY

DESIGNED BY: J.N.D.  
 DRAWN BY: R.A.K.  
 APPROVED: J.A.F.  
 JOB CODE: CCU285  
 22X34 SCALE:  
 VERTICAL 1" = 6'  
 HORIZONTAL 1" = 40'  
 11X17 SCALE:  
 VERTICAL 1" = 3'  
 HORIZONTAL 1" = 20'

**GradyMinor**  
 Q. Grady Minor and Associates, P.A.  
 3800 Via Del Rey  
 Bonita Springs, Florida 34134  
 Civil Engineers • Land Surveyors • Planners • Landscape Architects  
 Cert. of Auth. EB 0005151 Cert. of Auth. LB 0005151 Business LC 26000266  
 Bonita Springs: 239.947.1144 www.GradyMinor.com Fort Myers: 239.690.4380

**99th & 99th Avenue North - Public Utilities Renewal**  
**99TH AVE. N. - UTILITY PLAN & PROFILE**  
**STA. 30+00.00 TO 36+00.00**  
 ELEVATIONS SHOWN HEREON ARE BASED UPON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD '29)  
 CONVERSION FACTOR TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD '88) IS (-) 1.237

MUNICIPALITY: COLLIER COUNTY  
 SEC/TWN/RGE: 28/48/25  
 DATE: MARCH, 2022  
 SUBMITTAL TYPE: BID  
 SHEET 19 OF 99  
 JUSTIN A. FREDERIKSEN, P.E.  
 FLORIDA P.E. LICENSE NO. 66086

G:\ENGINEERING\PROJ-ENG\CCU285\SUBMITTAL\TYPE\CONSTRUCTION PLANS\99TH & 99TH AVE\CCU285\_99TH-99TH - UTILITY PLAN & PROFILE 4/21/2023 2:05 PM



