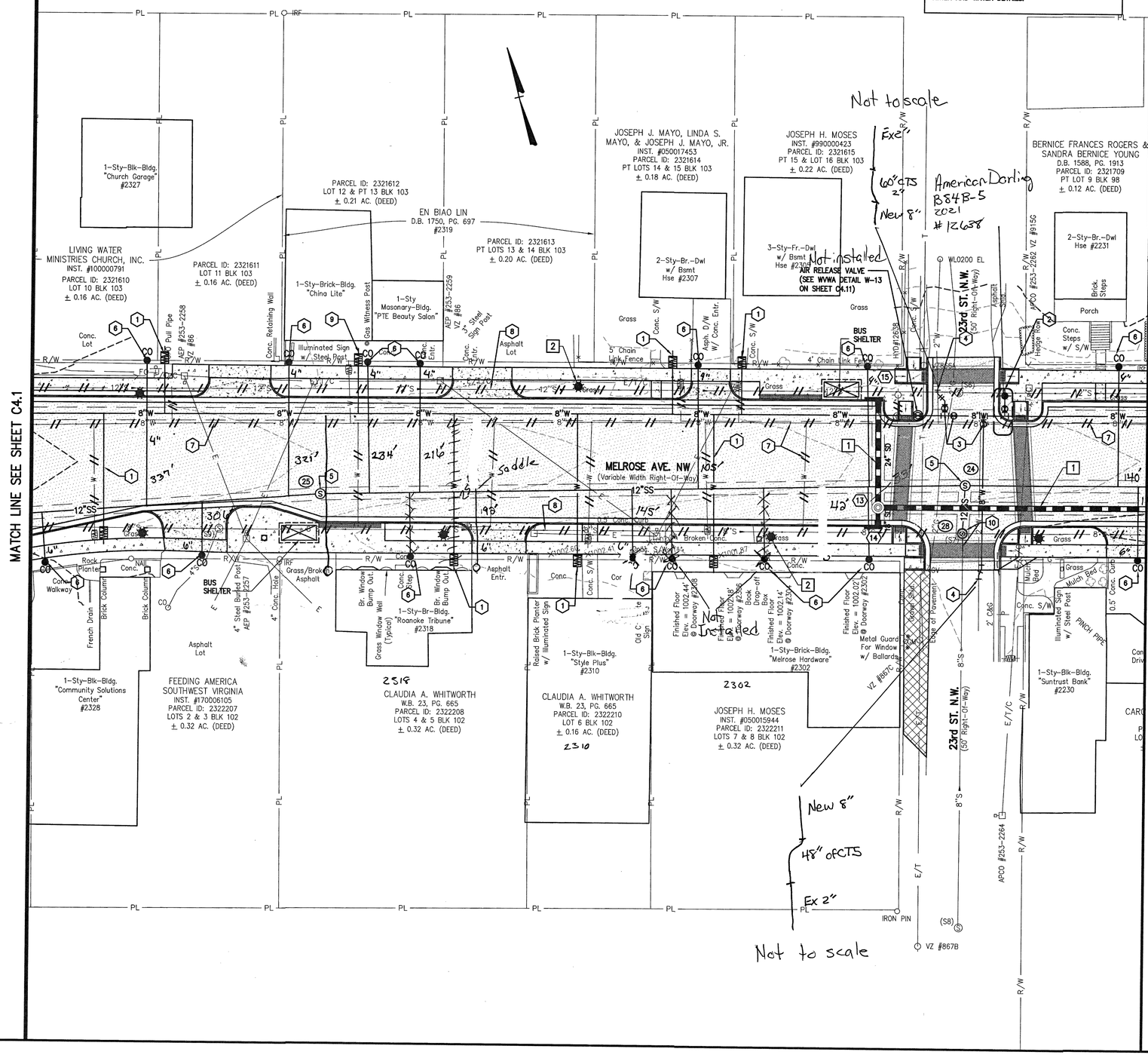
REFER TO SHEET C4.4 FOR STORM DRAIN PROFILES.
REFER TO SHEET C4.5 FOR STORM DRAIN DETAILS.
REFER TO SHEET C4.6 FOR SANITARY SEWER PROFILES.
REFER TO SHEET C4.7 FOR WATERLINE PROFILES.
REFER TO SHEET C4.8 FOR WATER AND SANITARY SEWER GENERAL NOTES.
REFER TO SHEETS C4.9 THRU C4.11 FOR SANITARY SEWER AND WATER DETAILS.



STORM DRAINAGE/UTILITY GENERAL NOTES:

1. STORM DRAINAGE PIPE AND DRAINAGE STRUCTURES SHALL COMPLY WITH ALL APPLICABLE VDOT STANDARDS AND SPECIFICATIONS. REFER TO DETAIL D1 SHOWN ON SHEET C4.5 FOR PIPE BEDDING AND PAVEMENT RESTORATION INFORMATION.
2. THE INVERT OF ALL NEW STORM DRAINAGE INLETS AND MANHOLES SHALL CONFORM TO VDOT STD. IS-1 – "STANDARD METHOD OF SHAPING MANHOLE AND INLET INVERTS." REFER TO DETAIL ON THIS SHEET.
3. STORM DRAIN PIPE LENGTHS SHOWN HEREON ARE APPROXIMATE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE SLOPES SHOWN ARE COMPUTED USING INVERT OUT AT UPSTREAM STRUCTURE, INVERT IN AT DOWNSTREAM STRUCTURE, AND HORIZONTAL PIPE LENGTH MEASURES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4. UPON COMPLETION OF THE STORM DRAINAGE SYSTEM, THE CONTRACTOR SHALL FURNISH TO THE OWNER A FIELD SURVEYED FINAL CORRECT SET OF AS-BUILT PLANS OF THE NEWLY CONSTRUCTED STORM DRAIN AND/OR STORMWATER MANAGEMENT FACILITIES. AS-BUILT PLANS SHALL BE PROVIDED IN THE STATE PLANE VIRGINIA SOUTH COORDINATE SYSTEM, NAD 1983, FIPS 4502 FEET, US SURVEY FEET, DATUM NA 83, IN THE FORM OF 1 PAPER COPY AND 1 DIGITAL AUTOCAD FILE.
5. CONTRACTOR SHALL SUBMIT STORM DRAINAGE STRUCTURE FABRICATION ORDER SHEETS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO START OF FABRICATION.
6. A "RIGHT-OF-WAY EXCAVATION PERMIT" MUST BE OBTAINED BY THE CONTRACTOR FROM THE CITY OF ROANOKE PRIOR TO ANY CONSTRUCTION WITHIN THE RIGHT-OF-WAY. THE PERMIT APPLIES TO ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY CONNECTION TO RIGHT-OF-WAY, INSTALLATION OF SIDEWALKS, AND UTILITY CONNECTIONS. THIS PERMIT IS SUBMITTED TO THE CITY "PERMIT CENTER" AND IS ADMINISTERED BY THE TRANSPORTATION DIVISION. ALL CONSTRUCTION PERFORMED WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF ROANOKE "RIGHT-OF-WAY EXCAVATION AND RESTORATION STANDARDS."
7. REFER TO "CITY OF ROANOKE- CONSTRUCTION PROCEDURE REQUIREMENTS" ON SHEET C0.1 FOR ADDITIONAL REQUIREMENTS.
8. SEE SHEET C4.8 FOR WATER AND SANITARY SEWER NOTES.

KEYNOTES (GENERAL/UTILITY PLAN):

1. NEW STORM DRAINAGE SYSTEM – REFER TO SHEET C4.4 FOR NEW STORM DRAINAGE SYSTEM PROFILE AND STORM STRUCTURE DATA. NEW OPEN CUT OF PAVEMENT FOR INSTALLATIONS OF NEW STORM DRAINAGE SYSTEM. REFER TO DETAIL D1 SHOWN ON SHEET C4.5 FOR PIPE BEDDING AND PAVEMENT RESTORATION INFORMATION.
2. NEW STREET LIGHTS SHOWN FOR COORDINATION PURPOSES. REFER TO SHEET C7.1 THRU C7.3 FOR "POWER AND LIGHTING PLAN."
3. EXISTING SANITARY SEWER MANHOLE TOP FRAME AND LID (COVER) TO BE ADJUSTED TO BE SET FLUSH WITH NEW CONCRETE SIDEWALK AND/OR CONCRETE DRIVEWAY APRON.

WATER/SEWER KEYNOTES:

1. NEW 1" WATER SERVICE INSTALLATION (SEE WVWA DETAIL W-2).
2. NEW FIRE HYDRANT ASSEMBLY (SEE WVWA DETAIL W-17).
3. 8" GATE VALVE (SEE WVWA DETAIL W-9).
4. 8" WATERLINE – CONNECT TO EXISTING 2" WATERLINE WITH A TAPPED CAP.
5. NEW SANITARY SEWER MANHOLE (SEE WVWA DETAIL S-1). RE-CONNECT EXISTING SEWER LINES W/5' PVC PIPE.
6. NEW SANITARY SEWER LATERAL CONNECTION (SEE WVWA DETAIL S-6).
7. ABANDON EXISTING 8" WATERLINE. SEE "ABANDONMENT NOTES" ON SHEET C4.8.
8. ABANDON EXISTING 8" AND 12" SANITARY SEWER. SEE "ABANDONMENT NOTES" ON SHEET C4.8.
9. NEW 2" WATER SERVICE INSTALLATION (SEE WVWA DETAIL W-2).
10. REPLACE EXISTING SANITARY SEWER MANHOLE IN PLACE WITH NEW SANITARY MANHOLE (SEE WVWA DETAIL S-1). RE-CONNECT EXISTING SEWER LINES W/NEW 5' PVC PIPE.

UTILITY LEGEND:

- GM — GAS METER
- WM — WATER METER
- S — CO — S — SANITARY SEWER LINE/ LATERAL W/CLEANOUT
- 12"S — SANITARY SEWER MAIN (SIZE AS INDICATED)
- 26 — SANITARY SEWER MANHOLE NUMBER
- S — SANITARY SEWER MANHOLE
- 4"W — WATER LINE (SIZE AS INDICATED)
- AREA OF OPEN CUT IN PAVEMENT
- STREET LIGHT – SHOWN FOR REFERENCE ONLY
- FIRE HYDRANT
- WV — GATE VALVE
- 13 — SD MANHOLE NUMBER/STRUCTURE NUMBER
- STORM DRAIN MANHOLE
- STORM DRAIN INLET
- 18"SD — STORM DRAIN LINE
- W — REMOVE OR ABANDON IN-PLACE (AS NOTED)

0 10' 20' 40'
SCALE: 1" = 20'

COMMONWEALTH OF VIRGINIA
WM. THOMAS AUSTIN
Lic. No. 050997
3/2/21
PROFESSIONAL ENGINEER

Revisions	Date

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MELROSE AVE. STREETSCAPE IMPROVEMENTS – 22ND TO 24TH ST.
UTILITY AND STORM DRAINAGE PLAN– AREA 'B'
ROANOKE, VIRGINIA

Vertical Scale: N/A
Horizontal Scale: 1"= 20'
Commission Number: 4049
Sheet No.: C4.2