



DEPARTMENT OF ENVIRONMENTAL SERVICES

Facilities and Engineering
Engineering Bureau
2100 Clarendon Boulevard, Suite 813, Arlington, VA 22201
Phone: 703.228.3629 Fax: 703.228.3606 www.arlingtonva.us

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Construction Drawings For: 12TH STREET N

11TH ROAD N TO N ROOSEVELT ST

Project Number: 316.72301.N557.CA2.0000

GENERAL NOTES:

GENERAL CONSTRUCTION NOTES

- ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, CONSTRUCTION STANDARDS AND SPECIFICATIONS, AND WHERE APPLICABLE THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS. THE LATEST EDITIONS OF EACH RELEVANT MANUAL SHALL BE USED.
- ALL CONSTRUCTION AND WORK ACTIVITIES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND ALL OTHER RELEVANT WORK SAFETY REQUIREMENTS, LATEST EDITIONS.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT OFFICER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLANS.
- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 FOR MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES (i.e. WATER, SEWER, GAS, TELEPHONE, ELECTRIC, AND CABLE TV) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO IDENTIFY AND PROTECT ALL OTHER UTILITY LINES FOUND IN THE WORK SITE AREA BELONGING TO OTHER OWNERS THAT ARE NOT MEMBERS OF "MISS UTILITY". PRIVATE WATER AND/OR SEWER LATERALS WILL NOT BE MARKED BY MISS UTILITY OR THE COUNTY. THE CONTRACTOR SHALL LOCATE AND PROTECT THESE SERVICES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND SHALL RETAIN A PROFESSIONAL LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA TO PROVIDE ALL NECESSARY CONSTRUCTION LAYOUTS AND ESTABLISH ALL CONTROL LINES, GRADES, AND ELEVATION DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A COPY OF ALL CUT SHEETS FOR REVIEW, PER THE SPECIFICATIONS. THE COST OF ALL NECESSARY SURVEYING SERVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND, UNLESS OTHERWISE SPECIFIED, THE COST SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM BEST AVAILABLE RECORDS AND SHALL BE CONSIDERED TO BE APPROXIMATE. WHEN CONSTRUCTION ACTIVITY REACHES IN PROXIMITY TO EXISTING UTILITIES, THE TRENCH(ES) SHALL BE OPENED A SUFFICIENT DISTANCE AHEAD OF THE WORK OR TEST PITS SHALL BE MADE TO VERIFY THE EXACT LOCATION AND INVERTS OF THE UTILITY TO ALLOW FOR POSSIBLE CHANGES IN THE LINE OR GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES AND THE RELATED STRUCTURES. ALL EXISTING UTILITY SYSTEMS SHALL BE PROTECTED TO PREVENT DAMAGE DURING THE CONTRACTOR'S OPERATIONS. ANY SYSTEM DAMAGED SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
- EXISTING MANHOLE FRAMES, COVERS, VALVE BOXES, AND OTHER APPURTENANCES SHALL BE ADJUSTED TO THE FINAL GRADE OR REPLACED, AS NECESSARY. UNLESS OTHERWISE SPECIFIED, THE COST FOR THIS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE CONTRACTOR SHALL PROVIDE ADA COMPLIANT ACCESS THROUGH OR AROUND THE SITE AT ALL TIMES AND SHALL ENSURE THE SAFETY OF ALL THOSE PASSING THROUGH OR ADJACENT TO THE SITE.

STORMWATER AND ENVIRONMENTAL PROTECTION

THE CONTRACTOR SHALL CONFINE ALL ACTIVITIES AT THE SITE ASSOCIATED WITH CONSTRUCTION ACTIVITIES, TO INCLUDE STORAGE OF EQUIPMENT AND OR MATERIALS, ACCESS TO THE WORK, FORMWORK, ETC. TO WITHIN THE DESIGNATED LIMITS OF DISTURBANCE (LOD).

TREE PROTECTION

- TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF SECTION 02100 - CLEARING AND GRUBBING

TRAFFIC CONTROL

- CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO DISTURBING ANY EXISTING, OR INSTALLING ANY NEW, TRAFFIC SIGNS, SIGNALS, OR OTHER TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL PREMARK THE LAYOUT OF ANY PERMANENT TRAFFIC CONTROL STRIPING, INDICATING THE PROPOSED LOCATION AND TYPE OF MARKING TO BE INSTALLED. THE PREMARKING MAY CONSIST OF TYPE D TAPE, CHALK, OR LUMBER CRAYONS. THE CONTRACTOR SHALL ALLOW 3 WORKING DAYS FOR THE INSPECTION AND APPROVAL OF THE PREMARKINGS PRIOR TO PLACING THE PERMANENT MARKINGS.
- THE CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR TEMPORARY "NO PARKING" RESTRICTIONS TO THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO THE DESIRED ONSET OF RESTRICTIONS.
- THE CONTRACTOR SHALL PRESERVE ALL BUS STOPS, INCLUDING MAINTAINING ADEQUATE ACCESSIBILITY THROUGH AND ADJACENT TO THE CONSTRUCTION FOR BUSES AND THEIR PASSENGERS. THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF THE PROJECT OFFICER. TYPICALLY ANY RELOCATION OR CLOSURE OF A BUS STOP WILL REQUIRE AT LEAST TWO WEEKS ADVANCE NOTICE FOR COORDINATION WITH THE COUNTY'S BUS STOP COORDINATOR.
- WHEN CONDITIONS WARRANT DUE TO TRAFFIC VOLUMES, PATTERNS, OR SPECIAL EVENTS, THE COUNTY MAY SUSPEND OR OTHERWISE DIRECT THE CONTRACTOR'S ACTIVITIES TO PROTECT THE PUBLIC AND OR THE COUNTY'S TRANSPORTATION NETWORK.

WATER DISTRIBUTION, STORM, AND SANITARY SEWER SYSTEMS

- UNLESS OTHERWISE DIRECTED, CONTRACTORS ARE EXPRESSLY PROHIBITED FROM OPERATING ANY WATER VALVES OR APPURTENANCES. CONTRACTORS SHALL SUBMIT ALL REQUESTS FOR VALVE OPERATIONS TO THE PROJECT OFFICER AT LEAST 3 WORKING DAYS IN ADVANCE OF THE REQUIRED OPERATION.
- IN THE EVENT OF A WATER OR SEWER EMERGENCY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY'S WATER CONTROL CENTER AT 703-228-5555 AND THE PROJECT OFFICER.

Table of Contents:

Sheet Number	Sheet Title
1	COVER SHEET
2	LEGEND
3	EXISTING CONDITIONS PLAN
4	PROPOSED LIGHTING PLAN
5	PROPOSED LIGHTING PLAN
6	PROPOSED LIGHTING PLAN
7	NOTES & DETAILS

ADDITIONAL NOTES:

STAKEOUT

ALL PROPOSED STREETLIGHT LOCATIONS SHALL BE STAKED/MARKED BY ARLINGTON COUNTY SURVEY SECTION PRIOR TO INSTALLATION. IN ADDITION, CRITICAL PROPERTY CORNERS SHALL BE STAKED TO PRECLUDE INSTALLATION OR DIRECTIONAL BORING ON PRIVATE PROPERTY.

TOTAL NUMBER OF STREETLIGHTS

CARLYLE STREETLIGHTS TO BE INSTALLED = 25
EXISTING DVP STREETLIGHTS TO BE REMOVED & DISPOSED (BY DVP) = 8

DIRECTIONAL BORING

THE PROPOSED CONDUIT DIRECTIONAL BORING ALIGNMENTS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE CHANGED AT THE DIRECTION OF THE COUNTY PROJECT OFFICER. THE CONTRACTOR SHALL CONDUCT TEST PITS/BORES WHERE NEW CONDUIT CROSSES UNDERGROUND UTILITIES OR AS DIRECTED BY THE COUNTY PROJECT OFFICER TO ENSURE MINIMUM UTILITY CLEARANCES ARE MET.

STREETLIGHT LAYOUT

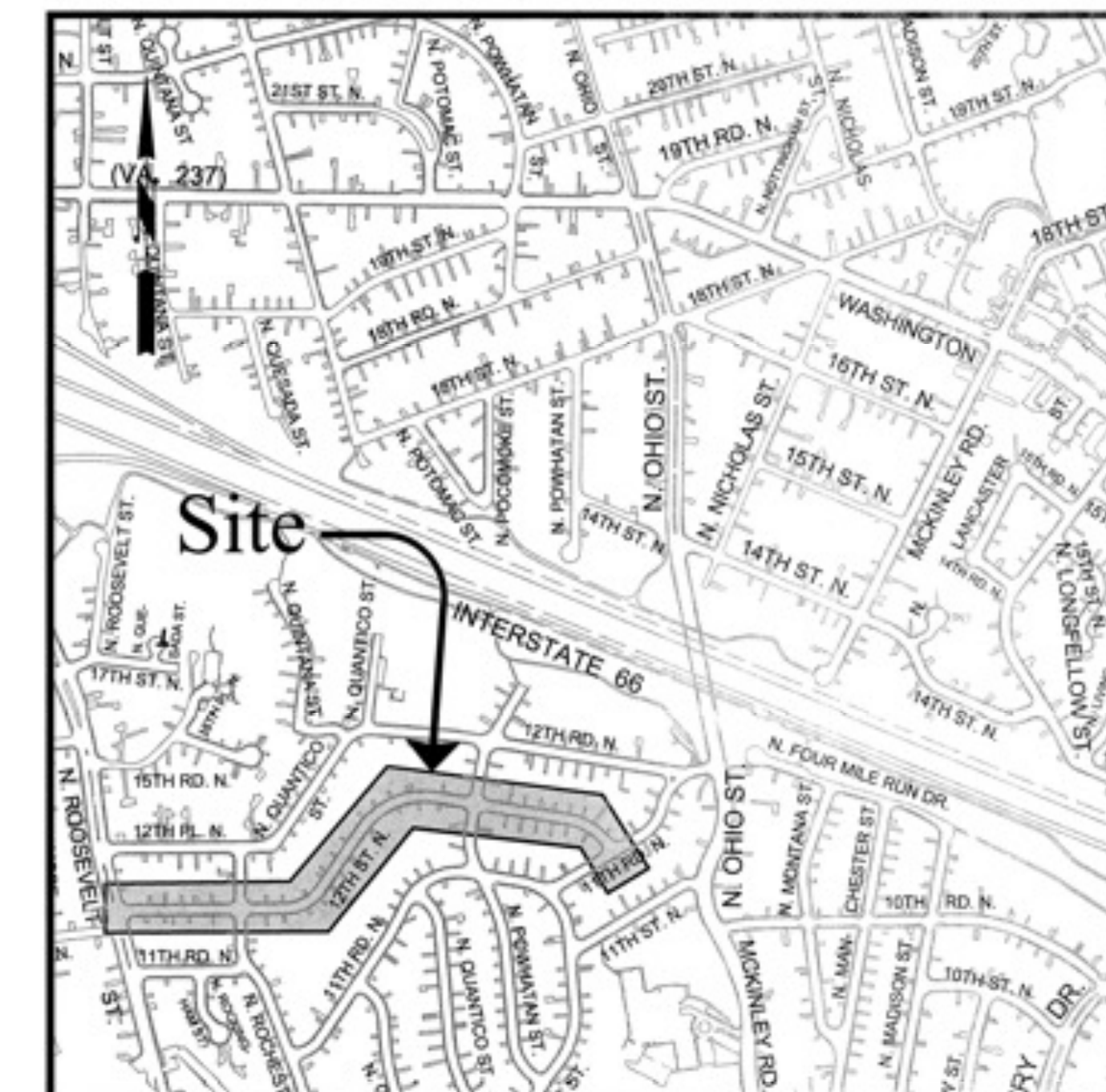
PROPOSED STREETLIGHT LAYOUT IS BASED ON THE ARLINGTON COUNTY INFRASTRUCTURE DESIGN AND CONSTRUCTION STANDARD H-3.11 STREETLIGHTS, TABLE 1. WHERE THE RECOMMENDED SPACING OF 80' COULD NOT BE REASONABLY MET DUE TO EXISTING INFRASTRUCTURE ALONG THIS 35.5' WIDE NEIGHBORHOOD MINOR STREET, THE STREETLIGHTS WERE LOCATED ON BOTH SIDES OF THE STREET AND STAGGERED TO BETTER MEET THIS SPACING.

SANITARY SEWER LATERALS

LOCATION OF SEWER LATERALS, IF SHOWN, ARE APPROXIMATE AND BASED SOLELY ON AVAILABLE RECORDS. SANITARY SEWER LATERALS ARE PRIVATELY OWNED AND MAINTAINED. IT'S THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING LATERALS WITHIN THE LIMITS OF CONSTRUCTION. APPROPRIATE PERMITS AND INSPECTIONS FOR WORK ON ANY LATERALS MUST BE OBTAINED FROM INSPECTION SERVICES. ANY LATERALS ABANDONED WITH THE PROJECT WILL BE CAPPED AT THE SEWER MAIN.

Location Map

Scale: 1"=600'



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TE&O APPROVAL

Approvals
Design Team Supervisor: *[Signature]* Date: 12/15/16
Quality Control Engineer: *[Signature]* Date: 12/15/16
Construction Management Supervisor: *[Signature]* Date: 12/15/16
WSS: Chief Support Engineer: *[Signature]* Date: 12/15/16
Transportation Bureau Chief: *[Signature]* Date: 12/15/16
Project Manager: *[Signature]* Date: 12/15/16

Revisions Date

Project Name and Location

COVER SHEET

12TH STREET N
11TH ROAD N TO N ROOSEVELT ST

Designed: E Caccavari
Drawn: E Caccavari
Checked: M Trout
Miss Utility Transmittal #5266

Filename: N557-PPLAN.dwg
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Plotted: December 09, 2016
Plotted by:

Scale: As Noted

Sheet
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LINETYPE LEGEND

	existing	PROPOSED
EASEMENT	---	---
HARDSCAPE FEATURE (MATERIAL NOTED)	---	---
BUILDING	---	---
COMMUNICATIONS CABLE	--- COM ---	---
CENTERLINE / BASELINE	---	---
CONTOURS	--- 250 --- 250 --- 250 ---	--- 250 --- 250 --- 250 ---
ELECTRIC (UNDERGROUND)	---	---
FENCE (MATERIAL NOTED)	--- X --- X --- X --- X ---	--- X --- X --- X --- X ---
FIBER OPTIC	--- FO --- FO ---	--- FO --- FO ---
GUARDRAIL	---	---
X" GAS (SIZE INCLUDED IF AVAILABLE)	--- GAS ---	---
GAS (IF SIZE UNAVAILABLE)	--- GAS ---	--- GAS ---
LIMITS OF DISTURBANCE	---	---
OVERHEAD WIRES	---	---
PROPERTY LINE	---	---
RIGHT-OF-WAY LINE	---	---
X" SANITARY SEWER (SIZE INCLUDED IF AVAILABLE)	--- 12" S ---	--- 12" S ---
SANITARY SEWER (IF SIZE UNAVAILABLE)	--- SAN ---	--- SAN ---
STORM (SIZE NOTED)	---	---
TELEPHONE (UNDERGROUND)	--- UGT ---	--- UGT ---
WALL	---	---
X" WATER (SIZE INCLUDED IF AVAILABLE)	---	---
WATER (IF SIZE UNAVAILABLE)	---	---
TREE LINE	---	---

HATCH LEGEND

PROP MILL & OVERLAY SEE TYPICAL SECTION FOR DETAILS	
PROP FULL DEPTH ASPHALT SEE TYPICAL SECTION FOR DETAILS	
PROP CONCRETE	
REPLACE & MATCH EXISTING DRIVEWAY OR LEADWALK. SEE CONSTRUCTION NOTES	
DEMOLITION AREA	

SYMBOL LEGEND

existing	PROPOSED
ex storm catch basin	PROP STORM CATCH BASIN (TO SCALE)
ex yard inlet	PROP YARD INLET (TO SCALE)
ex storm manhole	PROP STORM MANHOLE
ex sanitary manhole	PROP SANITARY MANHOLE
ex traffic sign	PROP TRAFFIC SIGN
ex gas valve	PROP GAS VALVE
ex light pole	PROP LIGHT POLE
ex utility pole	PROP UTILITY POLE
ex water manhole	PROP WATER MANHOLE
ex water valve	PROP WATER VALVE
ex fire hydrant	PROP FIRE HYDRANT
ex water meter	PROP WATER METER
ex utility manhole type indicated electric, tele, etc)	
ex traffic control box	
ex guy wires	
ex telephone pedestal	
ex electric box	
ex cable pedestal	
ex iron pipe or pin	
ex monument	
ex parking meter	
ex mailbox	
ex ground light	
ex trees, wooded area	

CURVE NUMBER (SEE CURVE TABLE)
LINE NUMBER (SEE LINE TABLE)
CONSTRUCTION NOTES (LEADER TO AREA AFFECTED)
BENCHMARK
NORTH ARROW
TRAVERSE
TEST HOLE
TREE REMOVAL

LABEL LEGEND

existing sanitary structure number	PROP SANITARY SEWER STRUCTURE NUMBER
existing storm sewer structure number	PROP STORM SEWER STRUCTURE NUMBER



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WSS Chief Support Engineer

Transportation Bureau Chief
Project Manager

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Project Name and Location
LEGEND
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11TH ROAD N TO N ROOSEVELT ST

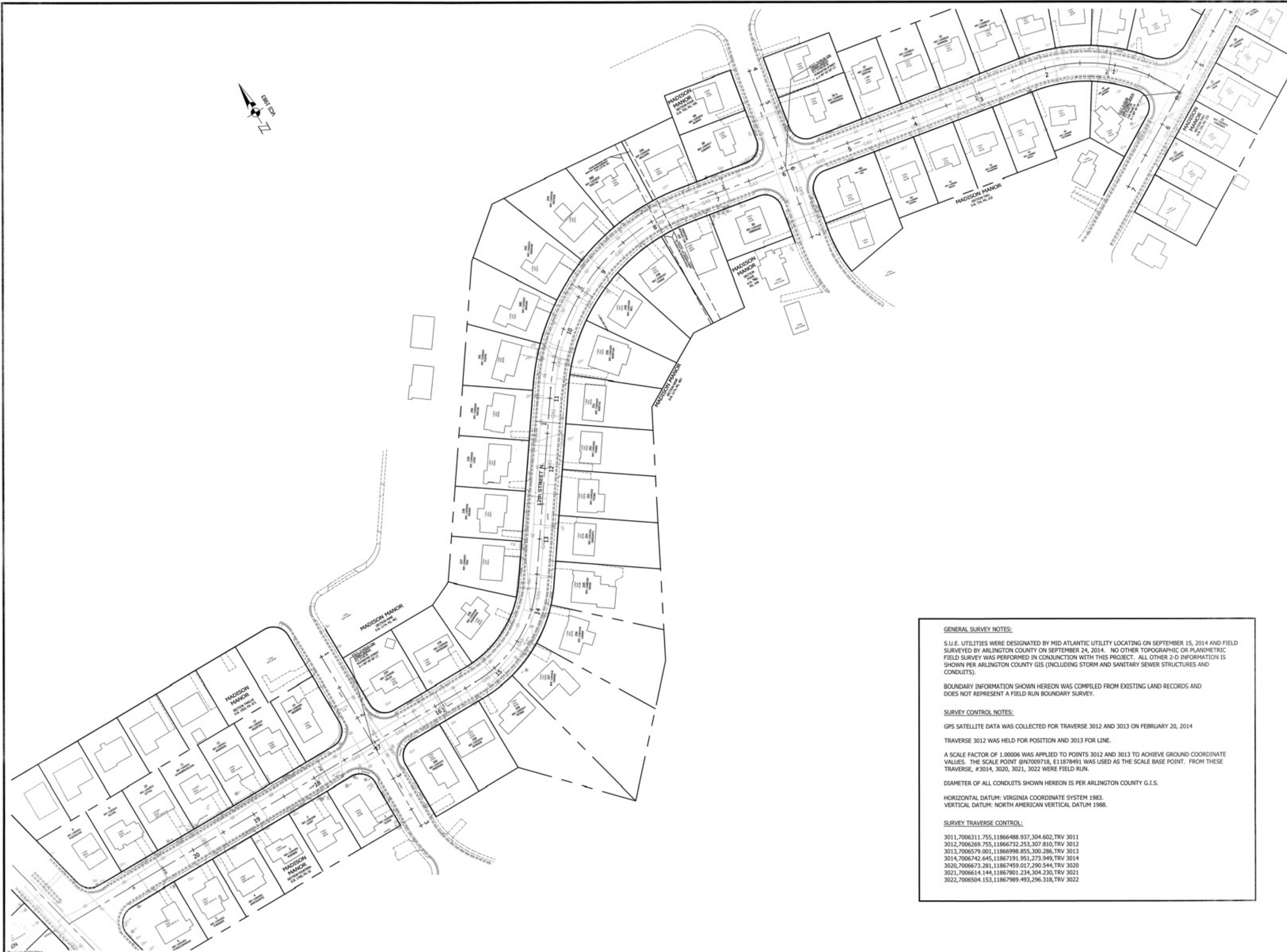
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12TH STREET N - N557



TE&O APPROVAL

Approvals Date
Design Team Supervisor 12/15/16
Quality Control Engineer 12/16/16

Construction Management Supervisor
WSS Chief Support Engineer 12/16/16

Transportation Bureau Chief
Project Manager 12/16/16

Revisions Date

Project Name and Location
EXISTING CONDITIONS

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Scale: 1"=60'

GRAPHIC SCALE



Sheet

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GENERAL SURVEY NOTES:

S.U.E. UTILITIES WERE DESIGNATED BY MID ATLANTIC UTILITY LOCATING ON SEPTEMBER 15, 2014 AND FIELD SURVEYED BY ARLINGTON COUNTY ON SEPTEMBER 24, 2014. NO OTHER TOPOGRAPHIC OR PLANIMETRIC FIELD SURVEY WAS PERFORMED IN CONJUNCTION WITH THIS PROJECT. ALL OTHER 2-D INFORMATION IS SHOWN PER ARLINGTON COUNTY GIS (INCLUDING STORM AND SANITARY SEWER STRUCTURES AND CONDUITS).

BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM EXISTING LAND RECORDS AND DOES NOT REPRESENT A FIELD RUN BOUNDARY SURVEY.

SURVEY CONTROL NOTES:

GPS SATELLITE DATA WAS COLLECTED FOR TRAVERSE 3012 AND 3013 ON FEBRUARY 20, 2014

TRAVERSE 3012 WAS HELD FOR POSITION AND 3013 FOR LINE.

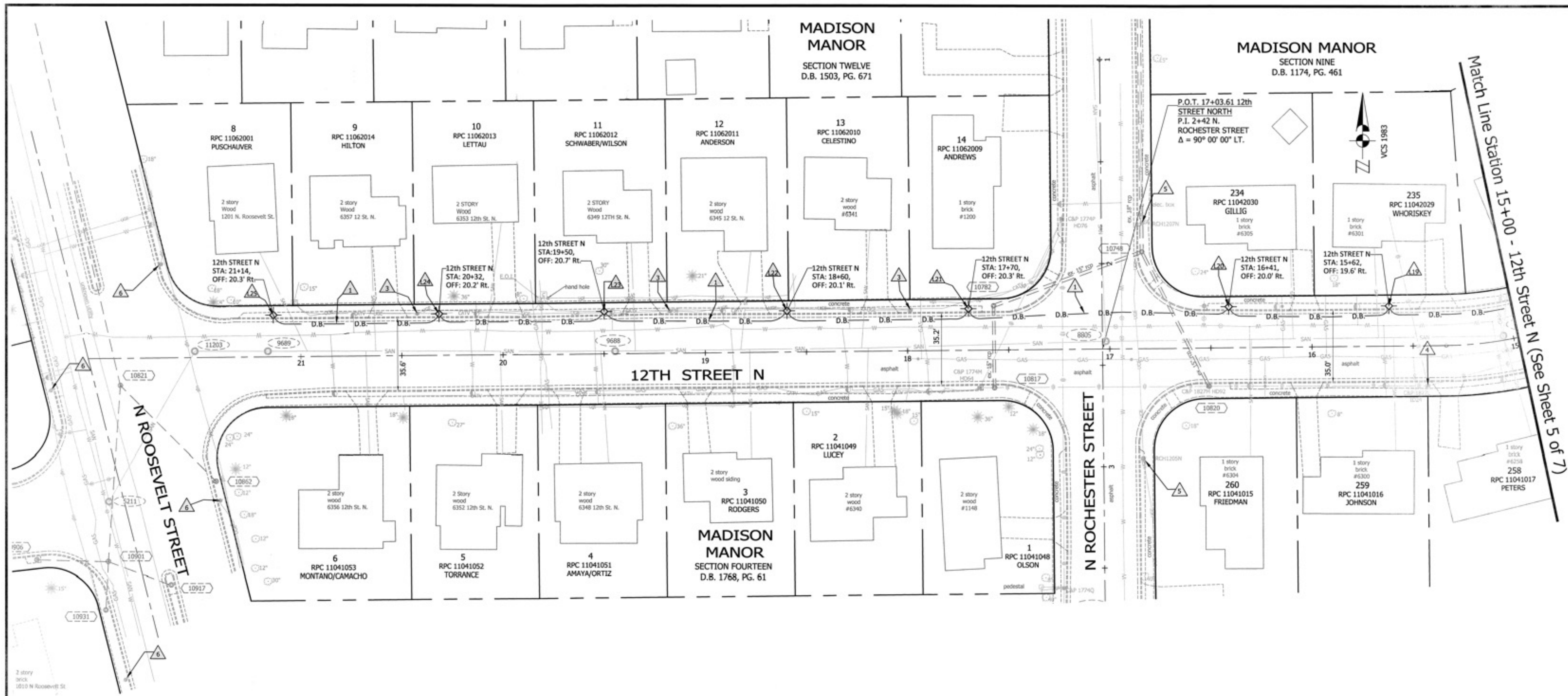
A SCALE FACTOR OF 1.00006 WAS APPLIED TO POINTS 3012 AND 3013 TO ACHIEVE GROUND COORDINATE VALUES. THE SCALE POINT @N7009718, E11878491 WAS USED AS THE SCALE BASE POINT. FROM THESE TRAVERSE, #3014, 3020, 3021, 3022 WERE FIELD RUN.

DIAMETER OF ALL CONDUITS SHOWN HEREON IS PER ARLINGTON COUNTY G.I.S.

HORIZONTAL DATUM: VIRGINIA COORDINATE SYSTEM 1983.
VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988.

SURVEY TRAVERSE CONTROL:

3011,7006311.755,11866488.937,304.602,TRV 3011
3012,7006269.755,11866732.253,307.810,TRV 3012
3013,7006579.001,11866998.855,300.286,TRV 3013
3014,7006742.645,11867191.951,273.949,TRV 3014
3020,7006673.281,11867459.017,290.544,TRV 3020
3021,7006614.144,11867801.234,304.230,TRV 3021
3022,7006504.153,11867989.493,296.318,TRV 3022



CONSTRUCTION NOTES

- 1. PROPOSED 12" BLACK FINISH ALUMINUM CARLYLE LIGHT, ARLINGTON COUNTY STANDARD (LT-5.1, LT-5.2a, LT-7, LT-8, LT-12, LT-14.2).
- 2. PROPOSED TWO (2) INCH CONDUIT AND FITTINGS WITH # SIX (6) AWG CABLES PULLED INSIDE, ARLINGTON COUNTY STANDARD (TS4-7).
- 3. PROPOSED 12"x12" QUAZITE SPLICE BOX AND COVER, ARLINGTON COUNTY STANDARD (LT-16).
- 4. REMOVE & DISPOSE EXISTING DVP COLONIAL STREET LIGHT
- 5. REMOVE & DISPOSE EXISTING DVP COBRA STREET LIGHT
- 6. EXISTING CARLYLE STREET LIGHT TO REMAIN
- 7. EXISTING DVP COBRA STREET LIGHT TO REMAIN

D.B. D.B. DIRECTIONAL BORE PER ARLINGTON COUNTY STANDARD "TRAFFIC AND STREETLIGHT SPECIFICATIONS".

- 8. PROPOSED METER LOCATION (AS DETERMINED BY ARLINGTON COUNTY; TO BE CONFIRMED WITH DVP PRIOR TO CONSTRUCTION).

Project Name and Location

PROPOSED LIGHTING PLAN

12TH STREET N

11TH ROAD N TO N ROOSEVELT ST

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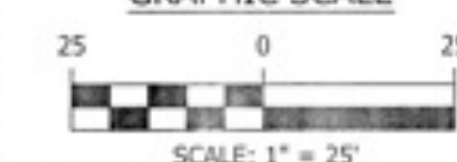
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Plotted by: Ecaccavari

Scale: 1"=25'

GRAPHIC SCALE

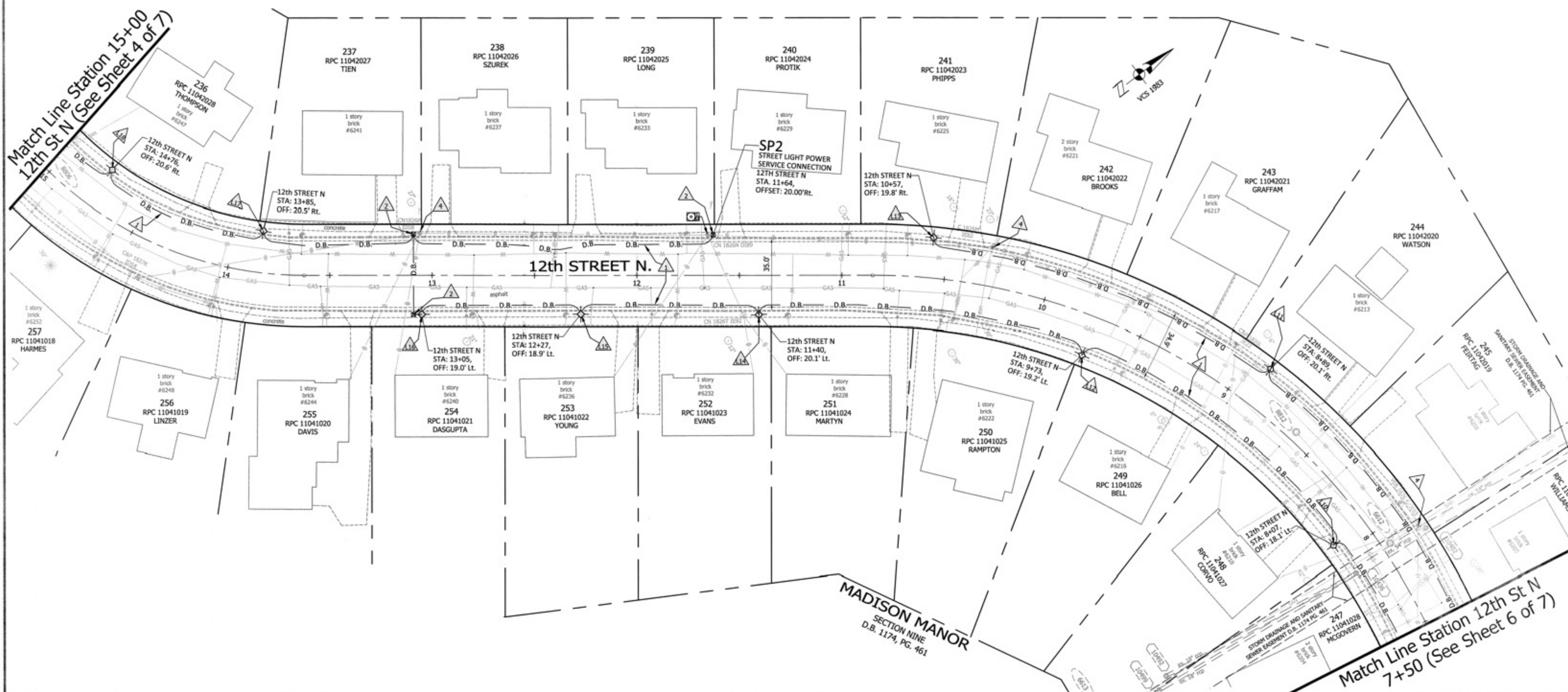


SCALE: 1" = 25'

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12TH STREET N - N557



Approvals *Mark M. Hoad* Date 12/15/16

DESIGN TEAM SUPERVISOR

J. J. J. J. Date 12/14/16

QUALITY CONTROL ENGINEER

CONSTRUCTION MANAGEMENT SUPERVISOR

John H. H. Date 12/14/16

WSS: CHIEF SUPPORT ENGINEER

TRANSPORTATION BUREAU CHIEF

J. J. J. J. Date 12/21/16

PROJECT MANAGER

Revisions Date

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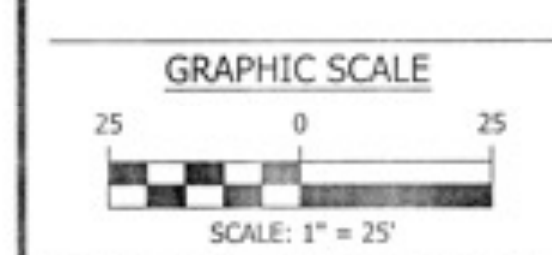
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PROPOSED LIGHTING PLAN
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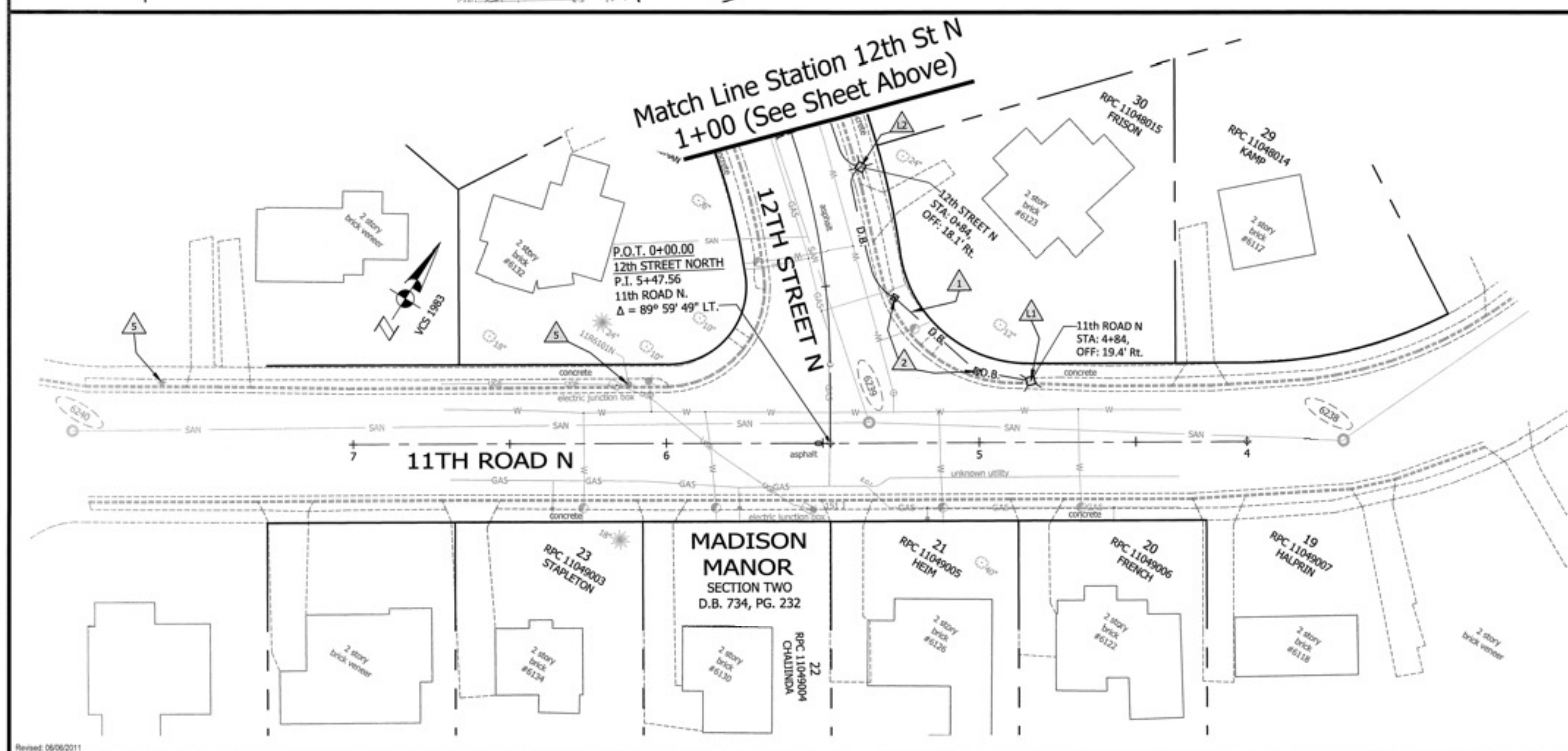
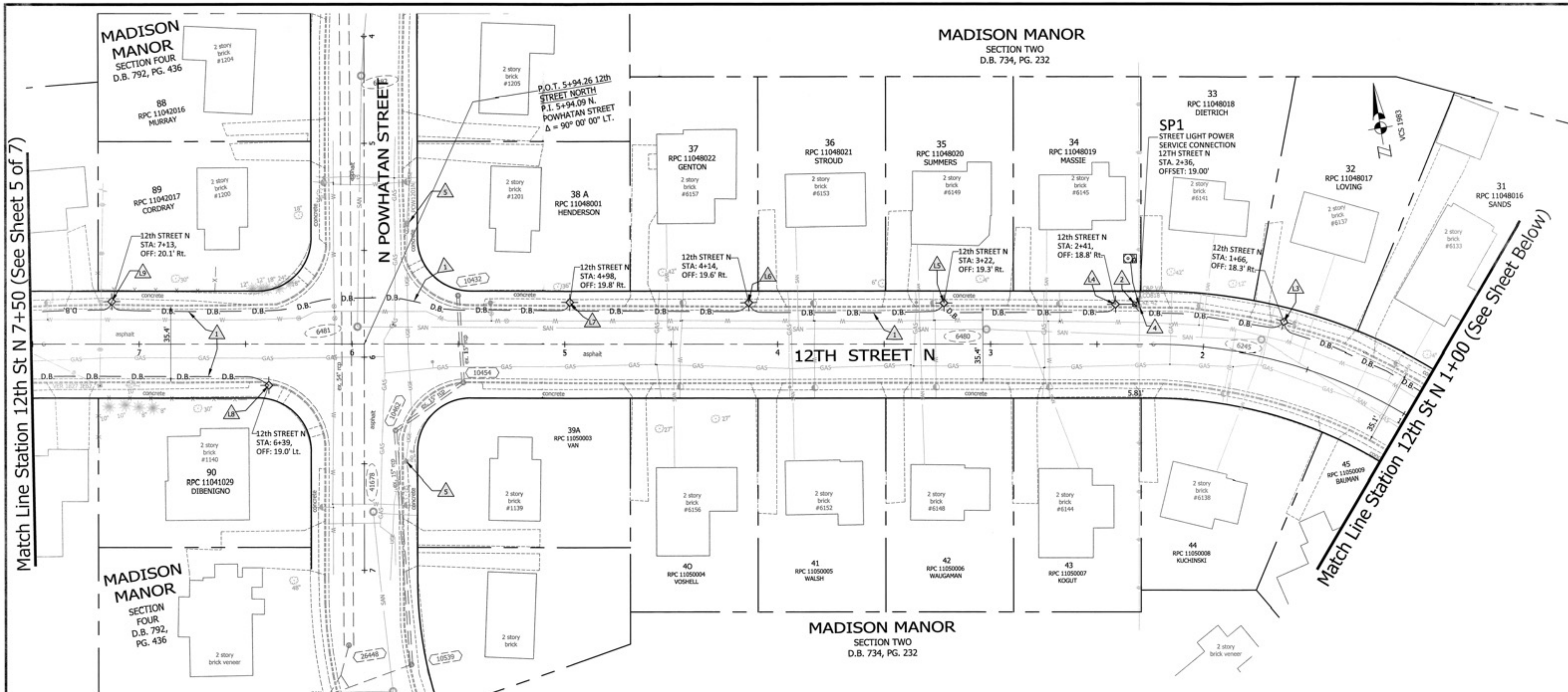
Scale: 1"=25'



Sheet

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Match Line Station 12th St N 7+50 (See Sheet 5 of 7)



CONSTRUCTION NOTES

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Approvals Date

DESIGN TEAM SUPERVISOR 12/15/16

QUALITY CONTROL ENGINEER 12/14/16

CONSTRUCTION MANAGEMENT SUPERVISOR

ASS. CHIEF SUPPORT ENGINEER 12/14/16

TRANSPORTATION BUREAU CHIEF

PROJECT MANAGER 12/14/16

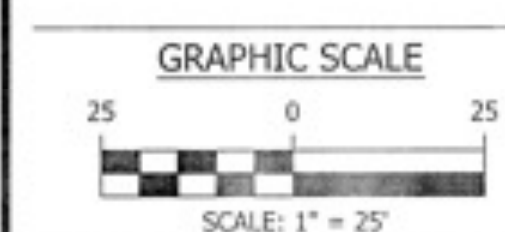
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Sheet

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12TH STREET N - N557

TECO APPROVAL

Approvals Date
Design Team Supervisor 12/15/16
Quality Control Engineer 12/16/16

CONSTRUCTION MANAGEMENT SUPERVISOR
WSS CHIEF SUPPORT ENGINEER 12/16/16

TRANSPORTATION BUREAU CHIEF
PROJECT MANAGER 12/16/16

Revisions Date

NOTES AND DETAILS
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STREET LIGHT VOLTAGE DROP CALCULATION									
Light type : Relume model UA2 XRE, 120V, 57.59W with 48 LEDs									
Amperes required per LED Light is 0.4833A									
For #6 AWG copper cable, effective impedance used in the calculation is 0.51 ohms/1000 ft.									
SERVICE CONNECTION - SP1 (CKT1)									
CIRCUIT # 1 - VOLTAGE DROP TO METER AND TWO POLES (Along 12th St N from Station 0+00 to 2+36)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP1	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	10	4.83	0.25	
CKT1-1	METER	L3	89	#6 AWG	1	2	0.97	0.04	
CKT1-2	L3	L1	220	#6 AWG	1	1	0.48	0.05	
Total Voltage Drop of Circuit # 1 at last pole (V):								0.34	
Percent Voltage Drop for Circuit # 1 at last pole:								0.29%	
SERVICE CONNECTION - SP1 (CKT2)									
CIRCUIT # 2 - VOLTAGE DROP TO METER AND ONE POLE (Along 12th St N from Station 0+84 to 2+36)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP1	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	10	4.83	0.25	
CKT2-1	METER	L2	180	#6 AWG	1	1	0.48	0.04	
Total Voltage Drop of Circuit # 2 at last pole (V):								0.29	
Percent Voltage Drop for Circuit # 2 at last pole:								0.24%	
SERVICE CONNECTION - SP1 (CKT3)									
CIRCUIT # 3 - VOLTAGE DROP TO METER AND FOUR POLES (Along 12th St N from Station 2+36 to 10+57)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP1	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	10	4.83	0.25	
CKT3-1	METER	L4	24	#6 AWG	1	4	1.93	0.02	
CKT3-2	L4	L6	210	#6 AWG	1	3	1.45	0.16	
CKT3-3	L6	L9	338	#6 AWG	1	2	0.97	0.17	
CKT3-4	L9	L13	400	#6 AWG	1	1	0.48	0.10	
Total Voltage Drop of Circuit # 3 at last pole (V):								0.69	
Percent Voltage Drop for Circuit # 3 at last pole:								0.58%	
SERVICE CONNECTION - SP1 (CKT4)									
CIRCUIT # 4 - VOLTAGE DROP TO METER AND THREE POLES (Along 12th St N from Station 2+36 to 8+89)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP1	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	10	4.83	0.25	
CKT4-1	METER	L5	109	#6 AWG	1	3	1.45	0.08	
CKT4-2	L5	L7	213	#6 AWG	1	2	0.97	0.11	
CKT4-3	L7	L11	439	#6 AWG	1	1	0.48	0.11	
Total Voltage Drop of Circuit # 4 at last pole (V):								0.54	
Percent Voltage Drop for Circuit # 4 at last pole:								0.45%	

SERVICE CONNECTION - SP2 (CKT1)									
CIRCUIT # 1 - VOLTAGE DROP TO METER AND THREE POLES (Along 12th St N from Station 8+07 to 13+05)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP2	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	15	7.25	0.37	
CKT1-1	METER	L16	207	#6 AWG	1	3	1.45	0.15	
CKT1-2	L16	L14	204	#6 AWG	1	2	0.97	0.10	
CKT1-3	L14	L10	361	#6 AWG	1	1	0.48	0.09	
Total Voltage Drop of Circuit # 1 at last pole (V):								0.71	
Percent Voltage Drop for Circuit # 1 at last pole:								0.59%	
SERVICE CONNECTION - SP2 (CKT2)									
CIRCUIT # 2 - VOLTAGE DROP TO METER AND THREE POLES (Along 12th St N from Station 6+39 to 13+05)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP2	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	15	7.25	0.37	
CKT2-1	METER	L15	289	#6 AWG	1	3	1.45	0.21	
CKT2-2	L15	L12	289	#6 AWG	1	2	0.97	0.14	
CKT2-3	L12	L8	362	#6 AWG	1	1	0.48	0.09	
Total Voltage Drop of Circuit # 2 at last pole (V):								0.82	
Percent Voltage Drop for Circuit # 2 at last pole:								0.68%	
SERVICE CONNECTION - SP2 (CKT3)									
CIRCUIT # 3 - VOLTAGE DROP TO METER AND FIVE POLES (Along 12th St N from Station 11+64 to 21+14)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP2	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	15	7.25	0.37	
CKT3-1	METER	L17	243	#6 AWG	1	5	2.42	0.30	
CKT3-2	L17	L19	203	#6 AWG	1	4	1.93	0.20	
CKT3-3	L19	L21	246	#6 AWG	1	3	1.45	0.18	
CKT3-4	L21	L23	218	#6 AWG	1	2	0.97	0.11	
CKT3-5	L23	L25	201	#6 AWG	1	1	0.48	0.05	
Total Voltage Drop of Circuit # 3 at last pole (V):								1.21	
Percent Voltage Drop for Circuit # 3 at last pole:								1.01%	
SERVICE CONNECTION - SP2 (CKT4)									
CIRCUIT # 4 - VOLTAGE DROP TO METER AND FOUR POLES (Along 12th St N from Station 11+64 to 20+32)									
CKT #	FROM	TO	CKT LENGTH	WIRE SIZE	QTY. OF LIGHTS ON POLE	TOTAL QTY. OF LIGHTS ON SP2	AMPERES THRU CABLE	VOLTAGE DROP IN THIS SECTION	
PANEL FEED	TRANSF	METER	100	#6 AWG	N/A	15	7.25	0.37	
CKT4-1	METER	L18	330	#6 AWG	1	4	1.93	0.33	
CKT4-2	L18	L20	199	#6 AWG	1	3	1.45	0.15	
CKT4-3	L20	L22	257	#6 AWG	1	2	0.97	0.13	
CKT4-4	L22	L24	209	#6 AWG	1	1	0.48	0.05	
Total Voltage Drop of Circuit # 4 at last pole (V):								1.02	
Percent Voltage Drop for Circuit # 4 at last pole:								0.85%	

EXISTING DVP POLES AND LIGHTING					
Count	Street	Station - Offset	DVP Grid & Pole ID #	Notes	
1	12th Street N	between 11th St N & Powhatan	2+30.05 - 18' Rt.	CO818; 1823D; KE42	Cobra to be removed
2	12th Street N	between Powhatan & Rochester	7+19.82 - 19' Lt.	1827A; JE62	No Existing Lamp
3	12th Street N	between Powhatan & Rochester	7+90.79 - 20.5' Rt.	1826K; JE63	Cobra to be removed
4	12th Street N	between Powhatan & Rochester	9+09.43 - 20.5' Rt.	1826L; JE22	No Existing Lamp
5	12th Street N	between Powhatan & Rochester	10+29.85 - 20' Rt.	CO818; 1826M; IE82	Cobra to be removed
6	12th Street N	between Powhatan & Rochester	11+48.73 - 20' Lt.	182T; IE92	No Existing Lamp
7	12th Street N	between Powhatan & Rochester	11+65.79 - 19' Rt.	CO818; CN1826N; D189	No Existing Lamp
8	12th Street N	between Powhatan & Rochester	13+06.76 - 20' Rt.	CO818; 1826T; ID58	Cobra to be removed
9	12th Street N	between Powhatan & Rochester	14+35.46 18' Lt.	1827K; ID54	No Existing Lamp
10	12th Street N	between Powhatan & Rochester	15+42.72 - 19' Lt.	CO818; 1827L; ID24	Cobra to be removed
11	12th Street N	between Powhatan & Rochester	16+51.23 - 18' Lt.	1827M; HD92	No Existing Lamp
12	12th Street N	between Rochester & Roosevelt	17+64.35 - 18' Lt.	774M; HD64	No Existing Lamp
13	12th Street N	between Rochester & Roosevelt	17+98.39 - 19.9' Rt.	CO818; HD84	Colonial Light to be removed
14	12th Street N	between Rochester & Roosevelt	19+17.36 - 20.6' Rt.	CO818; HD64	Colonial Light to be removed
15	12th Street N	between Rochester & Roosevelt	20+42.19 - 20.4' Rt.	CO818; HD24	Colonial Light to be removed
16	N Rochester St	at 12th Street N	1+80.36 - 20.2' Lt.	RCH1201N	Carlyle Light to remain
17	N Rochester St	at 12th Street N	2+96.02 - 19.6' Lt.	RCH1205N	Carlyle Light to remain
18	N Powatan St	at 12th Street N	5+37.65 - 19.1' Lt.	POW1201N	Carlyle Light to remain
19	N Powatan St	at 12th Street N	6+49.53 - 19.7' Lt.	Unmarked Pole	Carlyle Light to remain
20	11th Road N	at 12th Street N	6+13.50 - 18.6' Rt.	11R6101N	Carlyle Light to remain