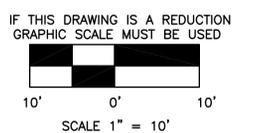


NOTE:
1. CONTRACTOR SHALL TAKE CARE TO AVOID UNDERMINING EXISTING SIDEWALK ADJACENT TO LIGHTING TRENCH.



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215 CHURCH AVENUE, S.W.
ROOM 350
PHONE: (540) 853-2731
FAX: (540) 853-1364
WWW.ROANOKEVA.GOV

DESIGNED: **PMC**
DRAWN: **ARG**
CHECKED: **PMC**

SEALS:

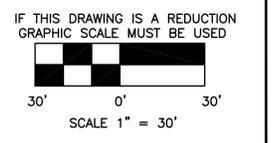
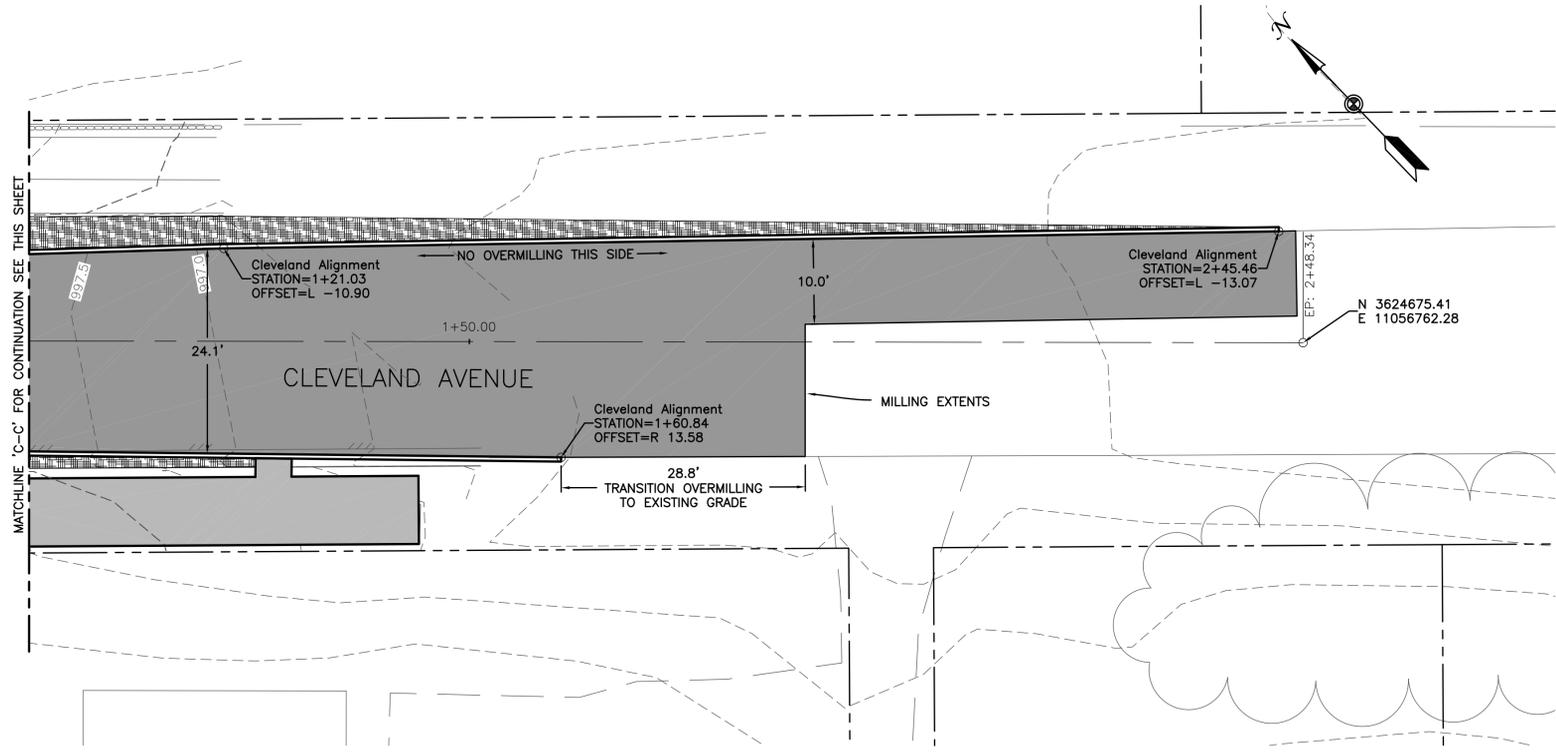
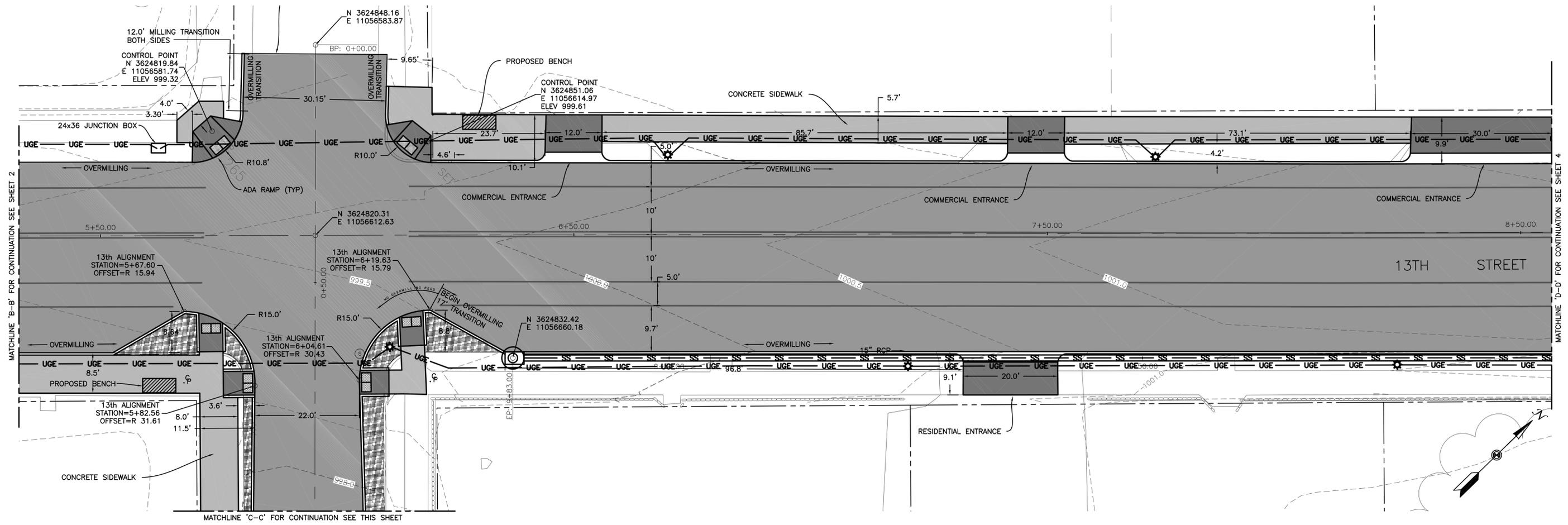
REV.	DATE	DESCRIPTION

DATE:
03/27/2015
SCALE:
1"=10'-0"
24"x36" SHEET

13TH STREET STREETScape PROJECT
WEST END TARGET AREA
CITY OF ROANOKE, VIRGINIA

PLANS

SHEET
2 OF 11
PLAN NO.
6793



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SEALS:

REV.	DATE	DESCRIPTION

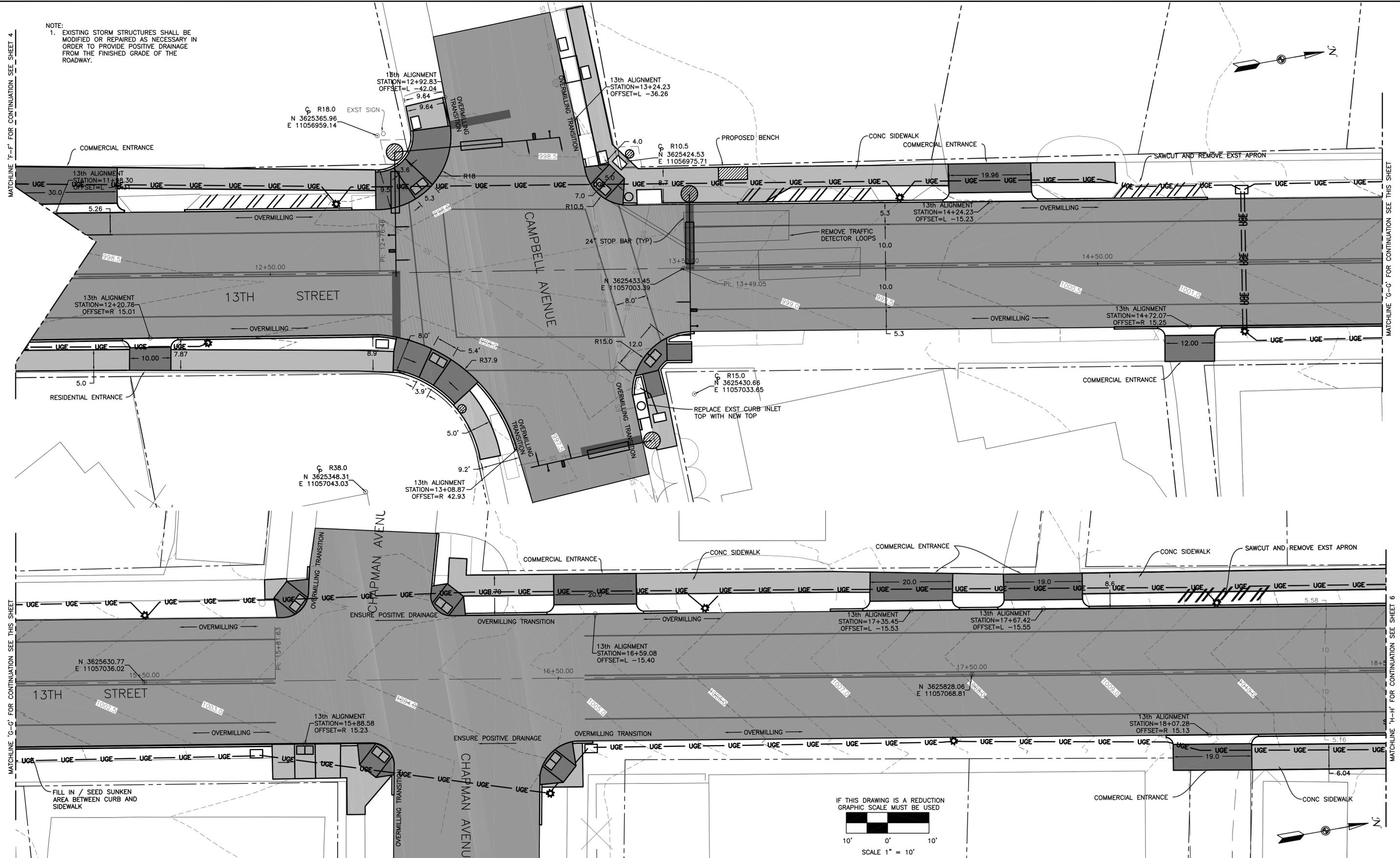
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 03/27/2015
 SCALE:
 1"=10'-0"
 24"x36" SHEET

13TH STREET STREETScape PROJECT
 WEST END TARGET AREA
 CITY OF ROANOKE, VIRGINIA

PLANS

SHEET
 3 OF 11
 PLAN NO.
 6793

NOTE:
 1. EXISTING STORM STRUCTURES SHALL BE MODIFIED OR REPAIRED AS NECESSARY IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE FINISHED GRADE OF THE ROADWAY.

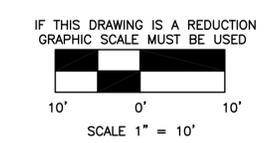


MATCHLINE 'F-F' FOR CONTINUATION SEE SHEET 4

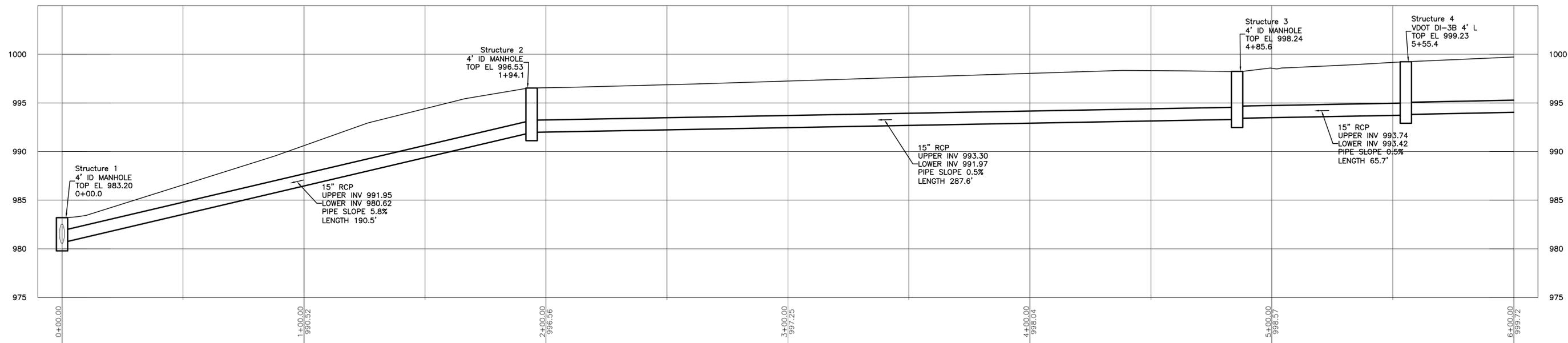
MATCHLINE 'G-G' FOR CONTINUATION SEE THIS SHEET

MATCHLINE 'G-G' FOR CONTINUATION SEE THIS SHEET

MATCHLINE 'H-H' FOR CONTINUATION SEE SHEET 6

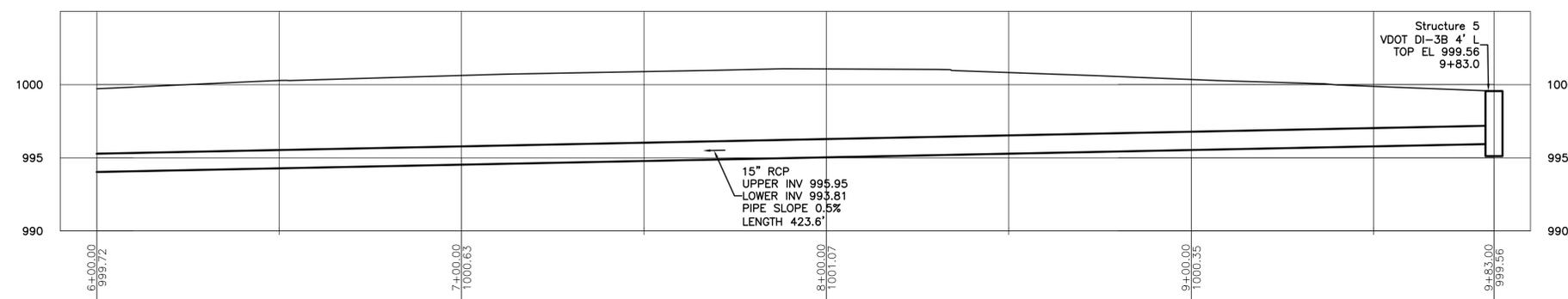


<p>ROANOKE</p>	<p>OFFICE OF THE CITY ENGINEER</p> <p>215 CHURCH AVENUE, S.W. ROOM 350 PHONE: (540) 853-2731 FAX: (540) 853-1364 WWW.ROANOKEVA.GOV</p>	<p>DESIGNED: PMC</p>		<p>REV.</p>	<p>DATE:</p>	<p>DESCRIPTION:</p>	<p>DATE: 03/27/2015</p>	<p>13TH STREET STREETScape PROJECT WEST END TARGET AREA</p> <p>CITY OF ROANOKE, VIRGINIA</p>	<p>PLANS</p>	<p>SHEET 5 OF 11</p>
	<p>DRAWN: ARG</p>	<p>CHECKED: PMC</p>		<p>SCALE: 1"=10'-0" 24"x36" SHEET</p>	<p>PLAN NO. 6793</p>					



STORM PROFILE

HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=5'-0"



STORM PROFILE

HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=5'-0"

IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED



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DESIGNED: **PMC**
DRAWN: **ARG**
CHECKED: **PMC**

SEALS:

PRISCILLA M. CYGIELNIK
Lic. No. 046035
4/29/15
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

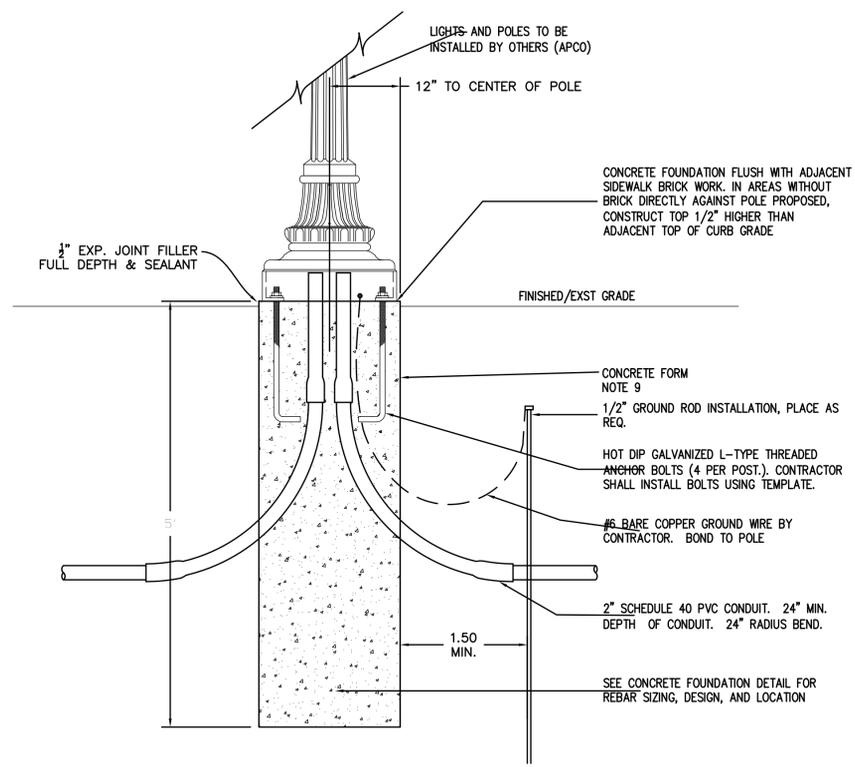
DATE:
03/27/2015
SCALE:
AS SHOWN
24"x36" SHEET

13TH STREET STREETScape PROJECT
WEST END TARGET AREA

CITY OF ROANOKE, VIRGINIA

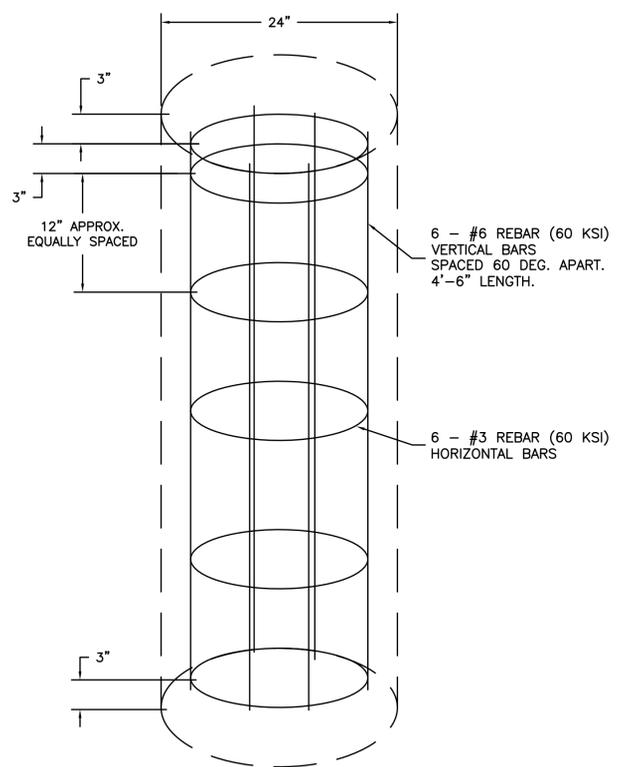
STORM PROFILES

SHEET
7 OF 11
PLAN NO.
6793

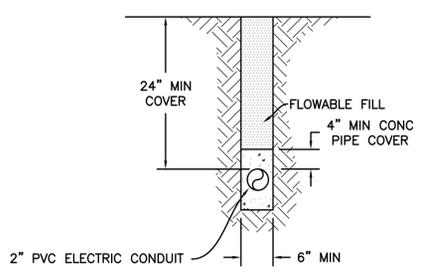


LIGHT POLE DETAIL
NTS

- NOTES:
- REFER TO POLE MANUFACTURER'S INSTRUCTIONS FOR PLACEMENT OF ANCHOR BOLTS. COORDINATE WITH LIGHT POLE PROVIDER FOR ANCHOR BOLT LOCATIONS / TEMPLATES FOR A WASHINGTON UTILITY POSTLITE ENHANCED SERIES LUMINAIRE BY HOLOPHANE.
 - POLE SHALL NOT BE INSTALLED UNTIL CONCRETE HAS CURED A MINIMUM OF THREE DAYS. POLE INSTALLATION BY AEP. COORDINATE INSTALLATION WITH MARTIN MCGEE.
 - ALL WORK TO BE IN ACCORDANCE WITH THE LATEST REVISION OF ACI 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AS WELL AS ANY OTHER APPROPRIATE CODES OR REGULATIONS. CONCRETE FOUNDATION 3500 PSI MINIMUM AT 28 DAYS
 - EACH FOUNDATION SHALL BE POURED IN A SINGLE CONTINUOUS POUR.
 - ALL LOOSE MATERIAL SHALL BE REMOVED FROM THE HOLE PRIOR TO CONCRETE PLACEMENT. THE SIDES OF THE EXCAVATION SHALL BE ROUGH AND FREE OF LOOSE MATERIAL.
 - CONCRETE SHALL BE PLACED IN A MANNER THAT PREVENTS SEGREGATION OF THE CONCRETE AND/OR INFILTRATION OF WATER OR SOIL. FREE FALL CONCRETE IS ALLOWED PROVIDED THE CONCRETE DOES NOT HIT THE SIDES OF THE EXCAVATION OR THE REBAR. UNDER NO CIRCUMSTANCE SHALL CONCRETE FALL THROUGH WATER.
 - BURIAL DEPTH IS DEFINED AS THE DISTANCE BETWEEN FINAL GRADE AND THE TOP OF THE BURIED CABLE OR CONDUIT. SECONDARY OR SERVICE CABLES SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 2'-6". IT IS RECOMMENDED THAT SECONDARY OR SERVICE CABLES MAINTAIN A BURIED DEPTH OF AT LEAST 2'-0". THE INITIAL 2'-6" BURIAL DEPTH IS TO ALLOW FOR CHANGES IN SURFACE CONDITIONS.
 - GROUND RODS ARE TO BE DRIVEN TO THE DEPTH SHOWN UNLESS ROCK OR OTHER OBSTRUCTIONS ARE ENCOUNTERED. RESISTANCE OF INDIVIDUAL GROUND LOCATIONS SHOULD BE LOWERED TO PRACTICAL VALUES. ADDITIONAL GROUND RODS MAY BE DRIVEN (NO MORE THAN THREE AT ANY SINGLE LOCATION).
 - GROUNDING CONDUCTOR SHALL BE CONNECTED TO GROUNDING STUD OF METALLIC POLES IN VICINITY OF HANDHOLE AND TO FIXTURES GROUNDING LUG.
 - FORM FOR CONCRETE FOUNDATION SHALL BE MADE FROM SONOTUBE OR SIMILAR MATERIAL. FORM SHALL EXTEND MINIMUM OF 12" BELOW GRADE.
 - CONDUITS SHALL BE "DAISY CHAINED" FROM POLE TO POLE. TWO SEPARATE CONDUITS MUST BE INSTALLED THROUGH EACH FOUNDATION. THE CONTRACTOR SHALL INSTALL AND LEAVE NYLON PULL ROPES IN ALL CONDUITS.
 - FORM HORIZONTAL REBAR IN RING OF 18" FOR 24" FOUNDATION.
 - HORIZONTAL TIES SHALL BE TIED TO VERTICAL REINFORCEMENT WITH STANDARD REINFORCEMENT TIE WIRE.

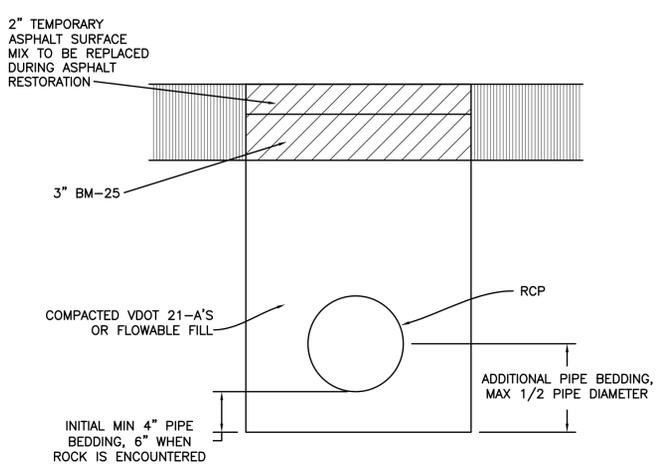


LIGHT POLE FOUNDATION REINFORCEMENT STEEL DETAIL
NTS

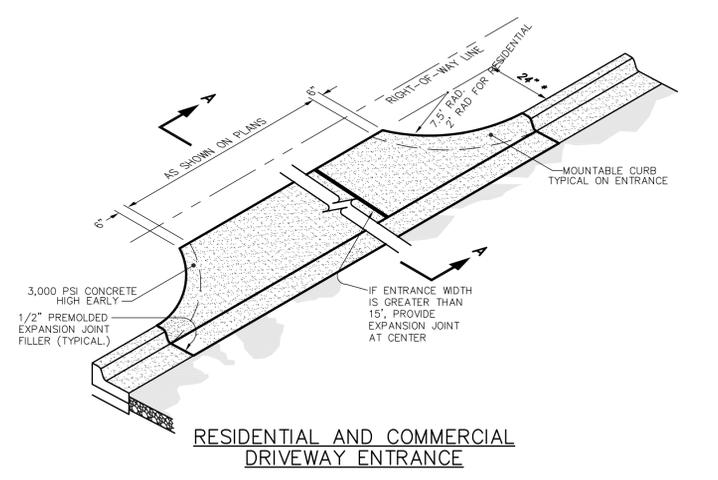
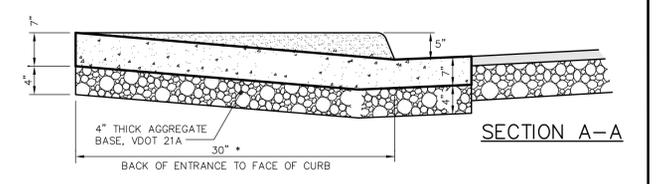


- NOTES:
- ANCHOR CONDUITS TO PREVENT FLOTATION. CONTRACTOR RESPONSIBLE FOR BACKFILLING WITH FLOWABLE FILL AND PROVIDING PAVEMENT BASE RESTORATION. CONTRACTOR SHALL INSTALL (2) 3" COMPACTED LIFTS OF BM-25 AND (1) 2" COMPACTED LIFT OF SM-12.5D ASPHALT WITHIN DOUBLE YELLOW STRIPED ROADWAYS AND (1) 3" LIFT OF BM-25 AND (1) 2" LIFT OF SM-12.5D WITHIN NON STRIPED ROADWAYS.
 - RESTORE ALL TRENCHES IN SIDEWALKS AND ENTRANCES WITH CONCRETE. RE-ESTABLISH GRASS IN GRASSED AREAS.

LIGHTING TRENCH
NOT TO SCALE

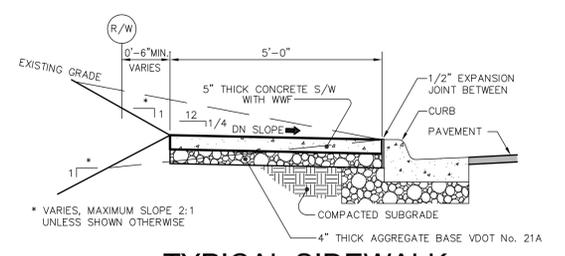


STORM DRAIN DETAIL
NOT TO SCALE



GENERAL NOTES:

- * DENOTES WHEN ENTRANCE IS CROSSING A SIDEWALK, THE CONTRACTOR SHALL EXTEND BACK OF ENTRANCE TO FRONT EDGE OF THE SIDEWALK. OTHERWISE USE A MINIMUM IS 24".
- SIDEWALKS THROUGH ENTRANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL A-A. MINIMUM 7" THICK WITH 4,000 PSI HIGH EARLY CONCRETE.
- GUTTER NOT REQUIRED WHEN ADJACENT TO CG-2.



TYPICAL SIDEWALK



JOINT DETAILS

- NTS
- UNLESS PLAN SHOWS OR SPECIFIES OTHERWISE.
 - FIBERBOARD SHALL BE TRIMMED TO ALLOW FOR SEALANT. SEE PROJECT MANUAL SPECIFICATIONS FOR THE REQUIRED USE OF SEALANT.

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DESIGNED: **PMC**
DRAWN: **ARG**
CHECKED: **PMC**

SEALS:

REV.	DATE	DESCRIPTION

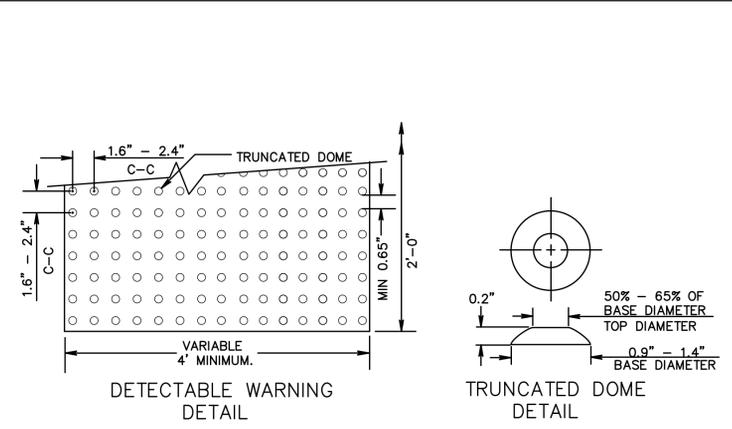
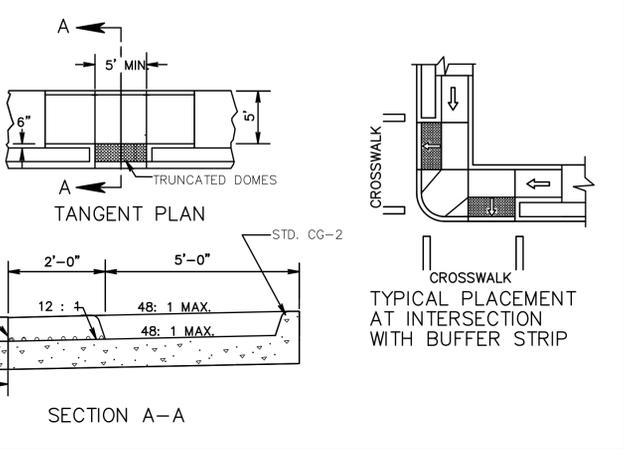
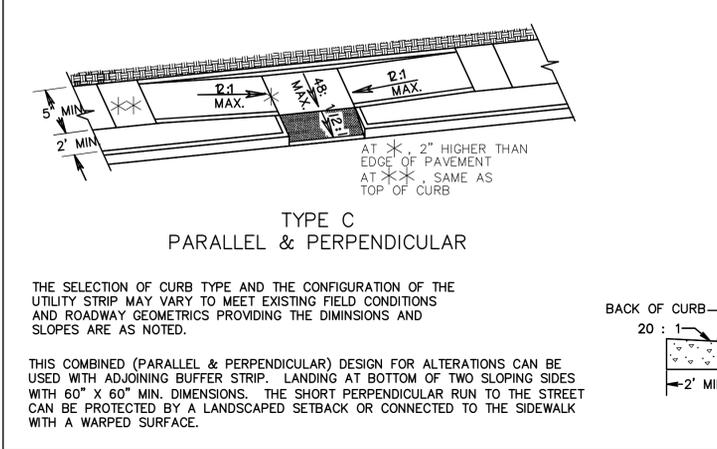
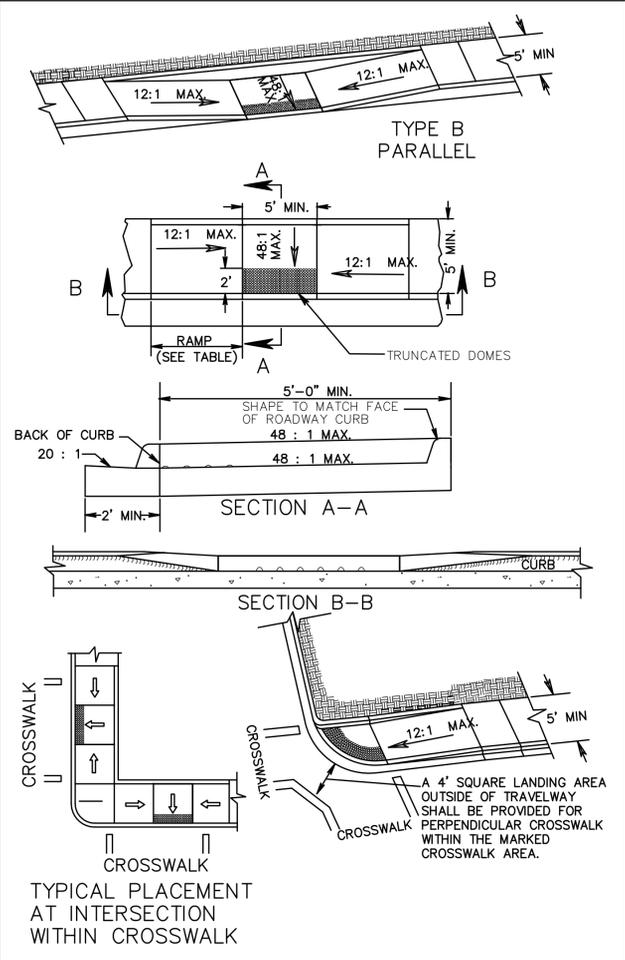
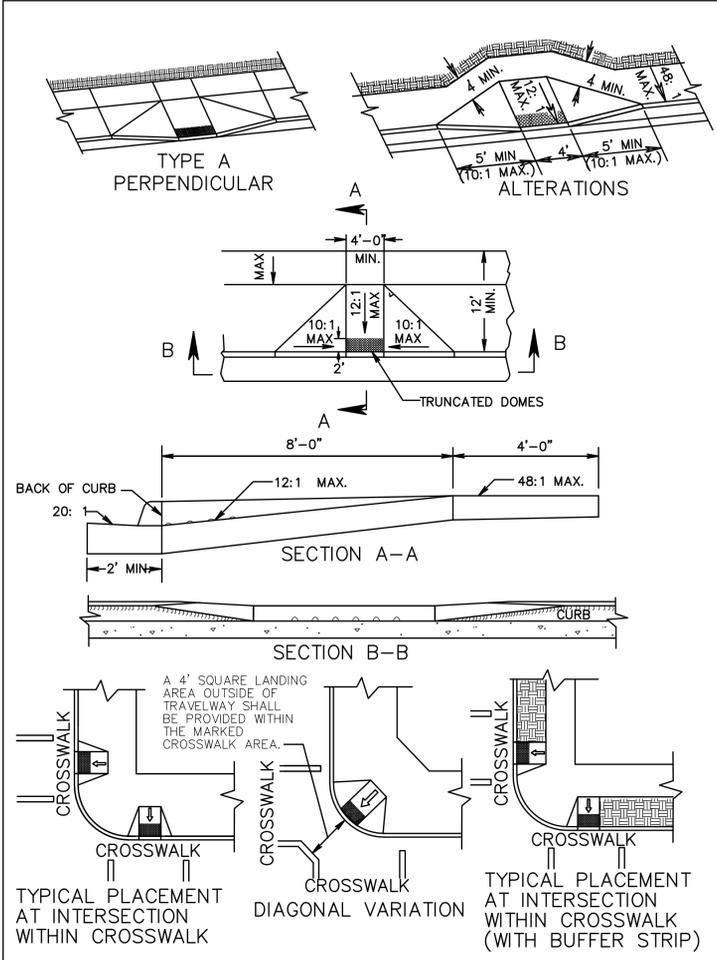
DATE: **03/27/2015**
SCALE: **NO SCALE**
24"x36" SHEET

13TH STREET STREETScape PROJECT
WEST END TARGET AREA

CITY OF ROANOKE, VIRGINIA

DETAILS

SHEET
8 OF 11
PLAN NO.
6793



TYPE B PARALLEL APPLICATION

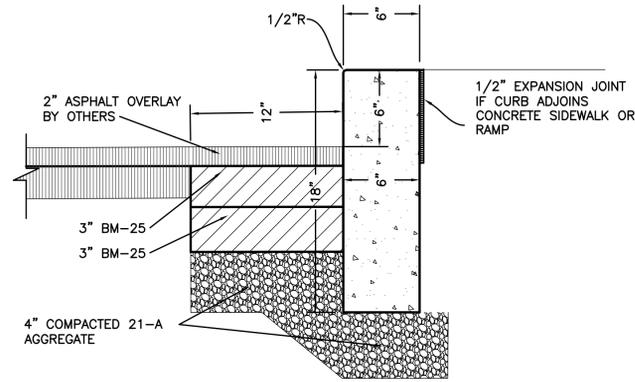
ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	4	6
1	5	7
2	5	8
3	6	9
4	8	12
5	10	15
6	14	15

TYPE C PARALLEL & PERPENDICULAR APPLICATION

ROADWAY GRADE IN PERCENT	MINIMUM RAMP LENGTH IN FEET	
	4" CURB	6" CURB
0	2	4
1	2	5
2	3	5
3	3	6
4	4	8
5	5	10
6	7	14
7	13	15
8	15	15

- NOTE: THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET, REGARDLESS OF THE SLOPE.
- NOTES:**
- THE DETECTABLE WARNING SHALL BE PROVIDED BY 6"x6" TRUNCATED DOMES PAVERS (2'x4' TOTAL).
 - SLOPING SIDES OF CURB RAMP SHALL BE POURED MONOLITHICALLY WITH RAMP FLOOR.
 - CURB RAMP ARE TO BE LOCATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THEY ARE TO BE PROVIDED AT INTERSECTIONS WHEREVER AN ACCESSIBLE ROUTE WITHIN THE RIGHT OF WAY OF A HIGHWAY FACILITY CROSSES A CURB REGARDLESS OF WHETHER SIDEWALK IS EXISTING, PROPOSED, OR NONEXISTENT. THEY MUST BE LOCATED WITHIN PEDESTRIAN CROSSWALKS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER, AND SHOULD NOT BE LOCATED BEHIND VEHICLE STOP LINES. EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. ACCESSIBLE ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS.
 - RAMP MAY BE PLACED ON RADIAL OR TANGENTIAL SECTIONS PROVIDED THAT THE CURB OPENING IS PLACED WITHIN THE LIMITS OF THE CROSSWALK AND THAT THE SLOPE AT THE CONNECTION OF THE CURB OPENING IS PERPENDICULAR TO THE CURB.
 - MINIMUM RAMP THICKNESS IS 7".
 - WHEN CURB RAMP ARE USED IN CONJUNCTION WITH A SHARED USE PATH, THE MINIMUM WIDTH SHALL BE THE WIDTH OF THE SHARED USE PATH.

CITY STANDARD CURB RAMP DETAIL



CONCRETE CURB DETAIL
NOT TO SCALE

Victor Stanley, Inc. P.O. DRAWER 330 - DUNKIRK, MD 20754 USA
TEL (301) 855-8300 - FAX (410) 257-7579 PG 1 OF 2

PRODUCT SPECIFICATIONS

CLASSIC SERIES C-10
Standard 6 Foot Length
Shown With Center Scrolled Armrest
And Recycled Second Site Systems Slats™

All fabricated components are steel shot-blasted, etched, phosphatized and electrostatically powder-coated with TSC polyester powder coatings. Casting dimensions vary slightly.

All specifications are subject to change. Please contact factory for details.

Ductile iron castings come with a 5 year warranty against breakage.

Each slat is precision-machined to receive a steel spine and fasteners.

The steel bar is inserted and the fasteners are driven into pre-drilled countersink holes.

The holes are covered with steel material.

SECOND SITE SYSTEMS™ DETAIL

U.S. Patent Pending

Slats are installed in the same configuration as wood slats.

The C-10 braces are pre-drilled with the appropriate hole pattern to mount the (10) 2" x 3" (nominal) recycled woodslats.

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(Anchor bolts provided by others)

1/4" x 2" solid steel bars

HEX-HEAD CAP BOLT DETAIL
1-5/16" Diameter
cross bar is bolted using (2) 3" long x 7/16", zinc plated hex head bolts

(4) 1/2" I.D. anchor bolt holes

1.7400 SIDE VIEW

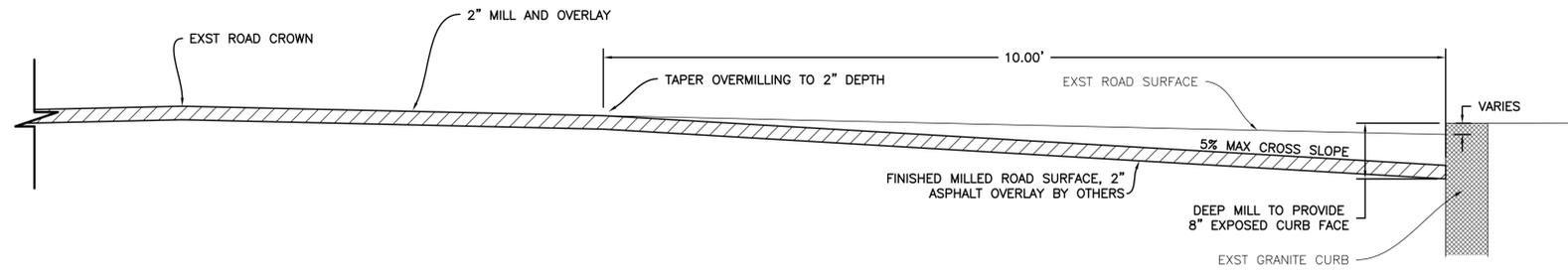
2.0711

Seat height 1.32

Finished grade

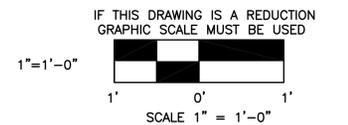
It is not recommended to locate anchor bolts until assembled bench is in place.

BENCH
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL PROTECT EXISTING CURB FACE FROM DAMAGE DURING MILLING. REMOVE ASPHALT ALONG EDGE BY HAND TOOLS IF NECESSARY.

TYPICAL OVERMILLING SECTION
SCALE: 1"=1'-0"



ROANOKE

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DESIGNED:	PMC
DRAWN:	ARG
CHECKED:	PMC

SEALS:

REV.	DATE:	DESCRIPTION

DATE:	03/27/2015
SCALE:	AS SHOWN 24"x36" SHEET

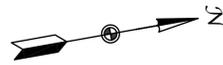
13TH STREET STREETScape PROJECT
WEST END TARGET AREA

CITY OF ROANOKE, VIRGINIA

DETAILS

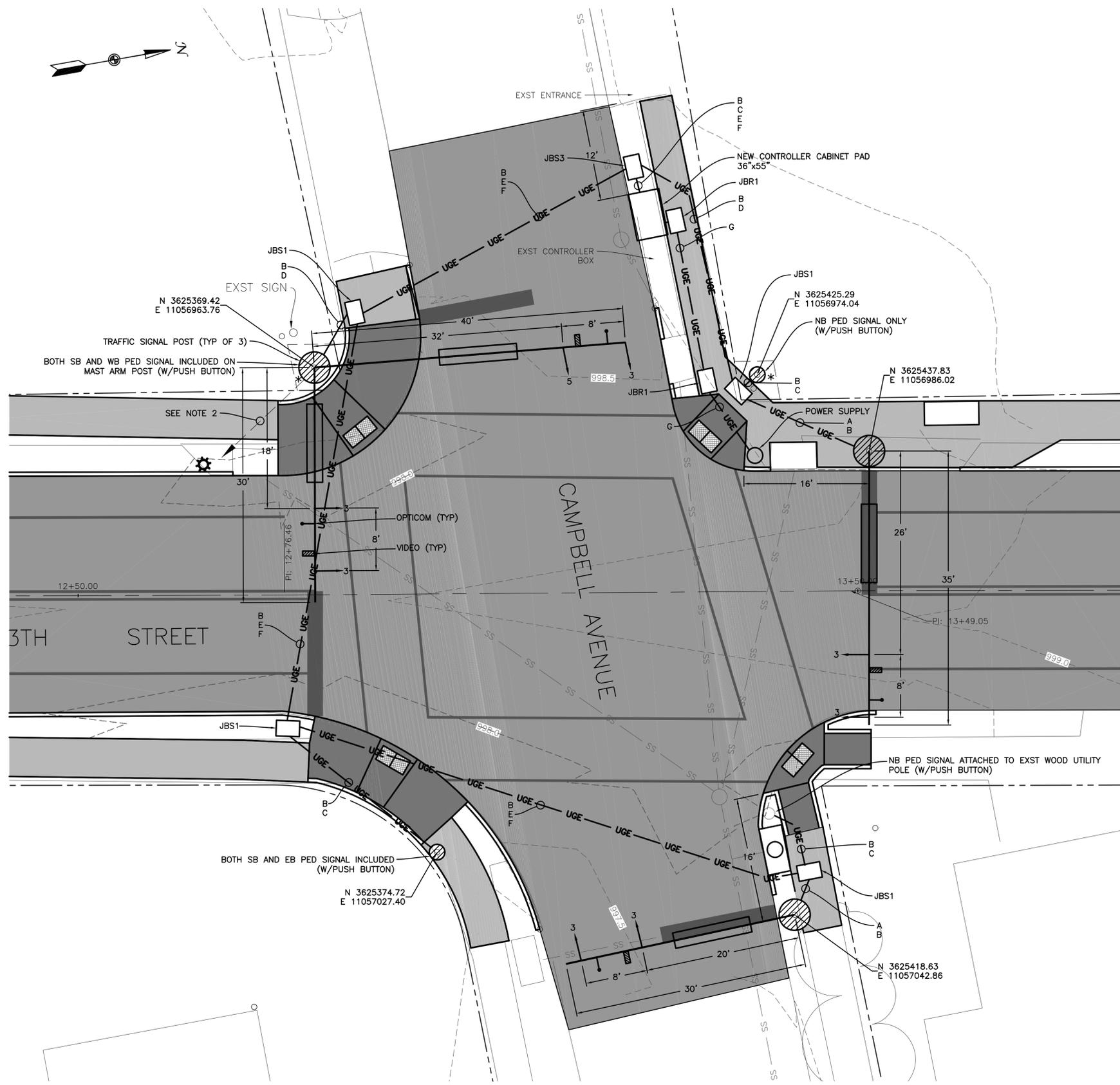
SHEET
10 OF 11

PLAN NO.
6793

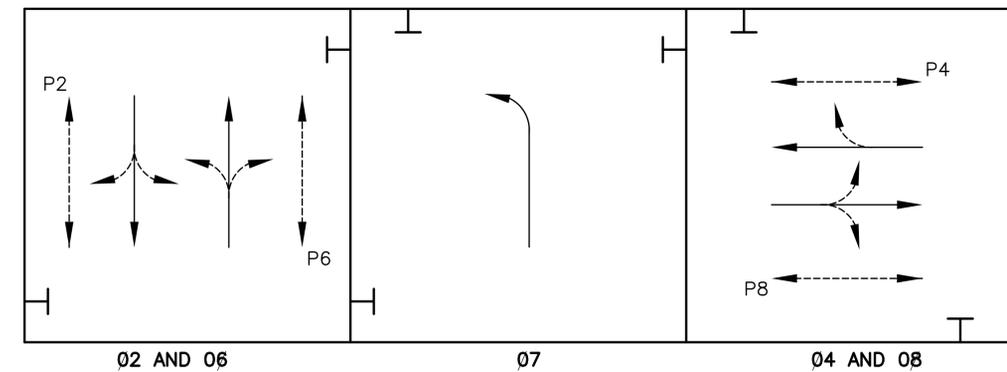


LEGEND	
	MAST ARM
	PEDESTRIAN SIGNAL POLE
	SIGNAL HEAD
	VIDEO DETECTION
	OPTICOM
	STREET NAME SIGN
	JUNCTION BOX
	CONDUIT

CABLE & CONDUIT LEGEND	
A	3" CONDUIT: VIDEO DETECTION, SIGNAL HEADS, & OPTICOM CABLES
B	2" CONDUIT: SPARE - FOR FUTURE USE
C	3" CONDUIT: PUSH BUTTON AND PEDESTRIAN HEADS
D	3" CONDUIT: VIDEO DETECTION, SIGNAL HEADS, OPTICOM, PUSH BUTTON, PEDESTRIAN HEADS
E	3" CONDUIT: VIDEO DETECTION AND OPTICOM
F	3" CONDUIT: SIGNAL HEADS
G	2" CONDUIT: POWER SUPPLY CABLES
H	3" CONDUIT: SPARE - FOR FUTURE USE



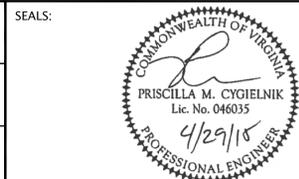
PHASING DIAGRAM



- NOTE:
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR TRAFFIC SIGNAL SYSTEM AND FOUNDATIONS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - * LOCATION SHOWN IS PREFERRED PENDING ACQUIREMENT OF RIGHT OF WAY. IF RIGHT OF WAY IS NOT ACQUIRED PRIOR TO CONTRACT AWARD, SECONDARY LOCATION OF MAST ARM POST MAY BE REQUIRED.



DESIGNED: PMC
 DRAWN: ARG
 CHECKED: PMC



REV.	DATE	DESCRIPTION

DATE: 03/27/2015
 SCALE: NO SCALE
 24"x36" SHEET

13TH STREET STREETScape PROJECT
 WEST END TARGET AREA
 CITY OF ROANOKE, VIRGINIA

SIGNAL PLAN

SHEET 11 OF 11
 PLAN NO. 6793