38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

MAYOR
TOBY BARKER

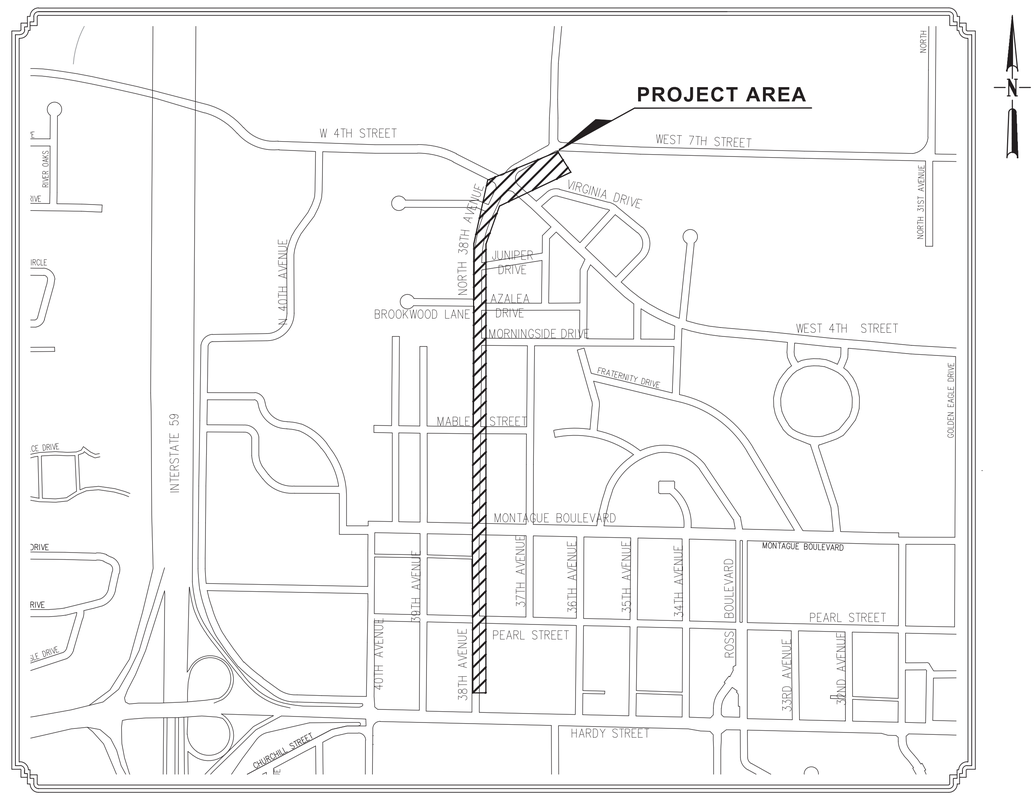
CHIEF ADMINISTRATIVE OFFICER
ANN JONES

ENGINEERING DIRECTOR
LAMAR RUTLAND, P.E.

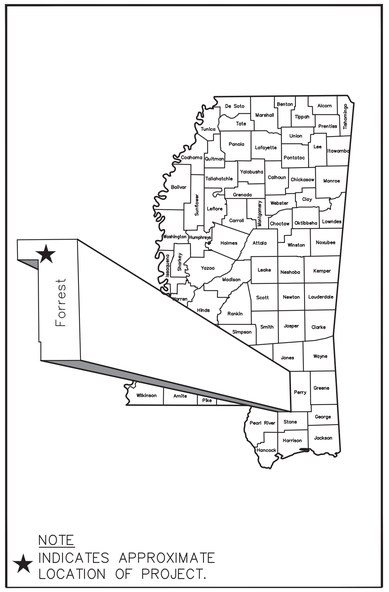
COUNCIL MEMBERS

JEFFREY GEORGE	WARD 1
DEBORAH D. DELGADO	WARD 2
CARTER CARROLL	WARD 3
MARY DRYDEN	WARD 4
NICHOLAS BROWN	WARD 5

UTILITIES
CITY OF HATTIESBURG
MISSISSIPPI POWER
AT&T
SPIRE GAS
COMCAST



VICINITY MAP
PROJECT LOCATION



NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

PREPARED BY :

NEEL-SCHAFFER
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GEOFFREY PAUL CROSBY
LICENSED PROFESSIONAL ENGINEER
19984
STATE OF MISSISSIPPI
1/28/2019

GEOFFREY P. CROSBY, P.E.
MISSISSIPPI LICENSE NO. PE: 19984

GENERAL NOTES

1. THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017 EDITION, AS AMENDED, SHALL BE THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE INDICATED OR AMENDED IN THE SPECIAL PROVISIONS, PROPOSAL AND CONTRACT DOCUMENTS.
2. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHOULD BE EXERCISED IN UNDERCUT AREAS AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
5. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAWING AND CONSTRUCTING THE FACILITY SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.
6. VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC., SHALL BE BACKFILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (COST ABSORBED).
7. PRIOR TO EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL TOPSOIL SHALL BE STRIPPED AND STOCKPILED. AFTER COMPLETION OF EXCAVATION AND EMBANKMENT CONSTRUCTION, ALL SLOPES SHALL BE UNIFORMLY PLATED WITH THE STOCKPILED TOPSOIL. THE COST OF STRIPPING, STOCKPILING, PLACING AND SPREADING OF TOPSOIL IS TO BE INCLUDED IN PAY ITEM, TOPSOIL FROM RIGHT OF WAY, PER SQUARE YARD.
8. ALL STORM DRAINAGE STRUCTURES SHALL BE CAST-IN-PLACE.
9. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
10. THE CONTRACTOR IS TO REMOVE AND RESET ANY SIGNS AND MAILBOXES WHICH CONFLICT WITH CONSTRUCTION. TO BE LOCATED BEHIND SIDEWALK WERE GREEN SPACE IS 3' OR LESS. (NOT A SEPARATE PAY ITEM).
11. THE LOCATION AND SPACING OF SIGNS SHOWN ON THE TRAFFIC CONTROL PLAN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
12. ALL POST LENGTHS FOR SIGNS SHALL BE VERIFIED IN THE FIELD PRIOR TO FABRICATION.
13. SOME WORK MAY BE REQUIRED OUTSIDE THE PROJECT LIMITS BEYOND THE B.O.P. AND E.O.P. NO ADDITIONAL COMPENSATION WILL BE MADE FOR SUCH WORK EXCEPT AS PROVIDED BY SPECIFIC PAY ITEMS SHOWN ON THE PLANS.
14. ALL SIGNS, SIGNALS, PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).
15. ALL RAISED OBJECTS SHALL BE PLACED A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB.
16. CONTRACTOR SHALL MAKE THE APPLICATION FOR POWER SERVICE, COORDINATING WITH UTILITY COMPANY, IN ADVANCE OF REQUIRING THE ELECTRICAL SERVICE.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
18. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.
19. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTOR'S TO FACILITATE TIE-INS TO OTHER CONTRACTOR'S WORK, WHERE FEASIBLE AND PRACTICABLE.
20. CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR RELOCATION OF EXISTING POWER, GAS, TELEPHONE, AND CABLE TV UTILITIES. CONTRACTOR SHALL PROVIDE ACCESS TO THE UTILITY COMPANIES FOR RELOCATION ACTIVITIES AS REQUIRED.
21. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE VERIFICATION, PROTECTION, AND RELOCATION OF BENCHMARKS DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR RELOCATION OF BENCHMARKS.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ANY SIGNS THAT ARE IN DIRECT CONFLICT WITH CONSTRUCTION IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION (COST ABSORBED).
23. REMOVAL OF EXISTING AND TEMPORARY TRAFFIC STRIPING, TRAFFIC CONTROL SIGNS AND BARRICADES SHALL BE ABSORBED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES IF ANY UTILITY POLES NEED TO BE SUPPORTED DURING CONSTRUCTION (COST ABSORBED).
25. THE CONTRACTOR SHALL REPAIR FENCES, RETAINING WALLS, GATES, SODDING, LANDSCAPING, ETC. DAMAGED DURING OVERALL CONSTRUCTION (COST ABSORBED).
26. THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM RESPONSIBILITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U.S. DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.
27. THE CONTRACTOR SHALL TRIM ALL LIMBS TO A VERTICAL CLEARANCE OF 8 FEET OF THE PROPOSED SIDEWALK (COST ABSORBED).
28. ONE LANE MUST BE OPEN AT ALL TIMES FOR INGRESS/EGRESS ON BOTH DRIVEWAYS FOR THE HASKIN 23221 PROPERTY. NO EXCEPTION WILL BE MADE.
29. UTILITY CONFLICTS SHOWN IN THESE DRAWINGS HAVE BEEN ADJUSTED ACCORDINGLY PRIOR TO THE AWARD OF THIS PROJECT.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: General Notes.dwg	
SCALE: NOT TO SCALE	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

JEFFREY PAUL CLARK
LICENSED PROFESSIONAL ENGINEER
19694
STATE OF MISSISSIPPI
1/28/2019

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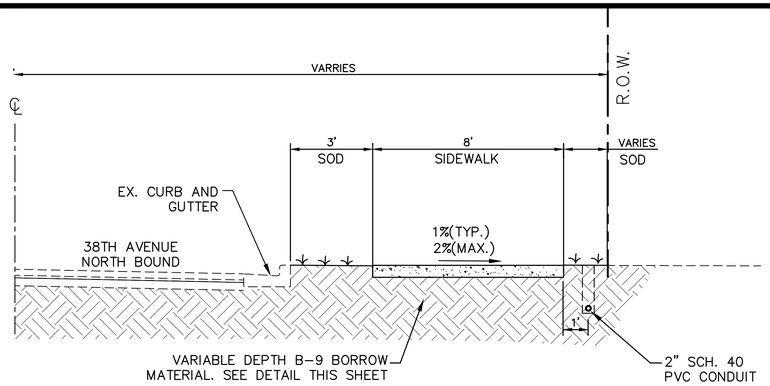
INDEX & GENERAL NOTES

WORKING NUMBER:	DRAWING NUMBER:
GN-1	2

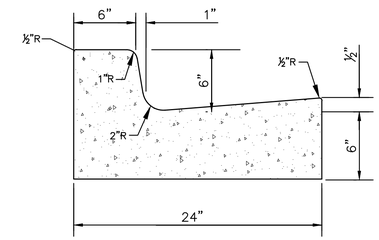
1/14/2019 8:59 AM J:\Civil 3d projects\60500\8667-18 - 38th ave\General notes.dwg



PROPOSED TYPICAL SECTION

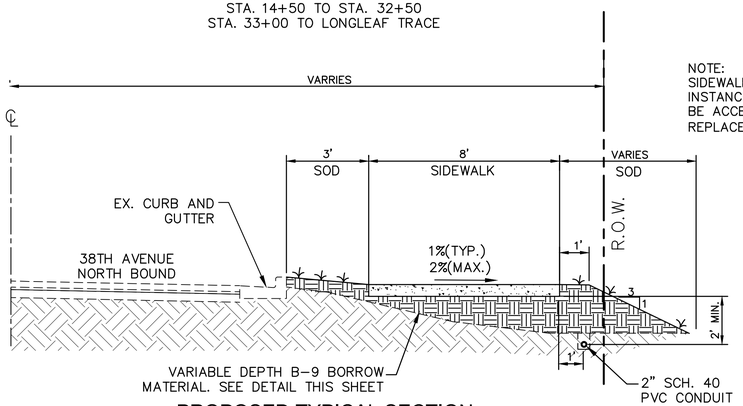
NOT TO SCALE
STA. 1+31 TO STA. 11+34
STA. 12+59 TO STA. 13+50
STA. 14+50 TO STA. 32+50
STA. 33+00 TO LONGLEAF TRACE

CURB AND GUTTER JOINT SPACING	
CONTROL JOINT	EXPANSION JOINT
10	40



TYPE 1 MODIFIED CURB AND GUTTER

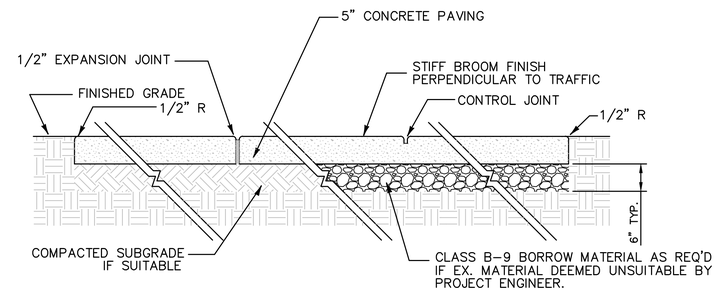
NOT TO SCALE



PROPOSED TYPICAL SECTION

NOT TO SCALE
STA. 13+50 TO STA. 14+50
STA. 32+50 TO STA. 33+00

NOTE:
SIDEWALK MUST MEET ADA REQUIREMENTS IN ALL INSTANCES. CROSS SLOPES EXCEEDING 2% WILL NOT BE ACCEPTED AND WILL BE REQUIRED TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

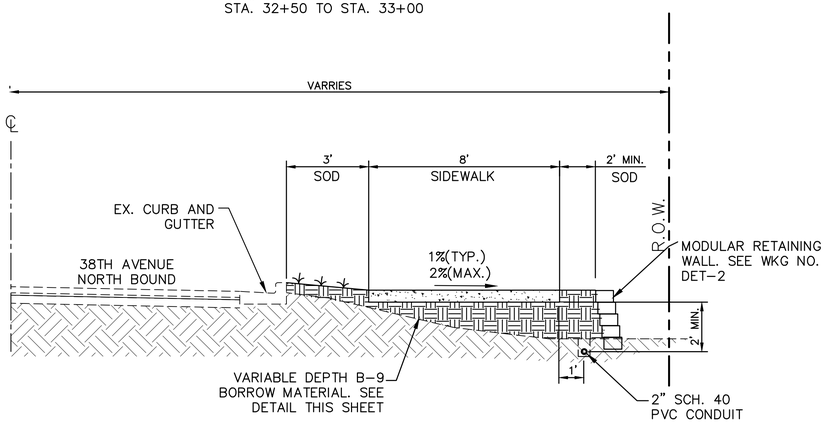


NOTES:
1. 1/2" EXPANSION JOINT CONFORMING TO ASTM D1751. TOP OF JOINT SHALL BE SEALED w/ 1/2 " TAR MODIFIED URETHANE SEALANT. PLACE EXPANSION JOINT AS SHOWN IN THE TABLE ABOVE.
2. HAND TOOLED CONTROL JOINTS W/ 1/2" RADIUS AS SHOWN ABOVE
3. ALL SUBGRADE SOILS FOR SIDEWALK SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

	JOINT SPACING	
SIDEWALK WIDTH	CONTROL JOINT	EXPANSION JOINT
8	8	40

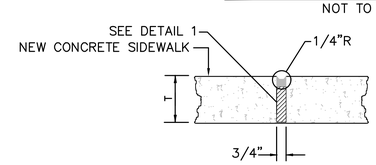
TYPICAL SIDEWALK DETAIL

NOT TO SCALE



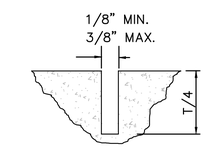
PROPOSED TYPICAL SECTION

NOT TO SCALE
STA. 11+34 TO STA. 12+59



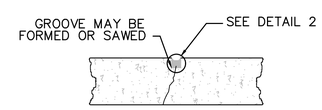
TYPE ``B" - EXPANSION JOINT

NOT TO SCALE



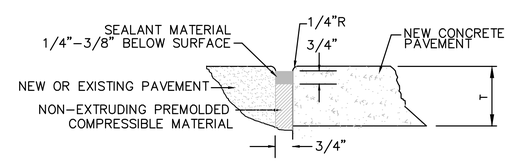
DETAIL 2 - CONTROL JOINT

NOT TO SCALE



TYPE ``A" - CONTROL JOINT

NOT TO SCALE



DETAIL 1 - EXPANSION JOINTS

NOT TO SCALE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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FILENAME: TYP_SEC.dwg	
SCALE: NOT TO SCALE	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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TYPICAL SECTIONS

WORKING NUMBER: TS-1

DRAWING NUMBER: 3

1/14/2019 10:00 AM n:\Civil 3d projects\8667\8667-18 - 38th ave\Typ_sec.dwg

SUMMARY OF QUANTITIES

FOOT NOTE	PAY ITEM #	PAY ITEM DESCRIPTION	UNIT	EST. QTY	FINAL QTY
1	202-A	REMOVAL OF OBSTRUCTIONS	LUMP SUM	1	
2	202-B	REMOVAL OF CONCRETE SIDEWALK	SQ. YD.	325	
2	202-B	REMOVAL OF PAVEMENT, ALL TYPES AND DEPTHS	SQ. YD.	850	
2	202-B	REMOVAL OF CURB & GUTTER, ALL TYPES	LIN. FT.	400	
	203-A	UNCLASSIFIED EXCAVATION, FM, AH	CU. YD.	200	
	203-G	EXCESS EXCAVATION, FM, AH	CU. YD.	100	
	203-EX	BORROW EXCAVATION, AH, FME, CLASS B9	CU. YD.	600	
3	211-A	TOPSOIL FROM RIGHT OF WAY	SQ. YD.	3500	
4	211-B	TOPSOIL FOR SLOPE TREATMENT, CONTRACTOR FURNISHED	CU. YD.	50	
5	216-B	SOLID SODDING, CENTIPEDE	SQ. YD.	2400	
	219-A	WATERING	KGAL	380	
	220-A	INSECT PEST CONTROL	ACRE	1	
	234-A	TEMPORARY SILT FENCE	LIN. FT.	1000	
	237-A	WATTLES, 20"	LIN. FT.	200	
	246-A	SANDBAGS	EACH	100	
	601-B	CLASS "B" STRUCTURAL CONCRETE, MINOR STRUCTURES	CU. YD.	15	
	602-A	REINFORCING STEEL	LBS.	1500	
6	603-CE	15" CORRUGATED POLYETHYLENE PIPE	LIN. FT.	100	
	603-CA	15" REINFORCED CONCRETE PIPE CLASS 3	LIN. FT.	16	
	603-CB	15" FLARED END SECTION	EACH	1	
7	907-603-PP	18" CORRUGATED POLYETHYLENE INLINE INLET, PER PLANS	EACH	7	
	608-A	CONCRETE SIDEWALK, WITHOUT REINFORCEMENT	SQ. YD.	3000	
8 , 10	907-616-A	COLORED CONCRETE WITH SCORING	SQ. YD.	60	
9	907-616-B	STAMPED AND COLORED CONCRETE (BRICK PATTERN)	SQ. FT.	2050	
8	907-616-C	STAMPED CONCRETE, BRICK PATTERN WITH TRUNCATED DOMES	EACH	27	
	609-B	CONCRETE CURB HEADER	LIN. FT.	200	
	609-D	TYPE 1 MODIFIED CURB AND GUTTER	LIN. FT.	130	
	907-609-PP	6" CONCRETE BAND, PER PLANS	LIN. FT.	515	
	613-D	MODIFY EXISTING INLET, PER PLANS	EACH	3	
11	613-D	ADJUSTMENT OF WATER METER	EACH	13	
	614-B	CONCRETE DRIVEWAY, WITH REINFORCEMENT, 6" THICKNESS	SY	750	
	815-B	GROUTED RIPRAP, #100	SQ. YD.	50	
	815-E	GEOTEXTILE FOR SUBSURFACE DRAINAGE, TYPE 5, NON-WOVEN	SQ. YD.	50	
	618-A	MAINTENANCE OF TRAFFIC	LUMP SUM	1	
	620-A	MOBILIZATION	LUMP SUM	1	
	626-H	THERMOPLASTIC LEGEND, WHITE (6" EQUIV.)	LIN. FT.	3050	
	632-C	TRAFFIC SIGNAL CABINET MODIFICATIONS	EACH	1	
	634-A	TYPE VI PEDESTRIAN SIGNAL POLE WITH FOUNDATION	EACH	1	
	635-A	TYPE 6 SIGNAL WITH PUSH BUTTON AND SIGN	EACH	1	
	636-D	2-IMSA-20-1, AWG14, 5 CONDUCTOR	LIN. FT.	200	
12	637-D	2" SCHEDULE 40 CONDUIT WITH PULL STRING, JACK OR BORED	LIN. FT.	330	
12	637-C	2" SCHEDULE 40 CONDUIT WITH PULL STRING	LIN. FT.	3570	
	637-A	TRAFFIC SIGNAL PULL BOX TYPE 1	EACH	1	
	637-A	TRAFFIC SIGNAL PULL BOX TYPE 3	EACH	1	
	637-D	JACK OR BORE 2" ROLL PIPE	LIN. FT.	365	
	682-D	ELECTRICAL PULL BOX	EACH	23	
13	686-A	RELOCATION OF UPLIGHT AND CONDUCTORS	EACH	3	
14	809-A	RETAINING WALL	SQ. FT.	380	
15	907-613-PP	RELOCATION OF SEWER CLEANOUT, PER PLANS	EACH	1	

FOOTNOTES

1	TO INCLUDE BUT NOT LIMITED TO CONCRETE DEBRIS, LANDSCAPING BEDS AND SHRUBS, DEBRIS, AND ITEMS IDENTIFIED IN THE PLANS THAT ARE IN CONFLICT WITH CONSTRUCTION THAT IS NOT COVERED UNDER A SEPARATE PAY ITEM.
2	INCLUDES THE COST OF FULL DEPTH SAW CUT.
3	STOCKPILED TOPSOIL FROM RIGHT OF WAY SHALL BE USED PRIOR TO USING CONTRACTOR FURNISHED TOPSOIL.
4	TO BE USED ONCE SPOCKPILLED TOPSOIL HAS BEEN DEPLETED.
5	INCLUDES THE COST OF GROUND PREPERATION.
6	ALL PIPE SHALL BE PERFORATED AND WRAPPED IN A SOCK. COST INCLUDES PIPE, PERFORATION, FILTER SOCK, STRUCTURE EXCAVATION, AND SELECT BEDDING AND BACKFILL.
7	INCLUDES ALL LABOR AND MATERIALS TO INSTALL 18" CATCH BASIN TO INCLUDE BUT NOT LIMITED TO ALL FITTINGS, GRATE, RISERS, STRUCTURE EXCAVATION, BEDDING AND BACKFILL.
8	COLOR SHALL BE RED PAVER AND SHALL MATCH THE BRICK PAVERS AT THE UNIVERSITY OF SOUTHERN MISSISSIPPI
9	COLOR CHARTS SHALL BE PROVIDED TO THE OWER TO SELECT COLOR.
10	INCLUDES THE COST OF REINFORCEMENT, COLORING, AND SCORING.
11	INCLUDES ALL LABOR, MATERIALS, AND COORDINATION TO ADJUST WATER METERS AS DIRECTED BY THE ENGINEER. PLASTIC METER BOXES ARE TO BE REPLACE BY CAST IRON BOXES TO BE PURCHASED FROM THE CITY OF HATTIESBURG.
12	TO BE INSTALLED FOR FUTURE LIGHING AND SHALL REQUIRE A PULL STRING (COST ABSORBED).
13	INCLUDES ALL WORK TO RELOCATE EXISTING BUILDING UPLIGHT AND CONDUCTORS OFF CITY RIGHT OF WAY. CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER ON POWER SERVICE AND DISIRED NEW LIGHT LOCATION. LIGHTS ARE TO BE OPERATIONAL ONCE RELOCATION IS COMPLETE.
14	INLCLUDES BUT NOT LIMITED TO STRUCTURE EXCAVATION, BACKFILL, BEDDING, WALL BLOCKS, CAP BLOCKS, DRAINAGE PIPE, FABRIC, AND ANY LABOR OR MATERIALS USED TO CONSTRUCT THE RETAINING WALL AS SHOWN IN THE PLANS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
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FILENAME: SQ.dwg	
SCALE: NOT TO SCALE	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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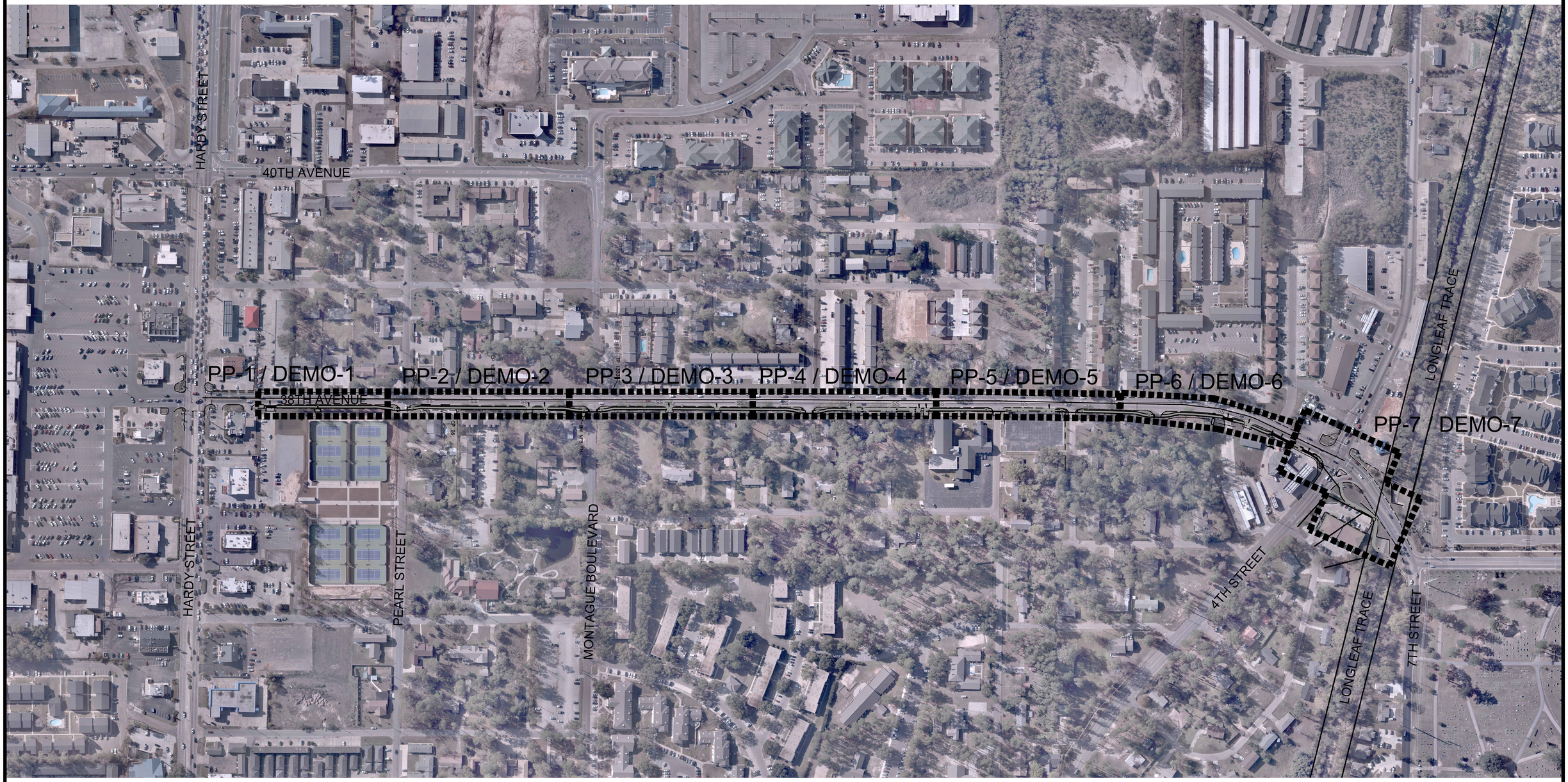
SUMMARY OF QUANTITIES

WORKING NUMBER: SQ-1

DRAWING NUMBER: 4



NOTICE TO DRAWING HOLDER

NEEL–SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS

NO.	DATE	BY	DESCRIPTION

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SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL–SCHAFFER
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OVERALL SITE PLAN

WORKING NUMBER: OVERALL

DRAWING NUMBER: 5

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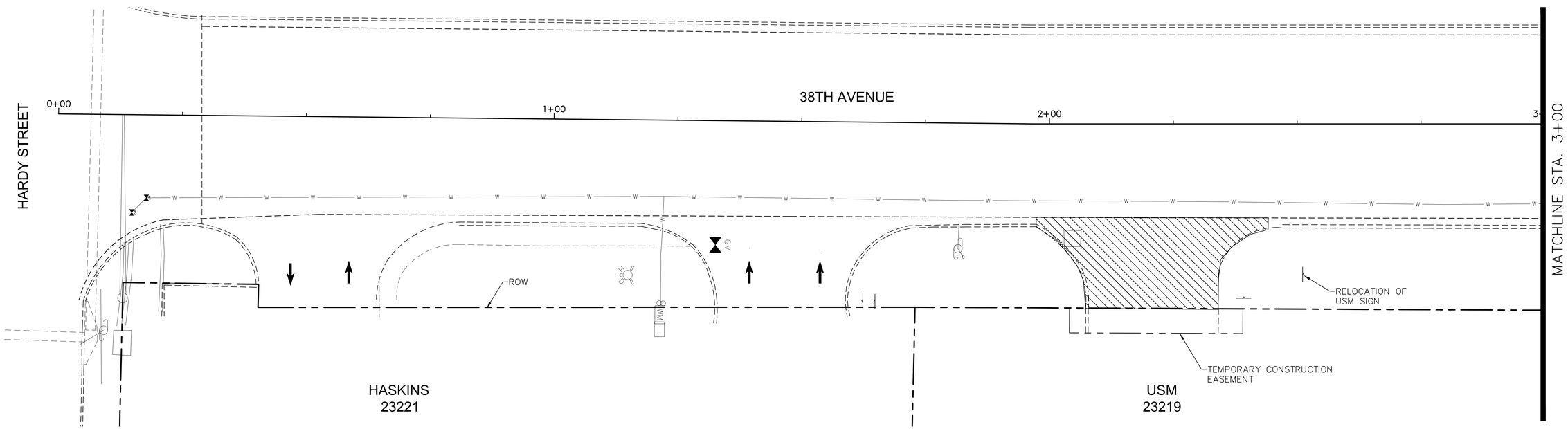

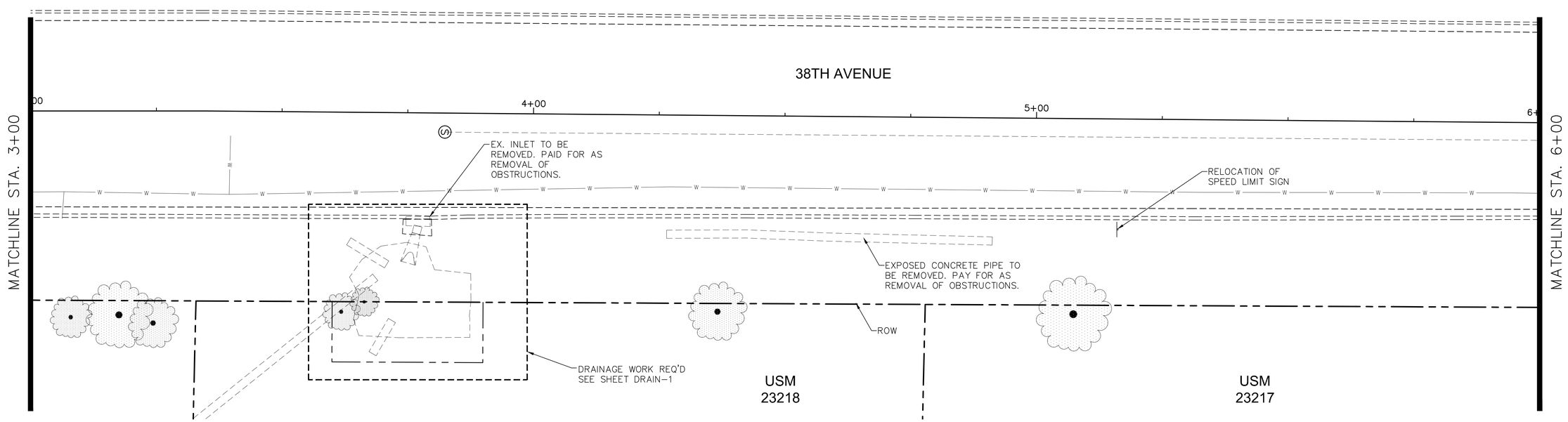

REMOVAL OF DRIVEWAY (CONCRETE AND ASPHALT)

REMOVAL OF CONCRETE SIDEWALK

REMOVAL OF CURB AND GUTTER

REMOVAL OF VEGETATION, (PAID AS CLEARING AND GRUBBING)

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 feet

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
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FILENAME: Demo.dwg	
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SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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EXISTING CONDITIONS &
DEMOLITION PLAN 38TH AVENUE
STA 0+00 TO STA 6+00

WORKING NUMBER:	DRAWING NUMBER:
DEMO-1	6

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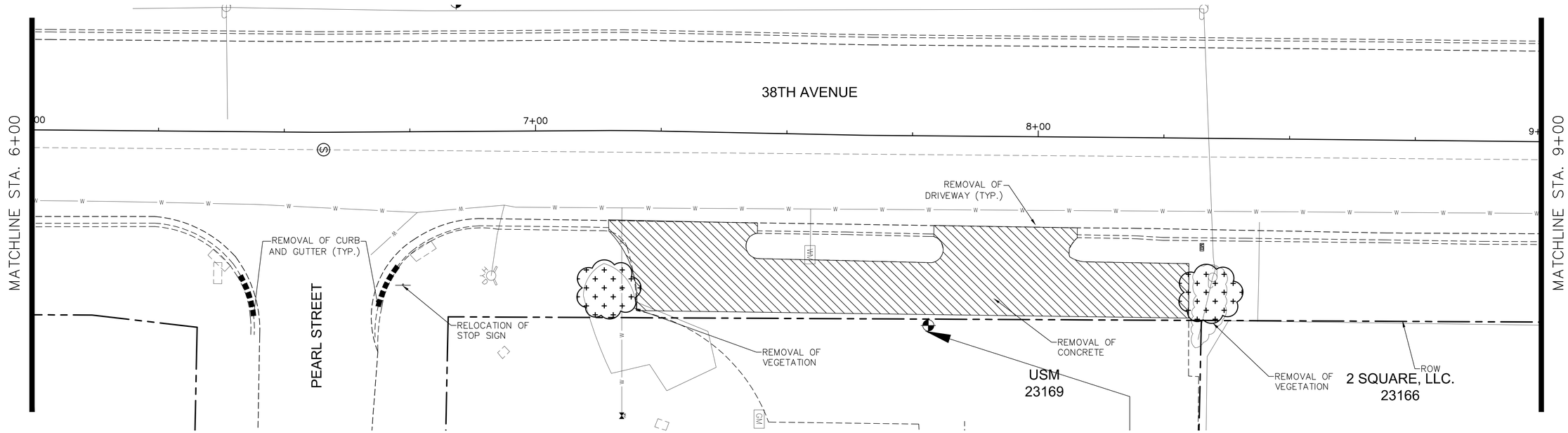
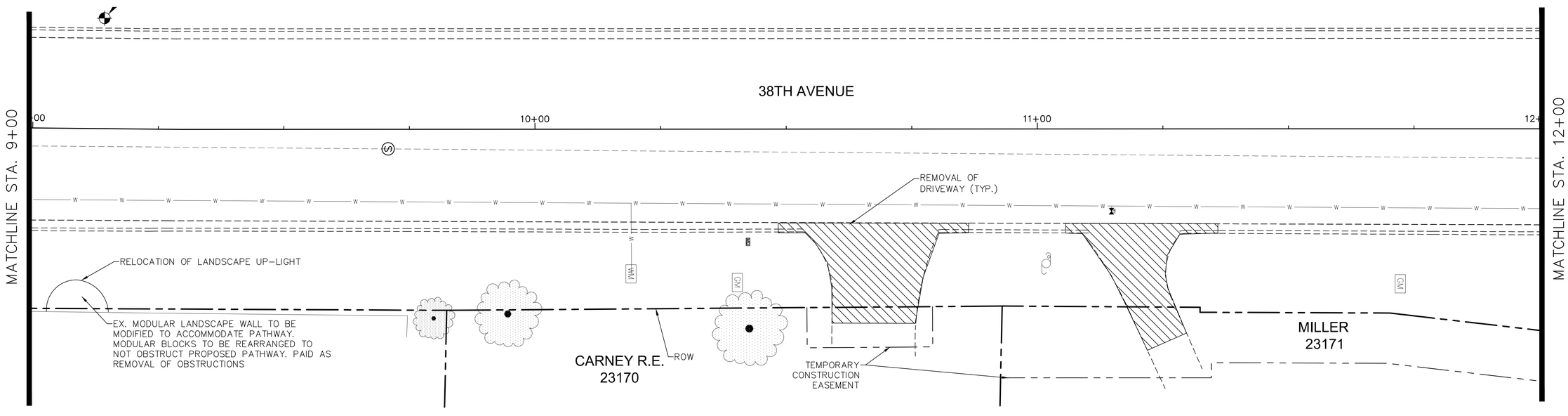




REMOVAL OF DRIVEWAY (CONCRETE AND ASPHALT)

REMOVAL OF CONCRETE SIDEWALK

REMOVAL OF CURB AND GUTTER

REMOVAL OF VEGETATION, (PAID AS CLEARING AND GRUBBING)

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 feet

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Demo.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

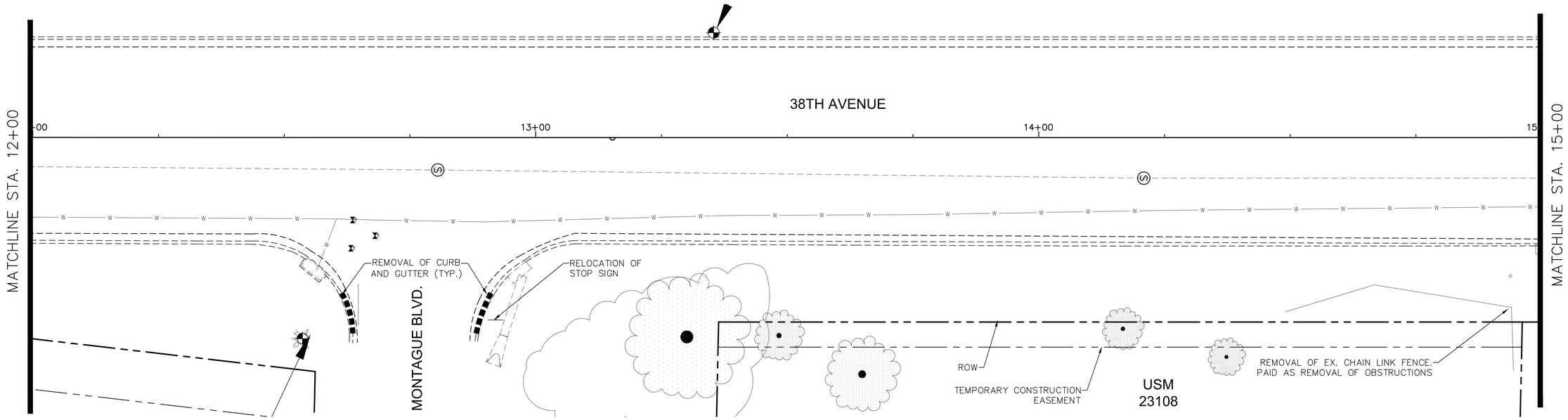
NEEL-SCHAFFER
Solutions you can build upon

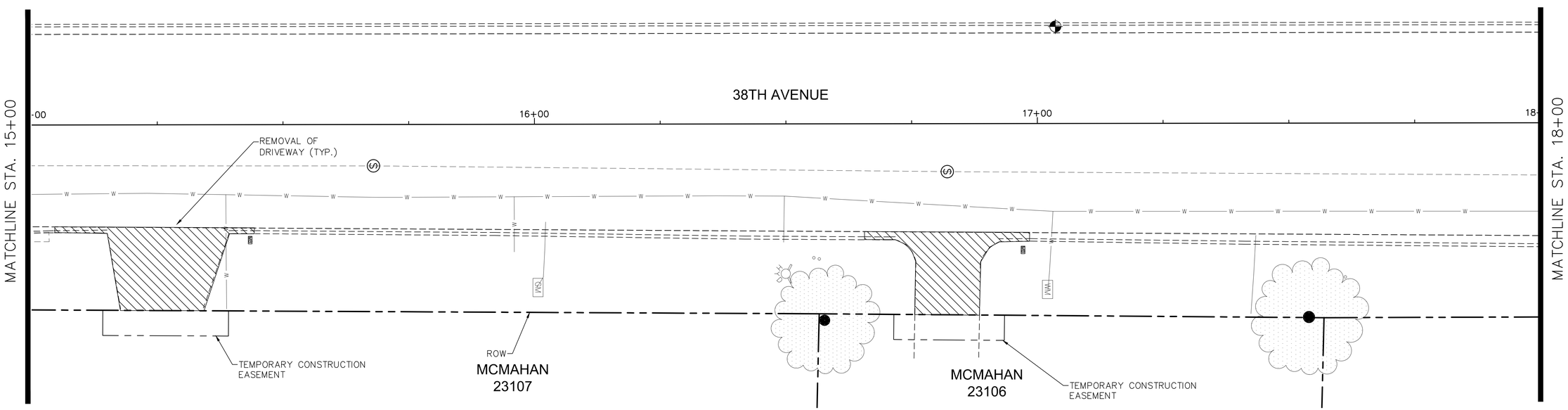
EXISTING CONDITIONS & DEMOLITION PLAN 38TH AVENUE STA 6+00 TO STA 12+00

WORKING NUMBER: DEMO-2

DRAWING NUMBER: 7

1/16/2019 11:28 AM F:\civil 3d projects\8000\8667-18 - 38th ave\demo.dwg





REMOVAL OF DRIVEWAY (CONCRETE AND ASPHALT)

REMOVAL OF CONCRETE SIDEWALK

REMOVAL OF CURB AND GUTTER

REMOVAL OF VEGETATION, (PAID AS CLEARING AND GRUBBING)

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 feet

NOTICE TO DRAWING HOLDER

NEEL–SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N–S PROJECT NO.: 8667–18–33	
FILENAME: Demo.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL–SCHAFFER
Solutions you can build upon

EXISTING CONDITIONS & DEMOLITION PLAN 38TH AVENUE STA 12+00 TO STA 18+00

WORKING NUMBER: DEMO-3

DRAWING NUMBER: 8

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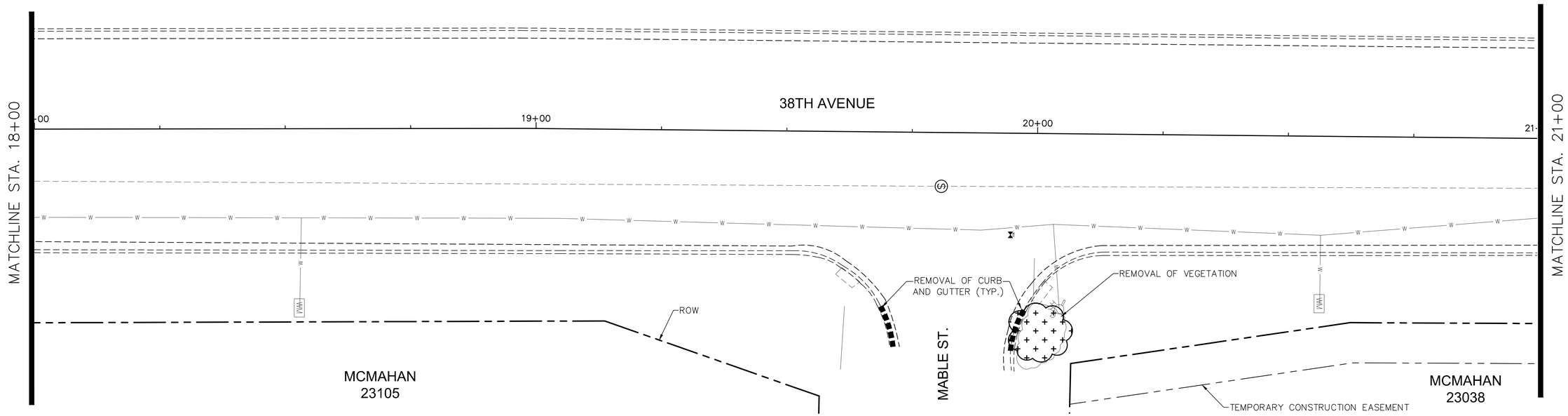

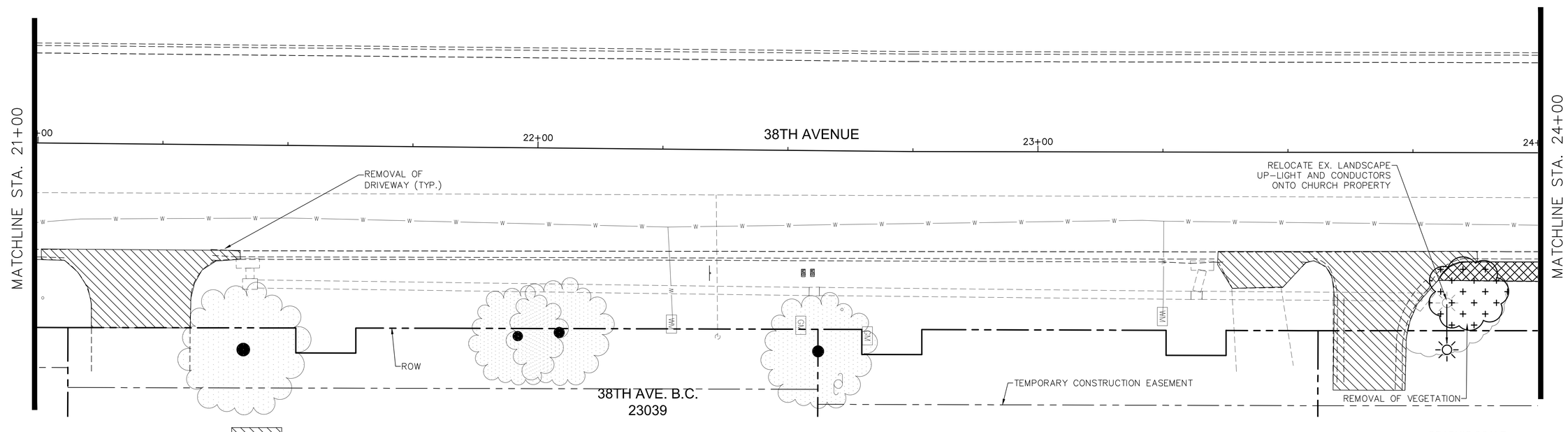

REMOVAL OF DRIVEWAY (CONCRETE AND ASPHALT)

REMOVAL OF CONCRETE SIDEWALK

REMOVAL OF CURB AND GUTTER

REMOVAL OF VEGETATION, (PAID AS CLEARING AND GRUBBING)

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 feet

NOTICE TO DRAWING HOLDER

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Demo.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

EXISTING CONDITIONS & DEMOLITION PLAN 38TH AVENUE STA 18+00 TO STA 24+00

WORKING NUMBER: DEMO-4

DRAWING NUMBER: 9

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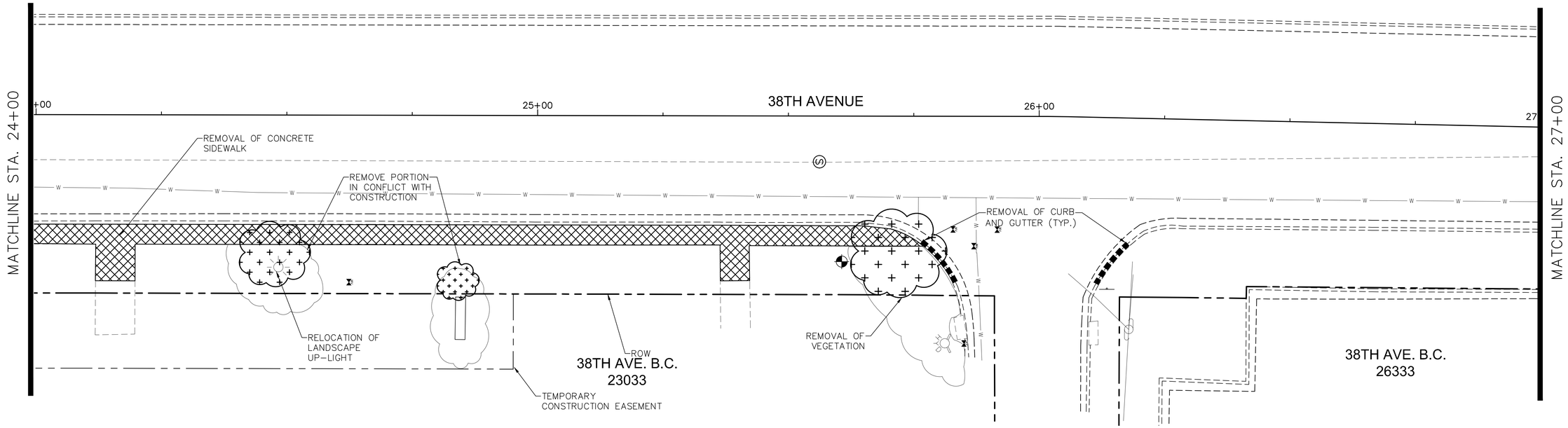

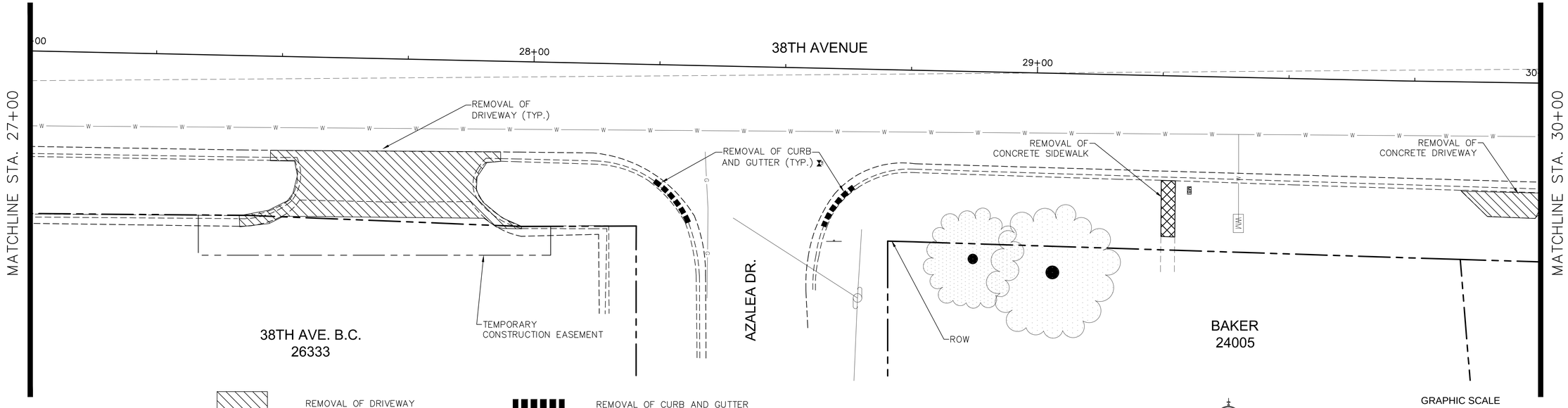

REMOVAL OF DRIVEWAY (CONCRETE AND ASPHALT)

REMOVAL OF CONCRETE SIDEWALK

REMOVAL OF CURB AND GUTTER

REMOVAL OF VEGETATION, (PAID AS CLEARING AND GRUBBING)

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 feet

NOTICE TO DRAWING HOLDER

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REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
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DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

EXISTING CONDITIONS & DEMOLITION PLAN 38TH AVENUE STA 24+00 TO STA 30+00

WORKING NUMBER: DEMO-5

DRAWING NUMBER: 10

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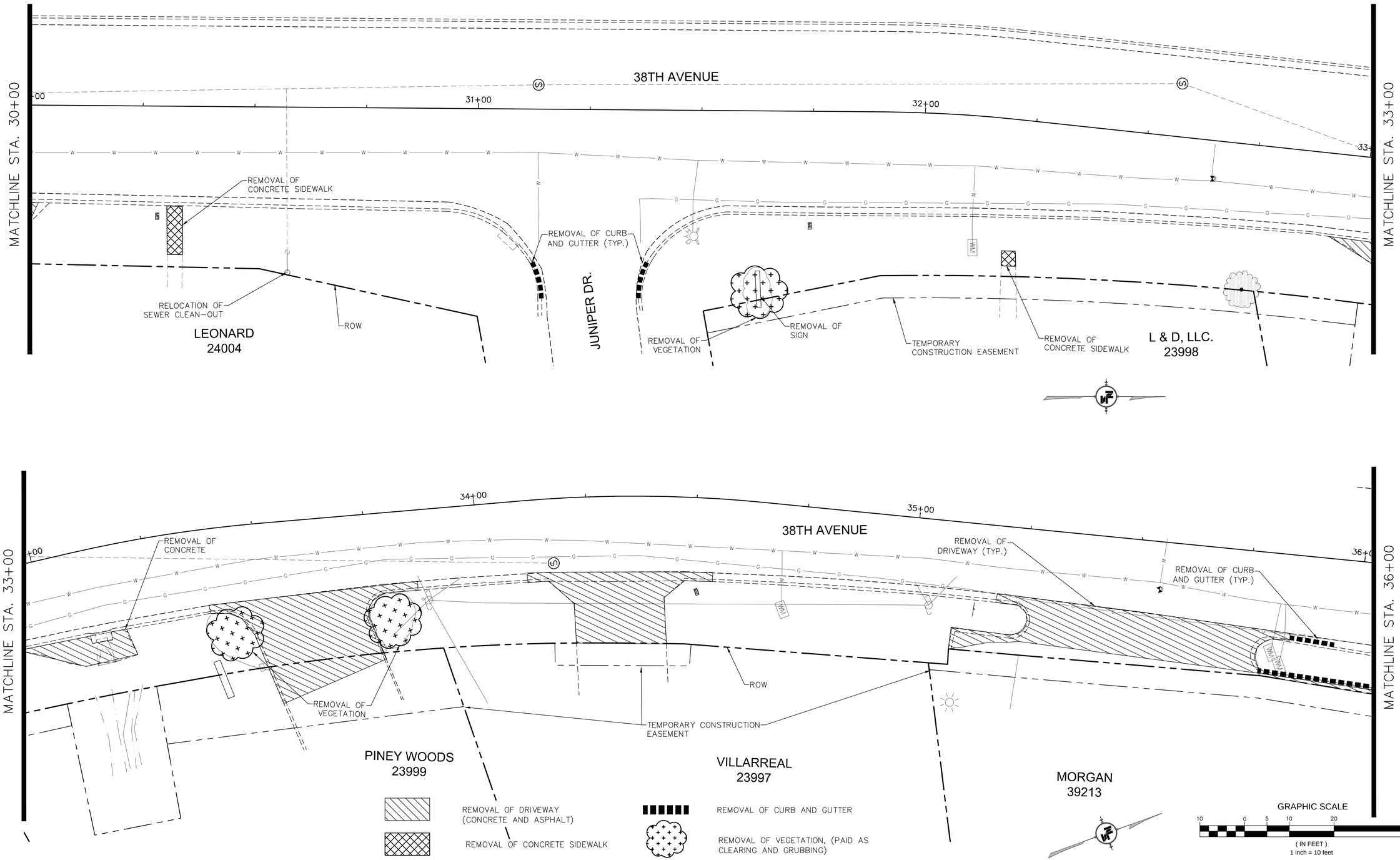

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Demo.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
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DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

EXISTING CONDITIONS & DEMOLITION PLAN 38TH AVENUE STA 30+00 TO STA 36+00

WORKING NUMBER: DEMO-6

DRAWING NUMBER: 11

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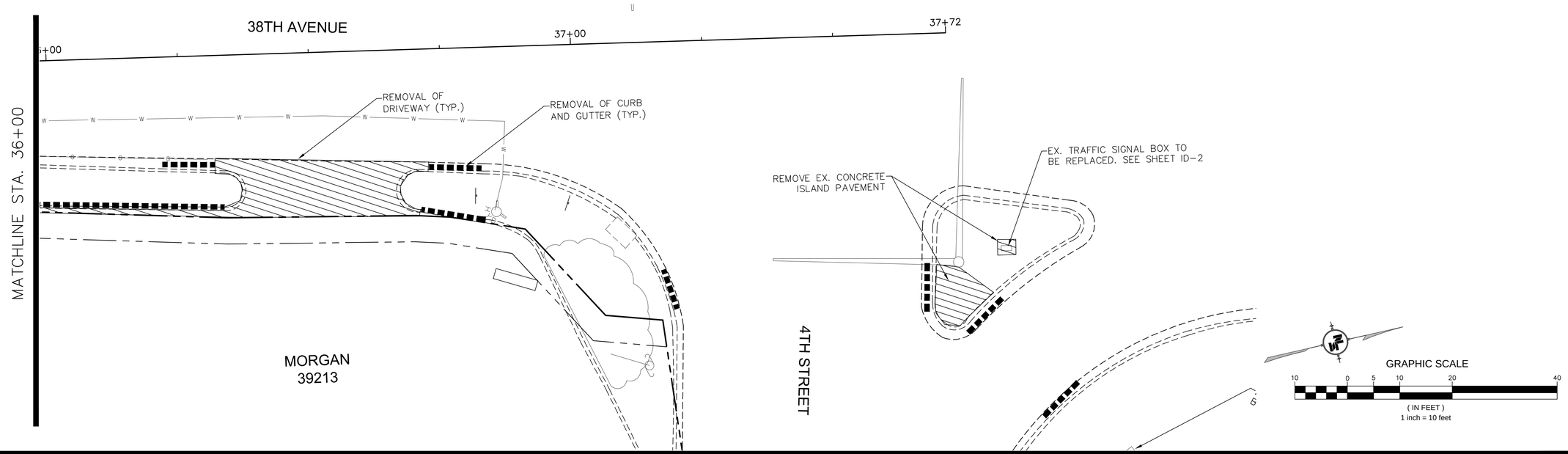

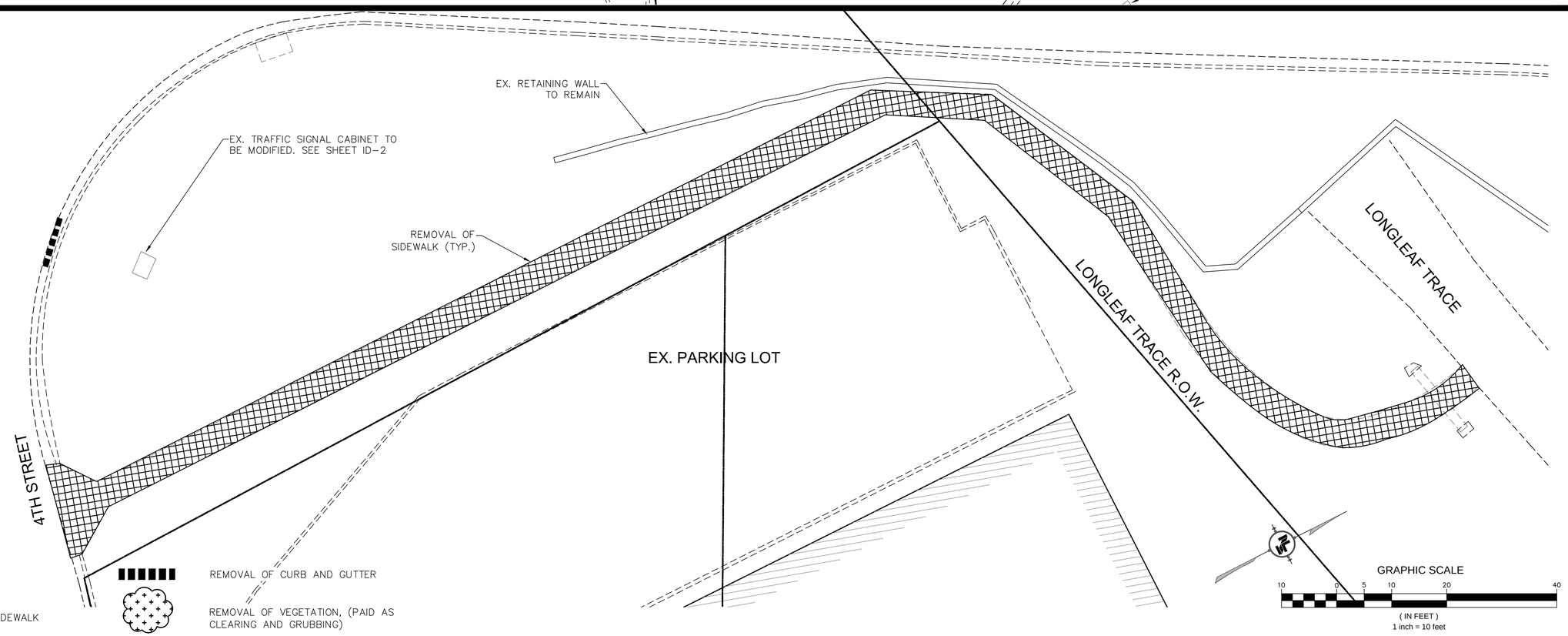

REMOVAL OF DRIVEWAY (CONCRETE AND ASPHALT)

REMOVAL OF CONCRETE SIDEWALK

REMOVAL OF CURB AND GUTTER

REMOVAL OF VEGETATION, (PAID AS CLEARING AND GRUBBING)

NOTICE TO DRAWING HOLDER

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REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: Demo.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

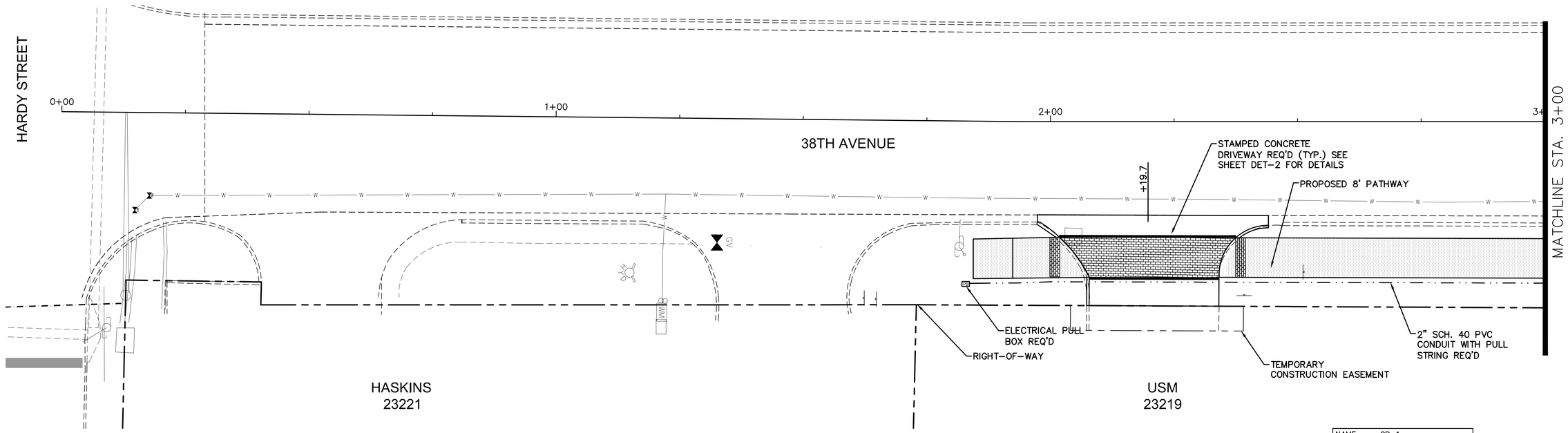
NEEL-SCHAFFER
Solutions you can build upon

EXISTING CONDITIONS & DEMOLITION PLAN 38TH AVENUE STA 36+00 TO LONGLEAF TRACE

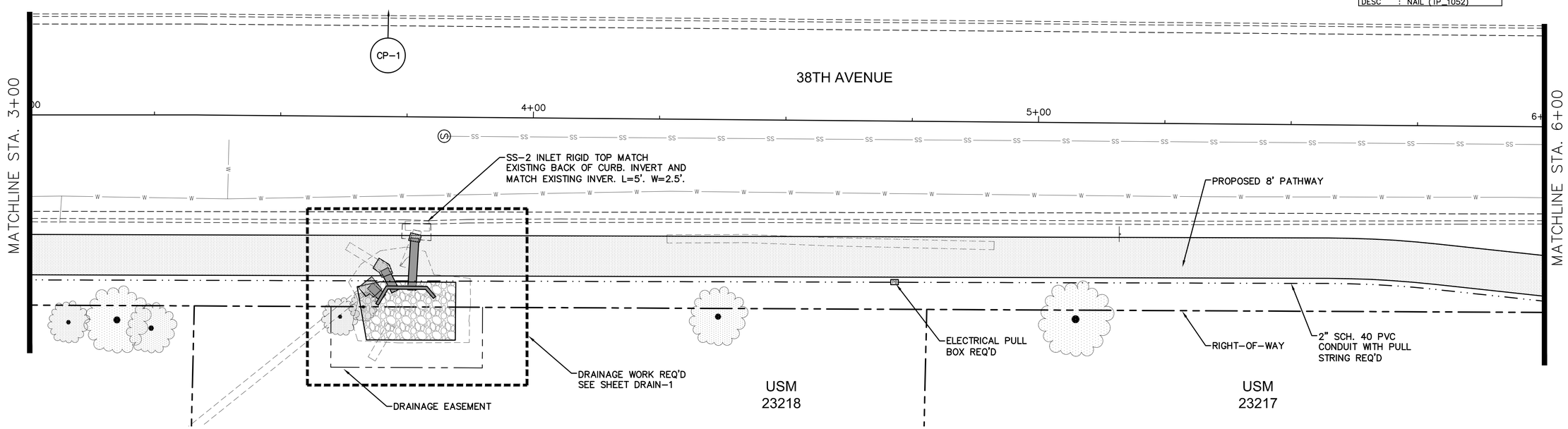
WORKING NUMBER: DEMO-7

DRAWING NUMBER: 12

1/14/2019 10:25 AM F:\Civil 3d projects\8000\8667-18 - 38th ave\demo.dwg



NAME	: CP-1
ELEV	: 222.928'
NORTHING:	664486.4480
EASTING	: 824287.956
DESC	: NAIL (TP_1052)



NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.

2. ALL WATER VALVES/METERS TO BE ADJUSTED TO FINISHED GRADE. WATER VALVES/METERS ADJUSTED TO MORE THAN ½" OF FINISHED GRADE WILL NOT BE ACCEPTED AND WILL BE REPAIRED AT THE CONTRACTORS OWN EXPENSE.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 feet

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

38TH AVENUE
STA 0+00 TO 6+00

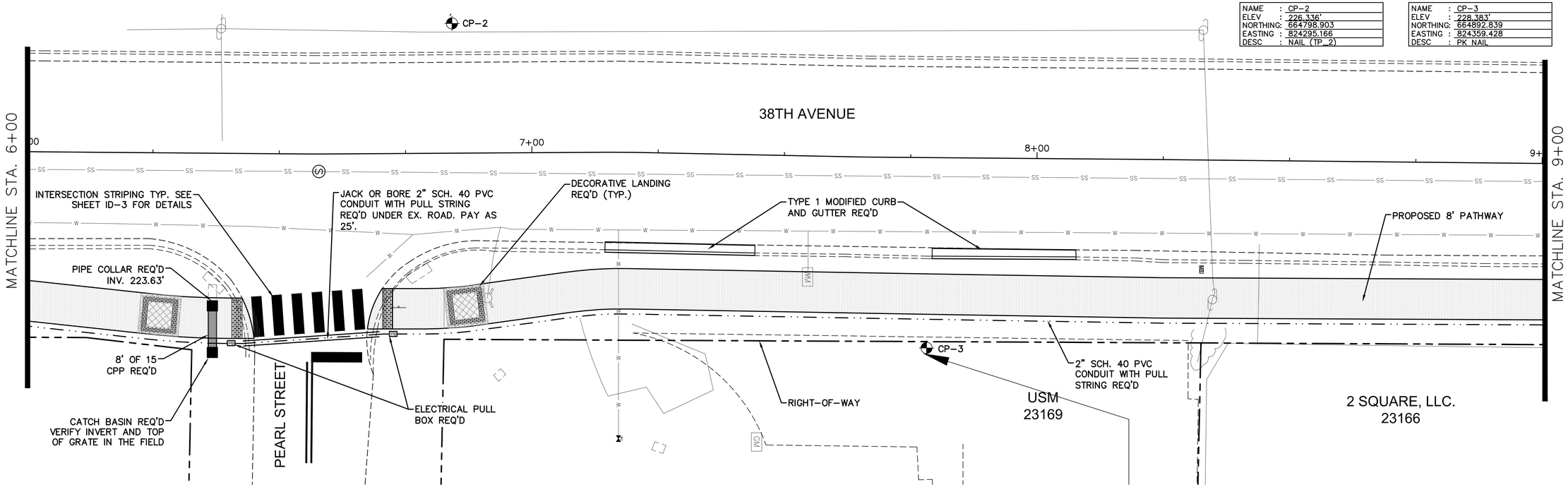
WORKING NUMBER: PP-1

DRAWING NUMBER: 13

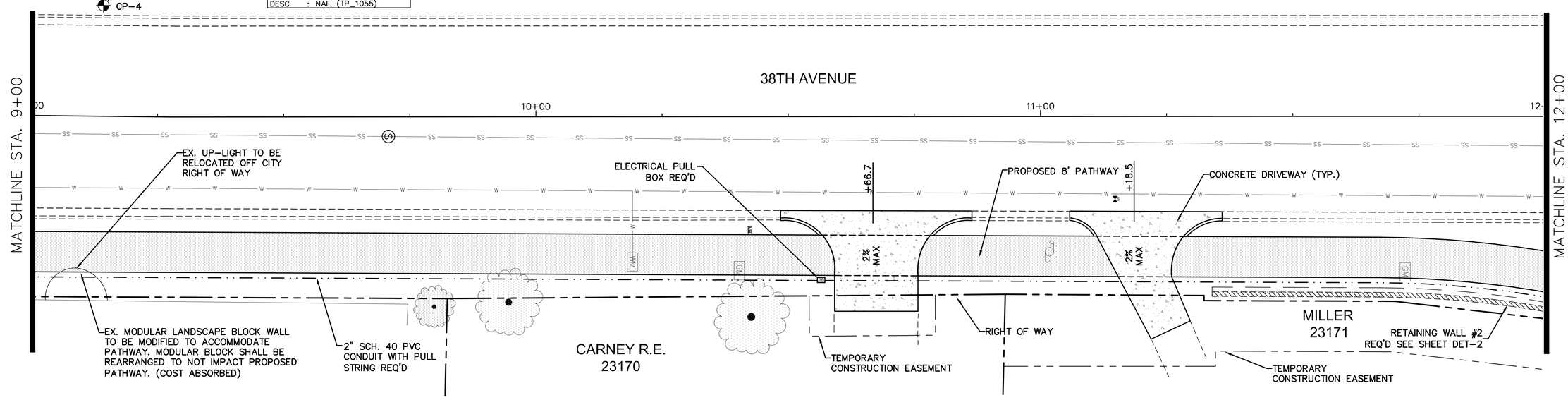
1/16/2019 11:30 AM F:\Civil 3d projects\8000\8667-18 - 38th ave\layout.dwg

NAME	: CP-2
ELEV	: 226.336'
NORTHING:	664798.903
EASTING :	824295.166
DESC	: NAIL (TP_2)

NAME	: CP-3
ELEV	: 228.383'
NORTHING:	664892.839
EASTING :	824359.428
DESC	: PK NAIL



NAME	: CP-4
ELEV	: 230.796'
NORTHING:	665028.983
EASTING :	824301.079
DESC	: NAIL (TP_1055)



NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.

2. ALL WATER VALVES/METERS TO BE ADJUSTED TO FINISHED GRADE. WATER VALVES/METERS ADJUSTED TO MORE THAN $\frac{1}{2}$" OF FINISHED GRADE WILL NOT BE ACCEPTED AND WILL BE REPAIRED AT THE CONTRACTORS OWN EXPENSE.

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 feet

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

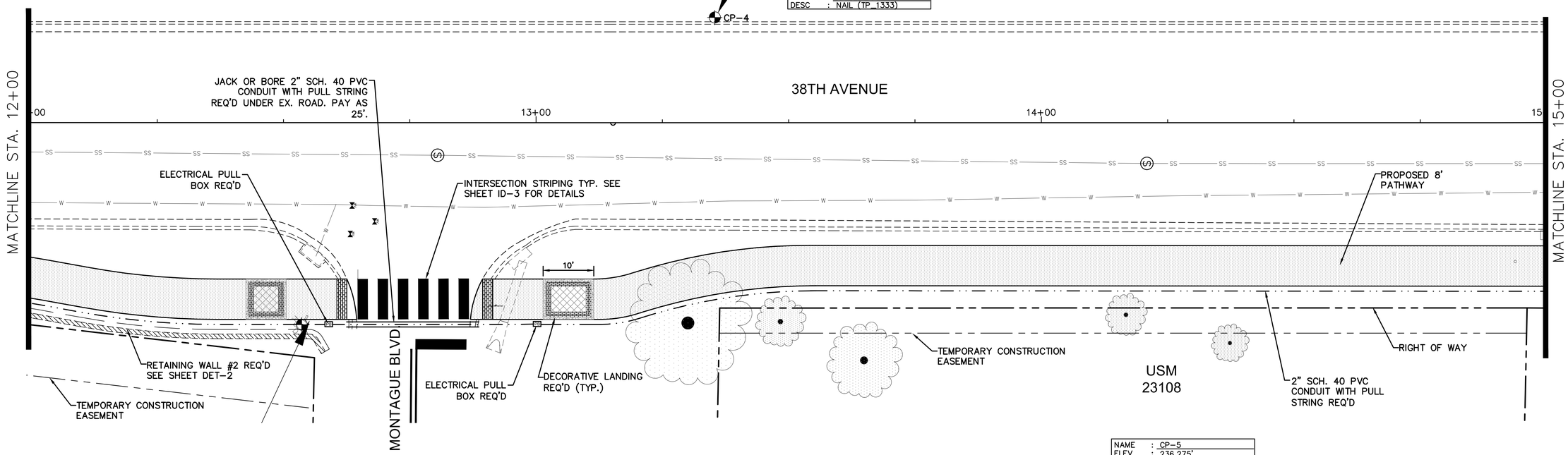
NEEL-SCHAFFER
Solutions you can build upon

38TH AVENUE
STA 6+00 TO 12+00

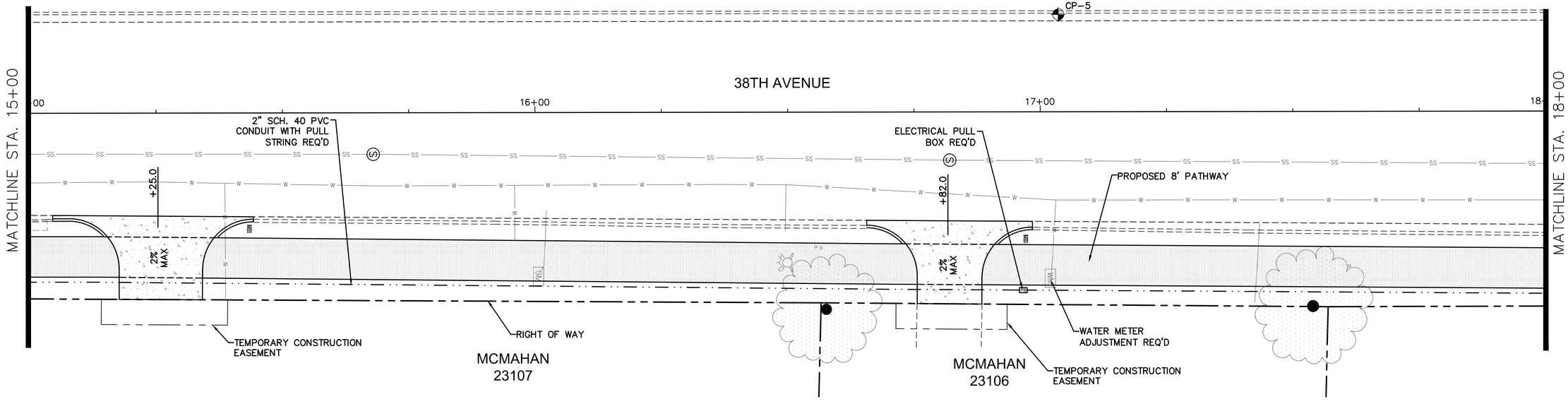
WORKING NUMBER:	DRAWING NUMBER:
PP-2	14

1/16/2019 11:32 AM - \\cnt-fs-project\8500\8667-18 - 38th ave\layout.dwg

NAME	CP-4
ELEV	227.754'
NORTHING	665450.059
EASTING	824302.224
DESC	NAIL (TP_1333)



NAME	CP-5
ELEV	236.275'
NORTHING	665818.252
EASTING	824303.508
DESC	NAIL (TP_1413)



NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.

2. ALL WATER VALVES/METERS TO BE ADJUSTED TO FINISHED GRADE. WATER VALVES/METERS ADJUSTED TO MORE THAN ½" OF FINISHED GRADE WILL NOT BE ACCEPTED AND WILL BE REPAIRED AT THE CONTRACTORS OWN EXPENSE.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 feet

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

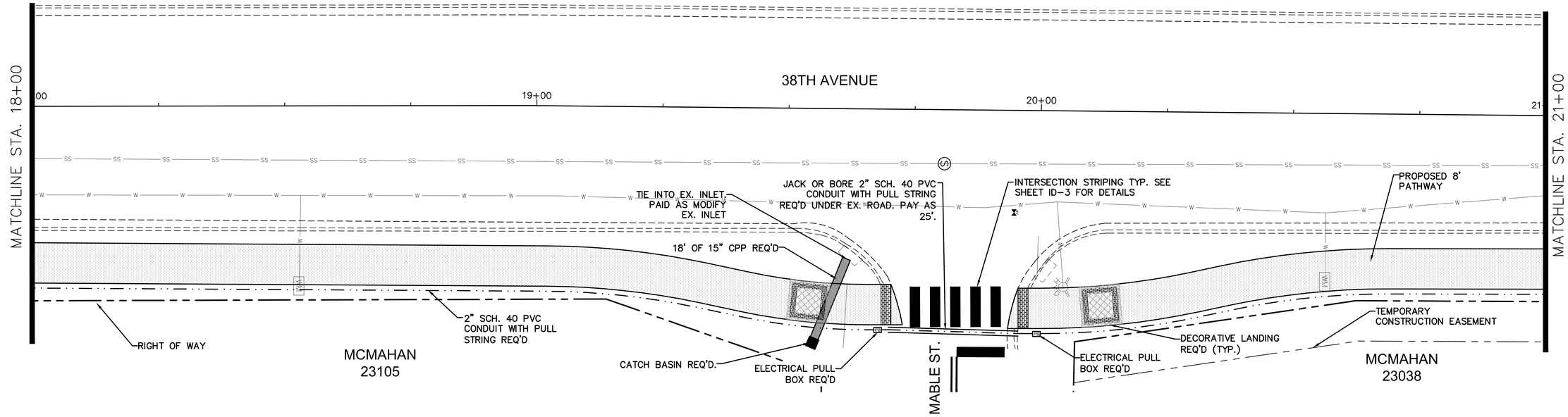
NEEL-SCHAFFER
Solutions you can build upon

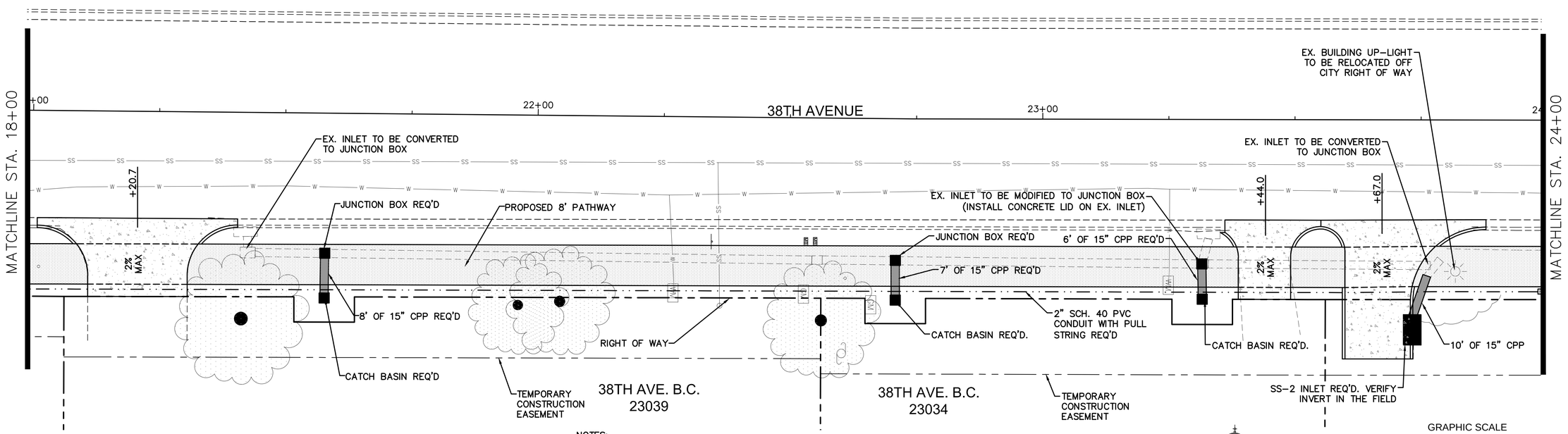
38TH AVENUE
STA 12+00 TO 18+00

WORKING NUMBER: PP-3

DRAWING NUMBER: 15

1/14/2019 10:42 AM n:\civil 3d projects\8600\8667.18 - 38th ave\layout.dwg





NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.

2. ALL WATER VALVES/METERS TO BE ADJUSTED TO FINISHED GRADE. WATER VALVES/METERS ADJUSTED TO MORE THAN ½" OF FINISHED GRADE WILL NOT BE ACCEPTED AND WILL BE REPAIRED AT THE CONTRACTORS OWN EXPENSE.

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

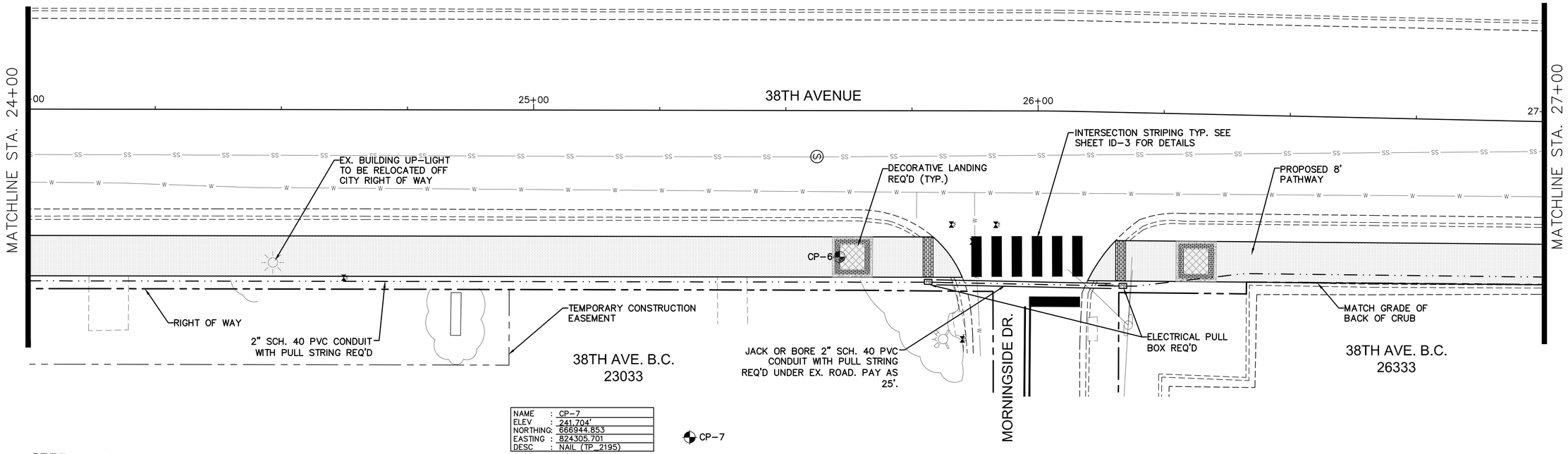
38TH AVENUE
STA 18+00 TO 24+00

WORKING NUMBER: PP-4

DRAWING NUMBER: 16

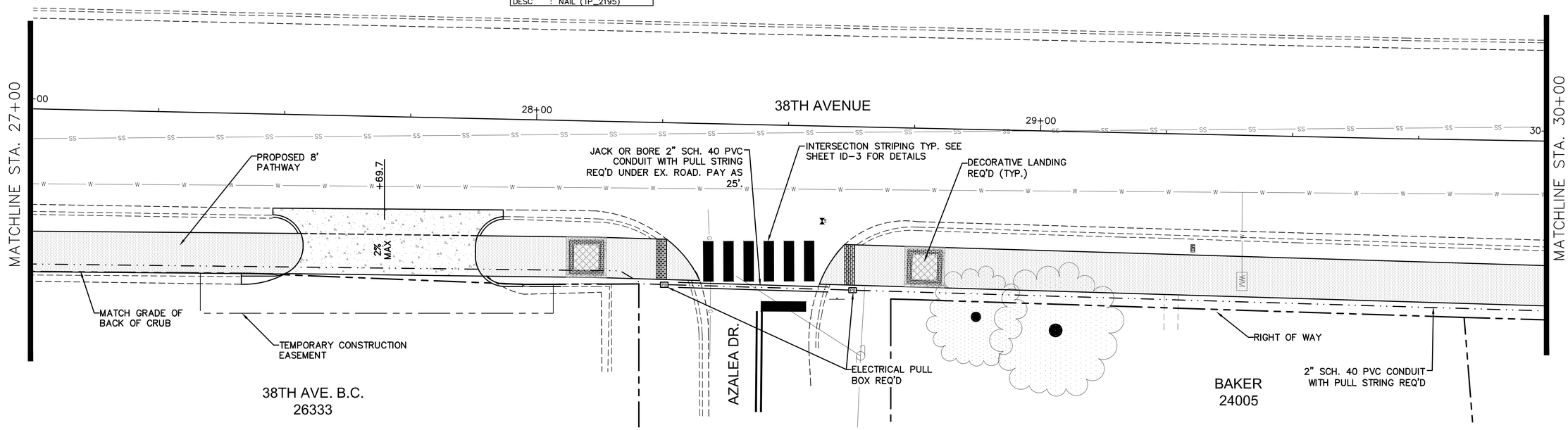
7/17/2019 10:43 AM r:\job 3d projects\8000\8667-18 - 38th ave\layout.dwg

NAME	: CP-6
ELEV	: 239.400'
NORTHING:	666675.362
EASTING :	824355.716
DESC	: NAIL (TP_2196)



NAME	: CP-7
ELEV	: 241.704'
NORTHING:	666944.853
EASTING :	824305.701
DESC	: NAIL (TP_2195)

CP-7



NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.

2. ALL WATER VALVES/METERS TO BE ADJUSTED TO FINISHED GRADE. WATER VALVES/METERS ADJUSTED TO MORE THAN $\frac{1}{2}$" OF FINISHED GRADE WILL NOT BE ACCEPTED AND WILL BE REPAIRED AT THE CONTRACTORS OWN EXPENSE.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 feet

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

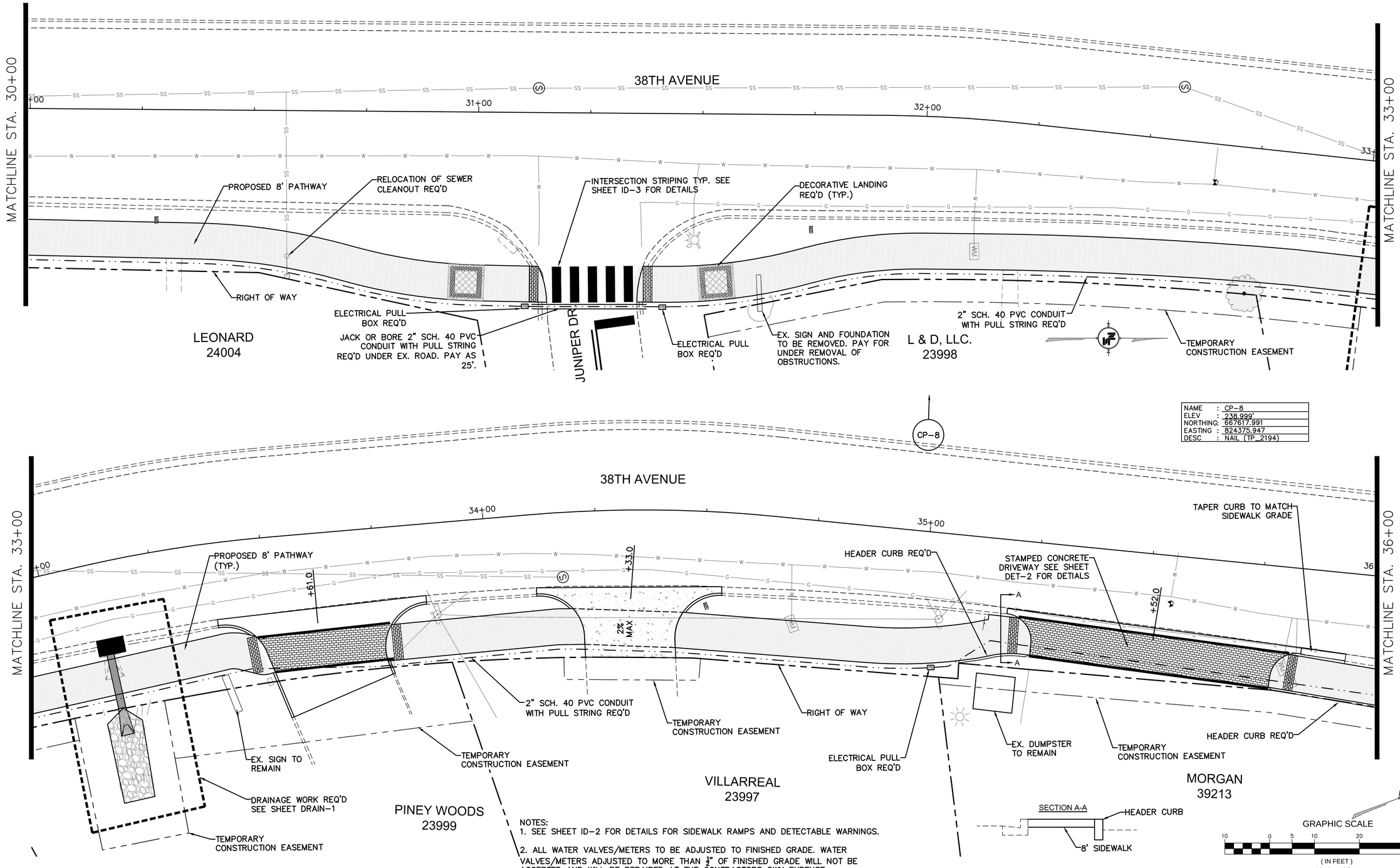
NEEL-SCHAFFER
Solutions you can build upon

38TH AVENUE
STA 24+00 TO 30+00

WORKING NUMBER: PP-5

DRAWING NUMBER: 17

1/14/2019 10:44 AM P:\civil 3d projects\8000\8667-18 - 38th ave\layout.dwg



NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.
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REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

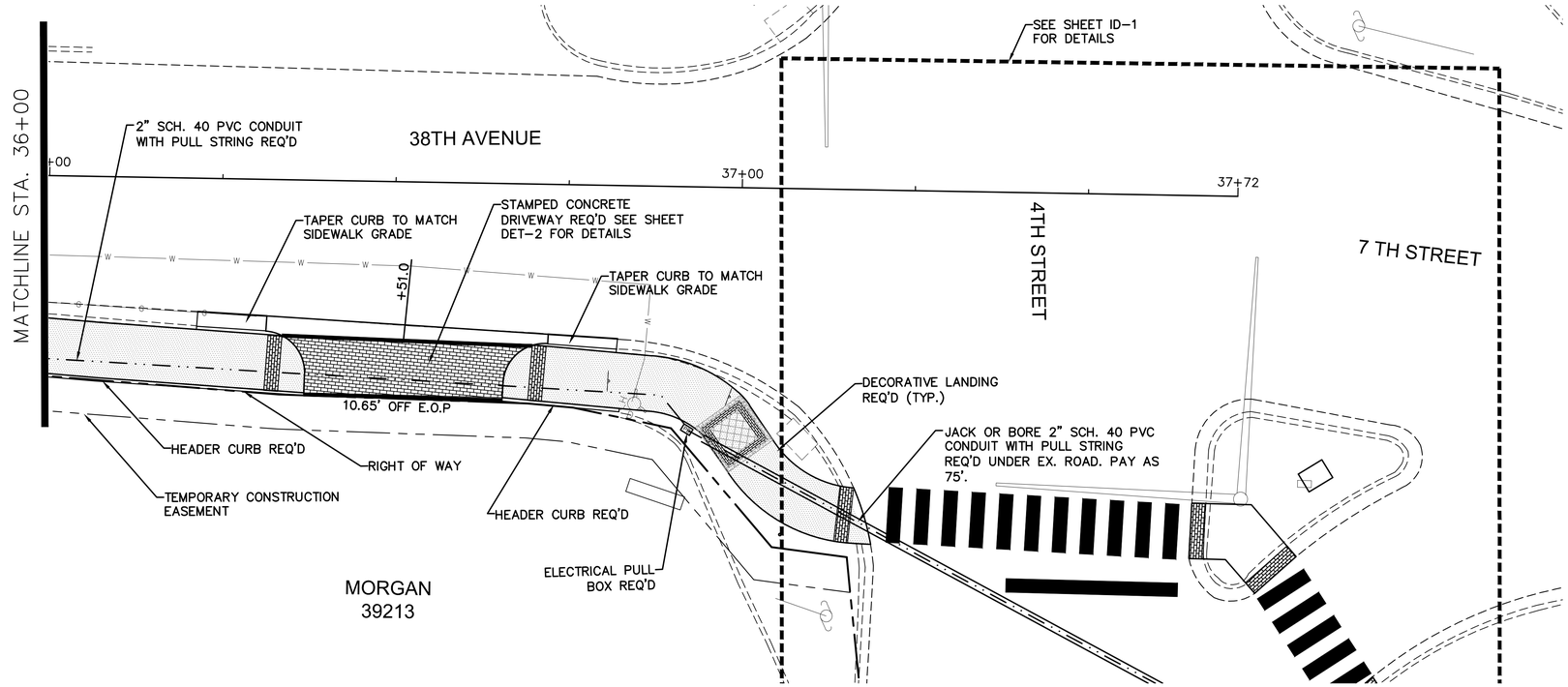
NEEL-SCHAFFER
Solutions you can build upon

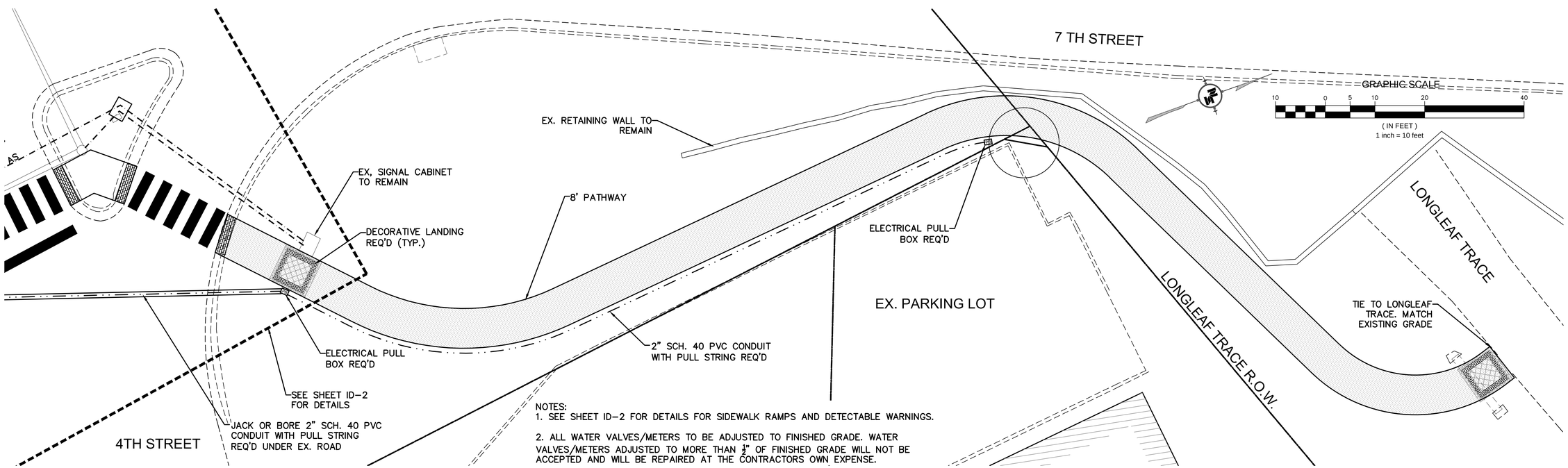
38TH AVENUE
STA 30+00 TO 36+00

WORKING NUMBER: PP-6

DRAWING NUMBER: 18

1/10/2019 11:31 AM n:\civil 3d projects\8600\8667118 - 38th ave\layout.dwg





NOTES:
1. SEE SHEET ID-2 FOR DETAILS FOR SIDEWALK RAMPS AND DETECTABLE WARNINGS.

2. ALL WATER VALVES/METERS TO BE ADJUSTED TO FINISHED GRADE. WATER VALVES/METERS ADJUSTED TO MORE THAN $\frac{1}{2}$" OF FINISHED GRADE WILL NOT BE ACCEPTED AND WILL BE REPAIRED AT THE CONTRACTORS OWN EXPENSE.

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
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SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

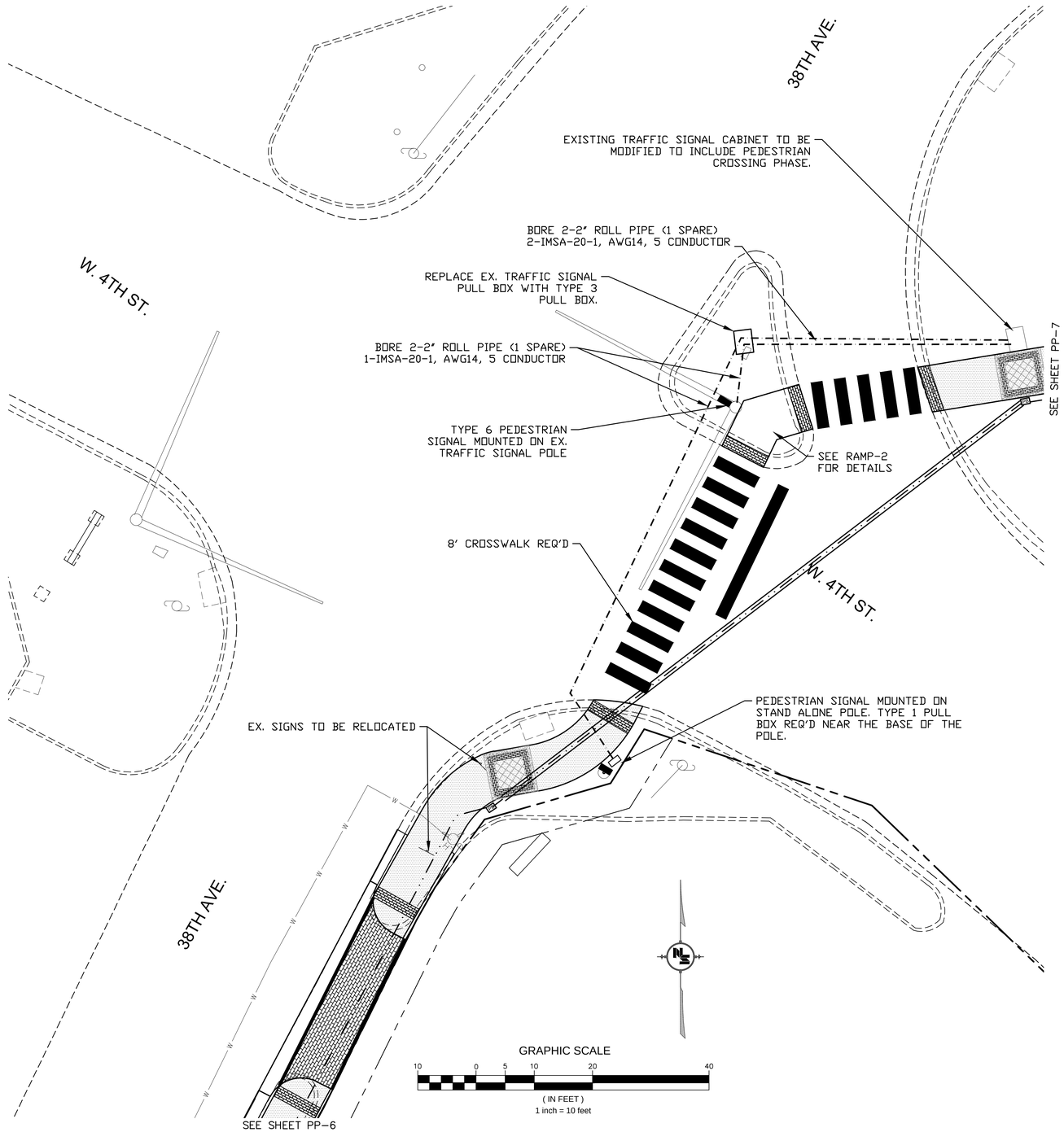
38TH AVENUE PATHWAY

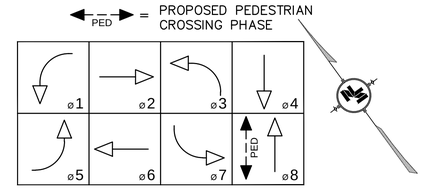
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

38TH AVENUE
STA 36+00 TO LONGLEAF TRACE

WORKING NUMBER:	DRAWING NUMBER:
PP-7	19





SIGNAL PHASING

*** NOTES:

1. SEE SHEETS TSD-1 THROUGH TSD-7 FOR TRAFFIC SIGNAL DETAILS

2. CONTRACTOR SHALL MODIFY EX. TRAFFIC SIGNAL CONTROLLER TO ACCEPT NEW PEDESTRIAN PHASING. LOAD SWITCH REQ'D TO BE INCLUDED IN CONTROLLER MODIFICATION.

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
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FILENAME: Layout.dwg	
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DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
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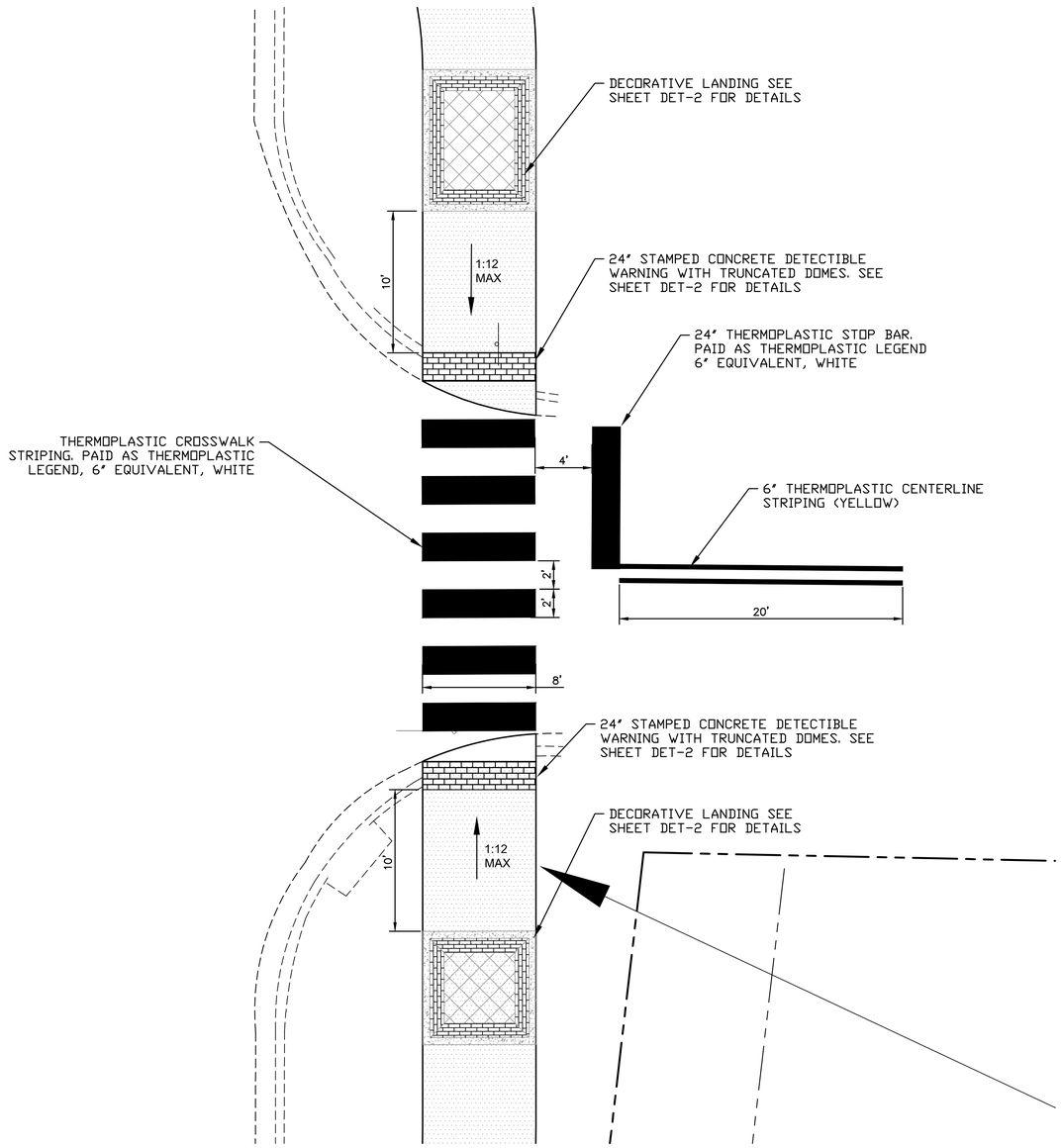
38TH AVENUE
INTERSECTION DETAILS #1

WORKING NUMBER:	DRAWING NUMBER:
ID-1	20

1/14/2019 10:49 AM n:\civil 3d projects\8600\8667-18 - 38th ave\layout.dwg



TYPICAL INTERSECTION DETAIL

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 feet

NOTICE TO DRAWING HOLDER

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38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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38TH AVENUE
INTERSECTION DETAILS #2

WORKING NUMBER: ID-2

DRAWING NUMBER: 21

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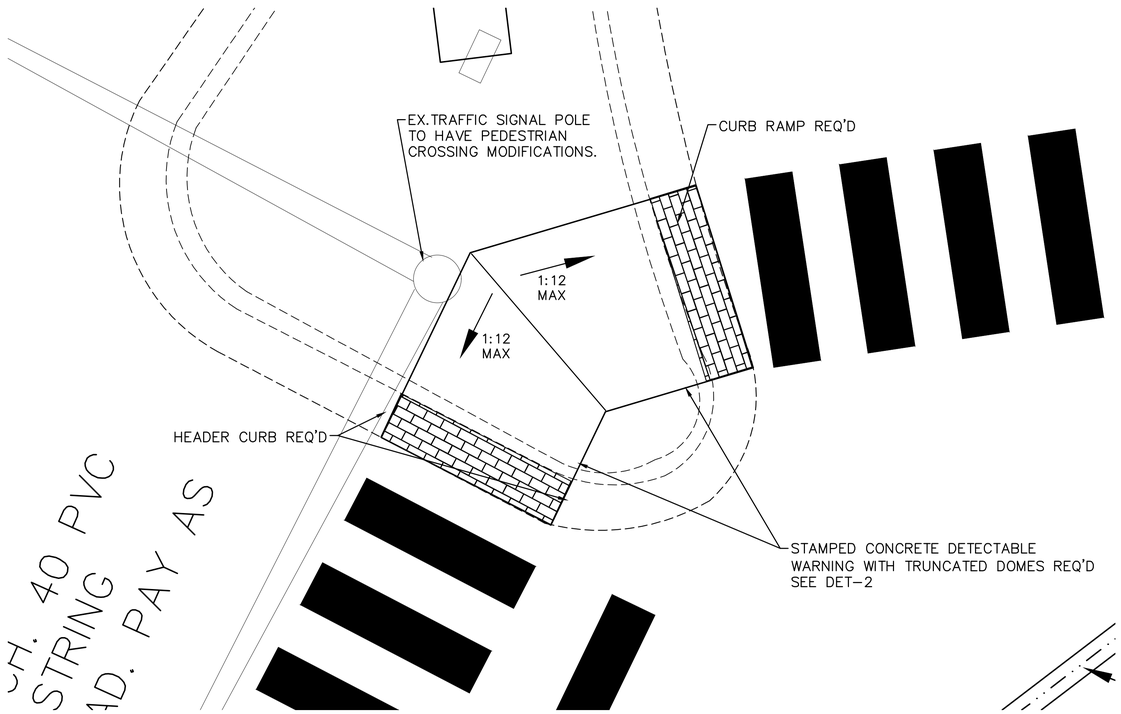
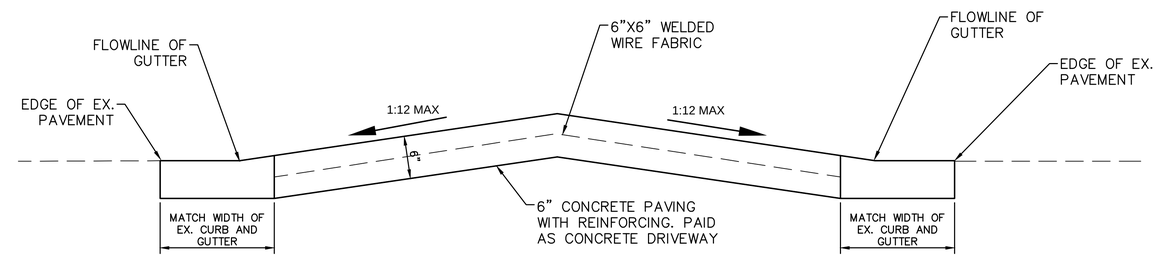


SPLITTER ISLAND CURB RAMP @ NE
CORNER OF 4TH ST. AND 38TH AVE.



SPLITTER ISLAND CURB RAMP @ NE
CORNER OF 4TH ST. AND 38TH AVE.
SECTION VIEW

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: Layout.dwg	
SCALE: 1" = 5'	
SURVEYED BY: CLEARPOINT ENGINEERS	
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DRWN: WTA	DATE: 01/2019
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QA/QC:	DATE:

38TH AVENUE PATHWAY

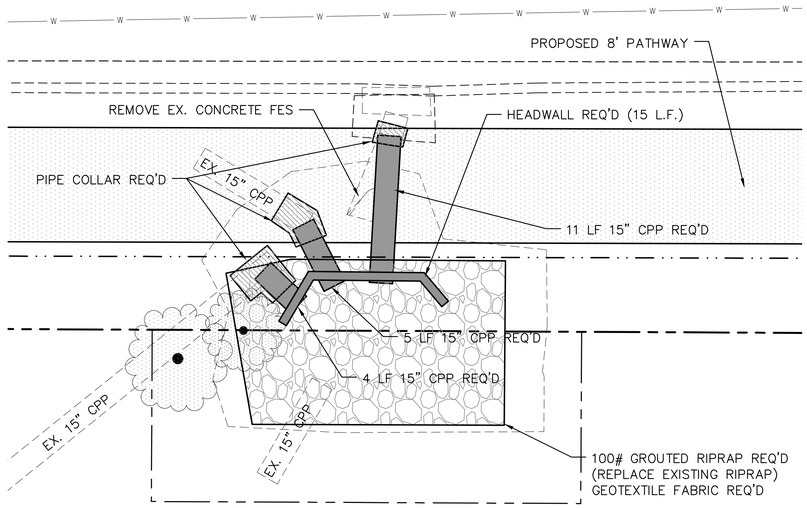
CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

38TH AVENUE
CURB RAMP DETAILS

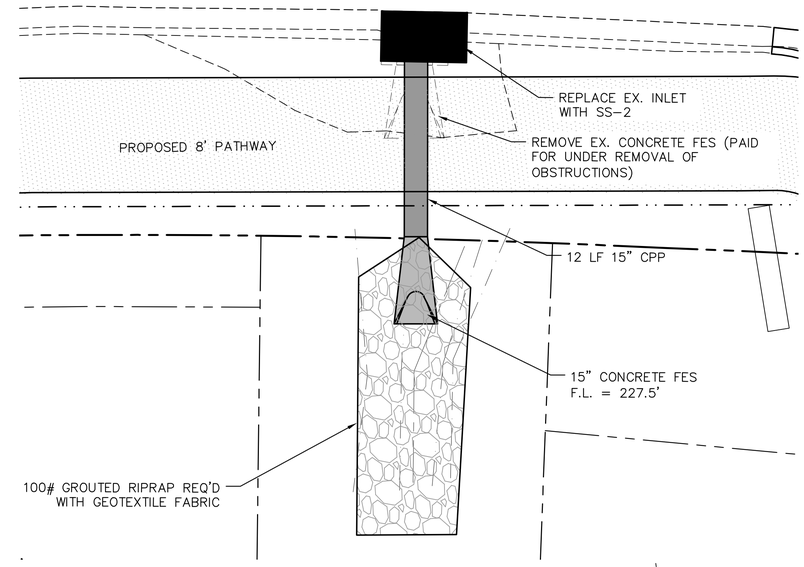
WORKING NUMBER: RAMP-1

DRAWING NUMBER: 22



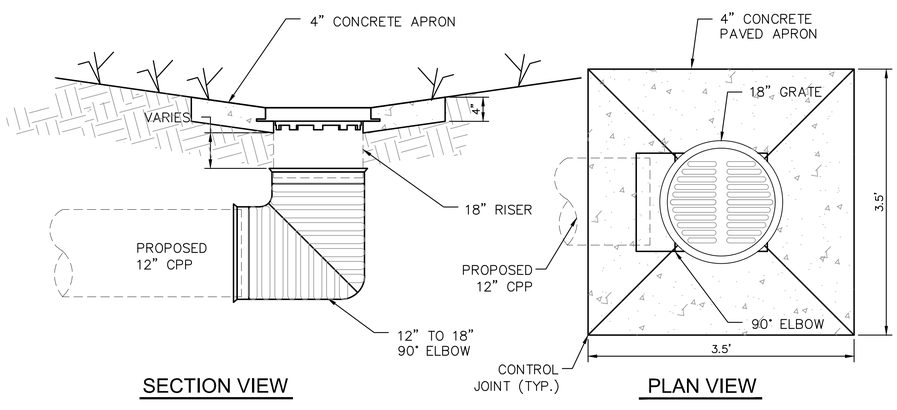
NOTE:
CPP TO BE PERFORATED AND WRAPPED IN A SOCK. (COST ABSORBED)

38TH AVENUE
STA. 3+75
NOT TO SCALE



38TH AVENUE
STA. 33+12
NOT TO SCALE

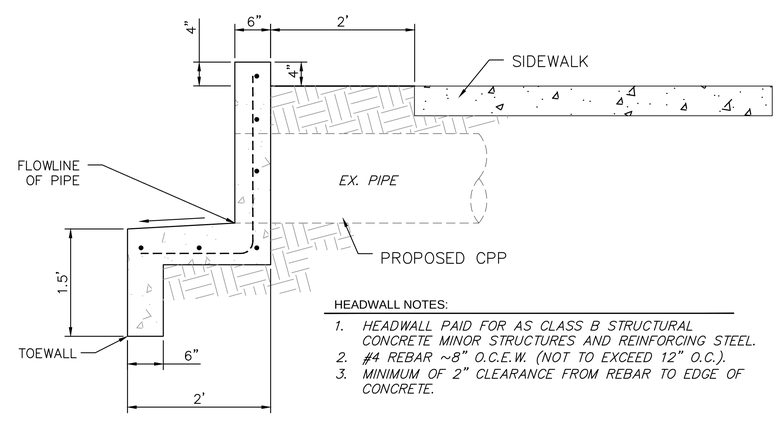
NOTE:
PAY AS INSTALLATION OF 18" CATCH BASIN, PER PLANS, PER EACH, INCLUDES INLINE DRAIN, 90° ELBOW, RISER, GRATE, PAVED APRON, AND ALL WORK ASSOCIATED WITH INSTALLING CATCH BASIN AS SHOWN IN THE PLANS.



SECTION VIEW

PLAN VIEW

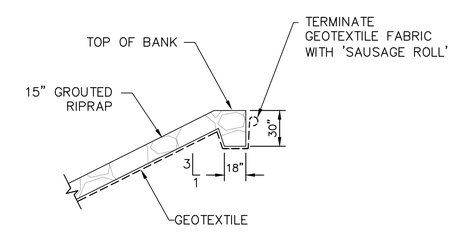
18" CATCH BASIN DETIAL
NOT TO SCALE



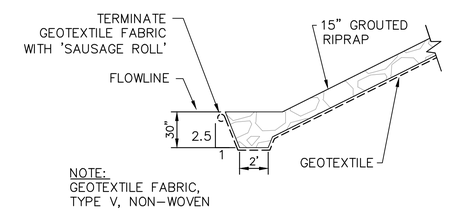
HEADWALL NOTES:

1. *HEADWALL PAID FOR AS CLASS B STRUCTURAL CONCRETE MINOR STRUCTURES AND REINFORCING STEEL.*
2. *#4 REBAR ~8" O.C.E.W. (NOT TO EXCEED 12" O.C.).*
3. *MINIMUM OF 2" CLEARANCE FROM REBAR TO EDGE OF CONCRETE.*

TYPICAL HEADWALL
CROSS SECTION
NOT TO SCALE



KEY AT TOP OF BANK
NOT TO SCALE



NOTE:
GEOTEXTILE FABRIC,
TYPE V, NON-WOVEN

TOEWALL DETAIL
NOT TO SCALE

TYPICAL GROUTED RIPRAP DETAIL
NOT TO SCALE

REVISIONS			
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38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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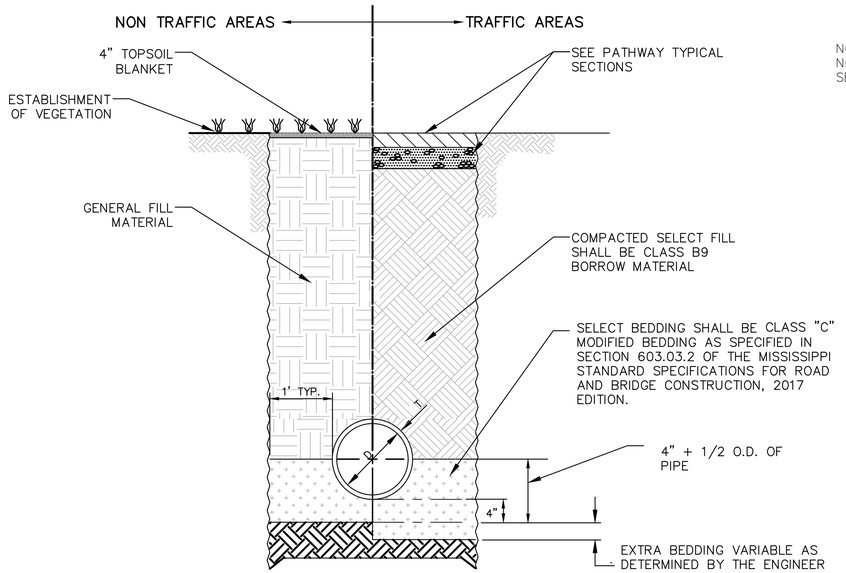
38TH AVENUE
DRAINAGE DETAILS

WORKING NUMBER: DRAIN-1

DRAWING NUMBER: 23

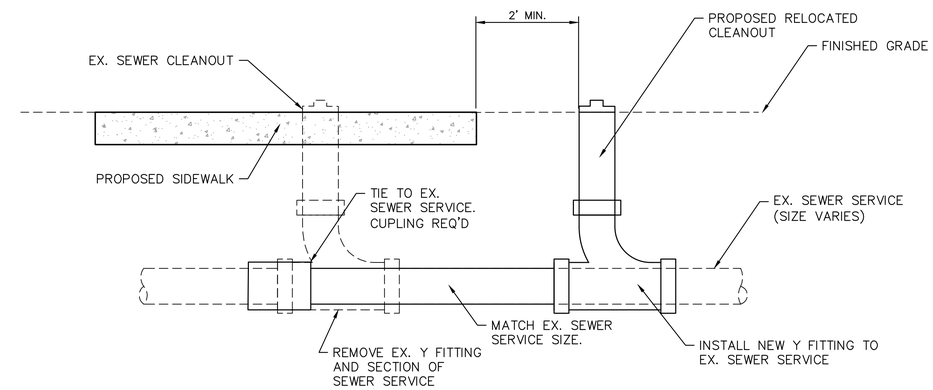
1/14/2019 10:53 AM J:\Civil 3d projects\8600\8667-18 - 38th ave\layout.dwg



NOTE: THE COST OF CORRUGATED PIPE SHALL INCLUDE BUT NOT LIMITED TO STRUCTURE EXCAVATION, SELECT BEDDING, SELECT BACKFILL, FILTER SOCK, AND PERFORATIONS.

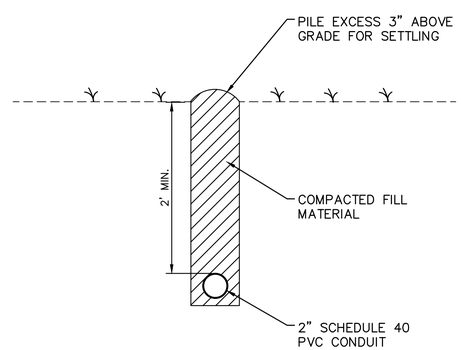
TYPICAL TRENCH DETAILS FOR DRAINAGE PIPE

NOT TO SCALE



SEWER CLEANOUT RELOCATION DETAIL

NOT TO SCALE



CONDUIT TRENCHING DETAIL

NOT TO SCALE

NOTICE TO DRAWING HOLDER

REVISIONS

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38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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SITE DETAILS

WORKING NUMBER:	DRAWING NUMBER:
DET-1	24

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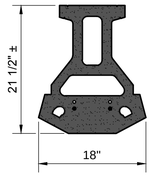
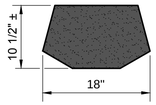
Standard Elevation

Cap Unit Elevation



Standard Plan



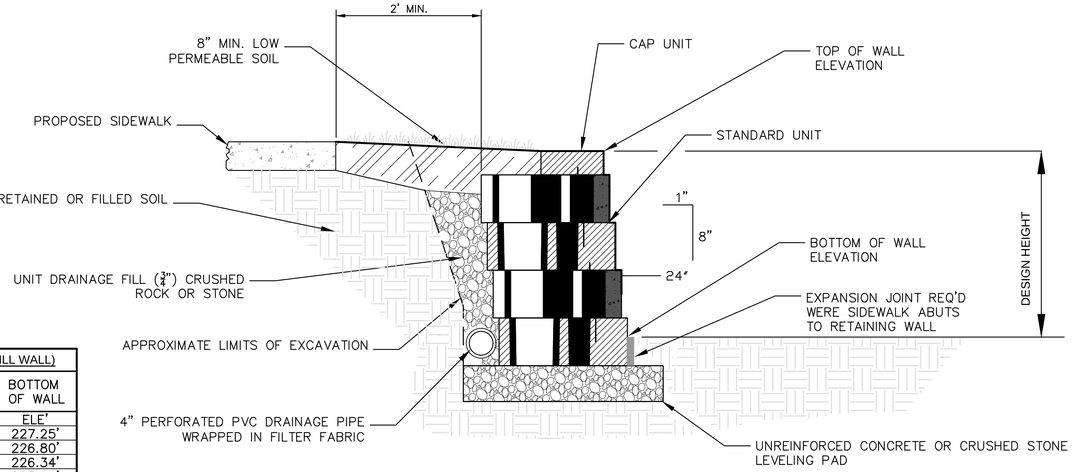
Cap Unit Plan

3-Plane Split
Cap Unit Option

Standard Unit

RETAINING WALL #1 (CUT WALL)		
STATION	TOP OF WALL	BOTTOM OF WALL
STATION	ELE'	ELE'
0+69	230.0'	229.50'
0+79	230.0'	229.04'
0+89	230.0'	228.58'
0+99	230.0'	228.10'
1+09	229.0'	228.00'
1+19	229.0'	228.00'
1+29	229.0'	227.90'
1+31	230.0'	227.80'

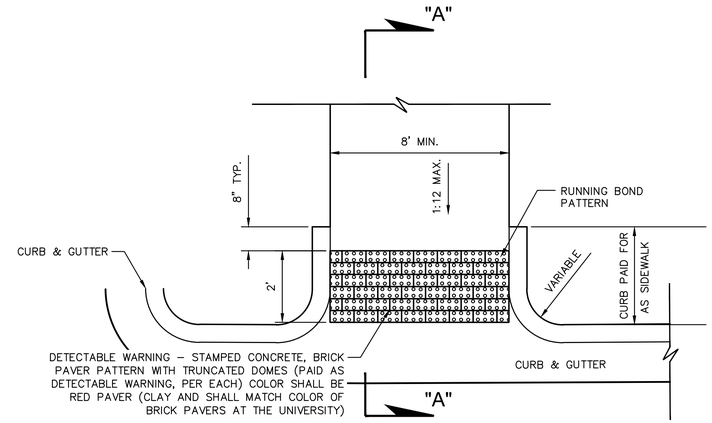
RETAINING WALL #2 (FILL WALL)		
STATION	TOP OF WALL	BOTTOM OF WALL
STATION	ELE'	ELE'
11+34	228.0'	227.25'
11+44	228.0'	226.80'
11+54	228.0'	226.34'
11+64	228.0'	225.94'
11+74	228.0'	225.64'
11+84	228.0'	225.40'
11+94	227.0'	225.21'
12+04	227.0'	225.00'
12+14	227.0'	224.75'
12+24	227.0'	224.55'
12+34	227.0'	224.40'
12+44	227.0'	224.25'
12+54	227.0'	224.13'
12+59	227.0'	224.37'



NOTE: PAYMENT BASED ON DESIGN HEIGHT PER SQUARE FOOT AND SHALL INCLUDED BUT NOT LIMITED TO STRUCTURE EXCAVATION, BACKFILL, BEDDING, WALL BLOCKS, CAP BLOCKS, DRAINAGE PIPE, FABRIC, AND ANY LABOR OR MATERIALS USED TO CONSTRUCT THE MODULAR BLOCK RETAINING WALL AS SHOWN IN THE PLANS.

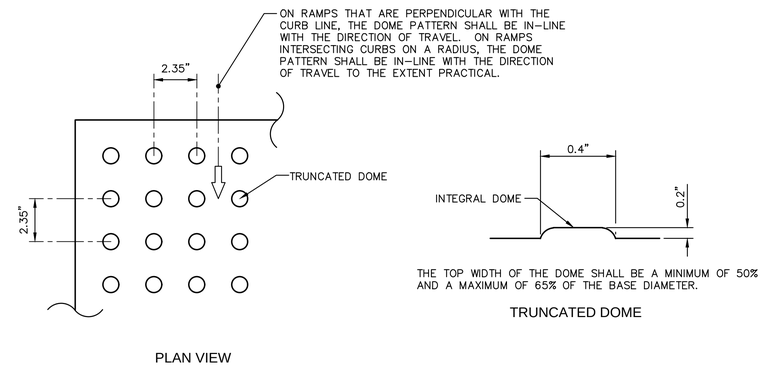
MODULAR RETAINING WALL DETIAL

NOT TO SCALE



TYPICAL CURB-RETURN HANDICAP RAMP DETAIL

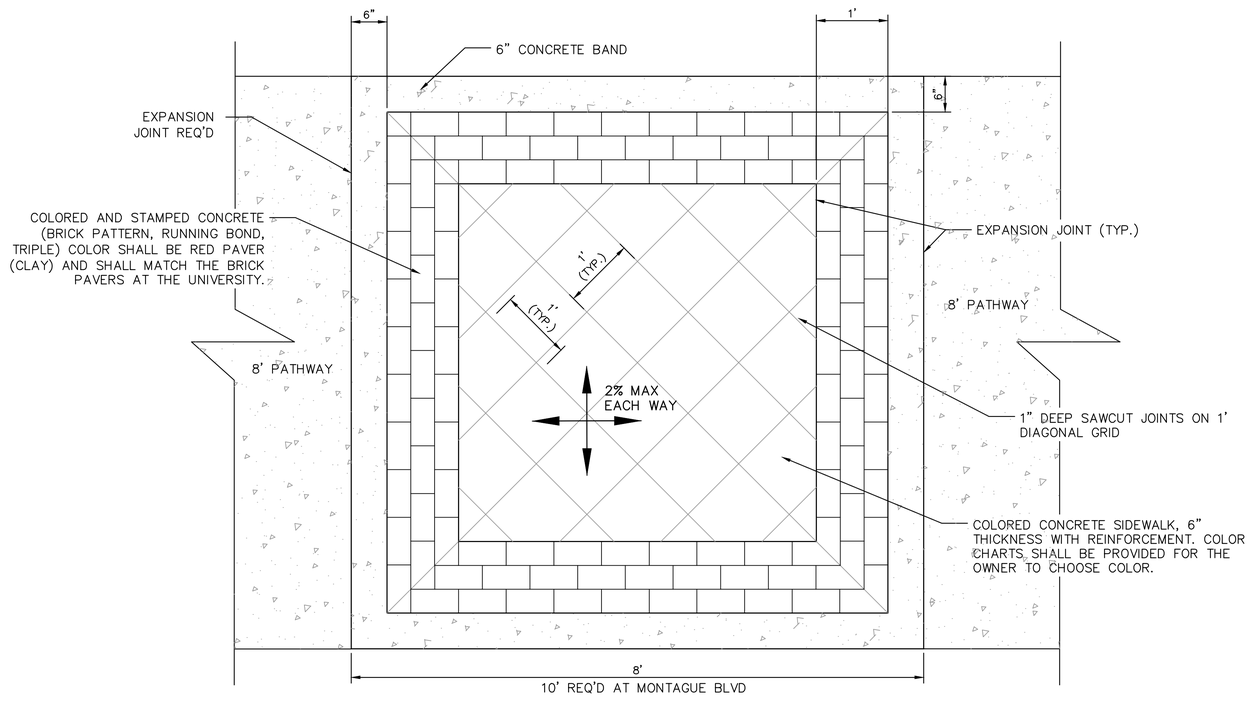
NOT TO SCALE



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 2 FEET (24 INCHES).

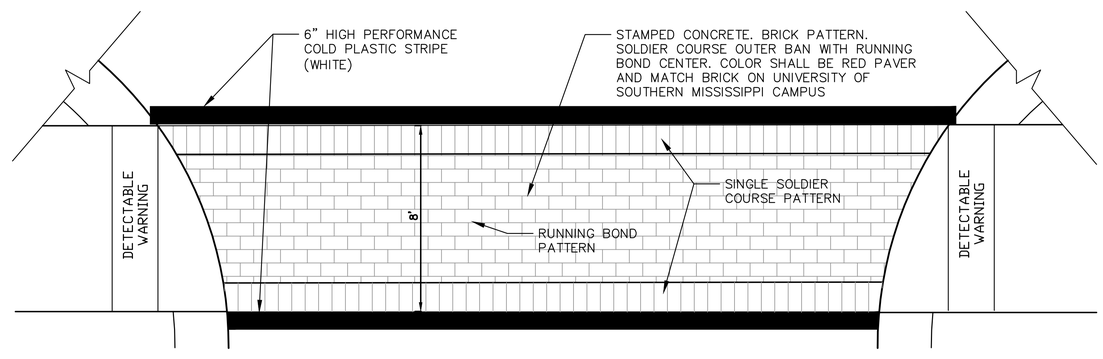
CURB RAMP DETECTABLE WARNING DETAIL

NOT TO SCALE



DECORATIVE LANDING DETIAL

NOT TO SCALE



COMMERCIAL DRIVEWAY DECORATIVE CROSSWALK

NOT TO SCALE

NOTICE TO DRAWING HOLDER

REVISIONS

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38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
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SITE DETAILS

WORKING NUMBER:	DRAWING NUMBER:
DET-2	25

TRAFFIC SIGNAL GENERAL NOTES

1. POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT LOCATIONS MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.

2. THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARMS POLES SHALL BE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II, USE 50 YEAR DESIGN SERVICE LIFE AND DO NOT CONSIDER GALLOPING OR TRUCK-INDUCED GUSTS. WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2013 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS UNLESS OTHERWISE NOTED ON PLANS. SEE TSD 3.

3. DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I - XI STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.

4. TRAFFIC SIGNAL MAST ARM POLES SHALL BE HOT DIPPED GALVANIZED WITH FINISH APPROVED BY THE ENGINEER.

5. TRAFFIC SIGNAL MAST ARM POLES REQUIRING LUMINAIRES ARE DESIGNATED BY (L). ALL LUMINAIRES SHALL BE LED UNLESS OTHERWISE NOTED ON PLANS.

6. STAINLESS STEEL TAG ATTACHED TO THE POLE SHAFT USING 3/16 INCH STAINLESS STEEL POP RIVETS WITH PROPERTIES AND INFORMATION AS FOLLOWS:
   - MINIMUM 1/16 INCH THICKNESS
   - MINIMUM 1/4 INCH STAMPED LEGEND WITH FOLLOWING INFORMATION:
     -- MANUFACTURER NAME
     -- MONTH / YEAR OF MANUFACTURE
     -- UNIQUE IDENTIFYING NUMBER FOR FUTURE MANUFACTURER REFERENCE
     -- EXTERNAL PROJECT NUMBER FROM THE PLANS COVER SHEET (EXAMPLE: STP-XXXX-XX…)

   TAG TO BE INSTALLED ON SHAFT SIDE OPPOSITE THE MAINLINE HIGHWAY AND LOCATED APPROXIMATELY 48 INCHES ABOVE THE TOP OF BASE PLATE.

7. THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE GROUND LINE OF THE POINT WHERE THE POLE IS LOCATED, EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.

8. ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.

9. POLE FOUNDATIONS AND BASE MOUNTED CABINET FOUNDATIONS, GRADE SHALL BE ESTABLISHED TO ±3" OF EDGE OF PAVEMENT ELEVATION UNLESS APPROVED BY SIGNAL PROJECT ENGINEER.

10. TRAFFIC SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS WITH BLACK BACK PLATES

11. PEDESTRIAN HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.

12. PEDESTRIAN PUSHBUTTONS SHALL BE EITHER STANDARD PUSHBUTTONS OR APS (ACCESSIBLE PEDESTRIAN SYSTEM) STYLE AS NOTED ON PLANS. SIGNS TO BE INCLUDED IN PAY ITEM FOR PEDESTRIAN PUSHBUTTONS AT NO ADDITIONAL COST. SIDE OF POLE LOCATIONS OF PUSHBUTTONS MAY BE FIELD ADJUSTED. PUSHBUTTON HARDWARE SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON PLANS.

13. FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).

14. TRAFFIC SIGNAL CABINETS AND CONTROLLERS SHALL BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASE SEQUENCE DIAGRAM.

15. ALL TRAFFIC SIGNAL CONTROLLERS SHALL BE THE CURRENT VERSION OF SIEMENS EAGLE TRAFFIC SIGNAL CONTROLLERS WITH SEPAC SOFTWARE, ETHERNET READY, AND COMPATIBLE WITH MDOT'S EXISTING TRAFFIC SIGNAL MANAGEMENT SOFTWARE. ALL TRAFFIC SIGNAL CONTROLLER FIRMWARE SHALL BE CAPABLE OF DELAYING THE ONSET OF THE FLASHING YELLOW ARROW. ALL MMU'S SHALL BE ETHERNET READY, 16 CHANNEL, AND CAPABLE OF RUNNING 12 DIFFERENT MODES OF FLASHING YELLOW ARROW OPERATION. THE CONTRACTOR SHALL COORDINATE WITH MDOT FOR IP ADDRESSES ON ALL NETWORKABLE DEVICES. DEVICES INCLUDE BUT NOT LIMITED TO: CONTROLLER, MMU WITH SDLC CABLE (CONFLICT MONITOR), AND DETECTION UNITS. TRAFFIC SIGNAL CONTROLLER CABINET SHALL HAVE A 16 LOAD BAY FACILITY, REAR ACCESS DOOR, LAPTOP TRAY, AND DUAL POSITION INTERNAL LED LIGHTING. ALL TRAFFIC SIGNAL CONTROLLER CABINETS SHALL HAVE A 5 POSITION CARD RACK AND ONE 175 WATT MINIMUM POWER SUPPLY AND 4 AVAILABLE SLOTS UNLESS OTHERWISE NOTED ON PLANS.

16. FOR PROTECTED/PERMITTED LEFT TURN PHASING USING TYPE 2 FYA TRAFFIC SIGNAL HEADS, OPERATION SHALL BE AS FOLLOWS: THE PROTECTED PHASE OF THIS OPERATION SHALL DISPLAY A SOLID GREEN ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THE PERMITTED PORTION OF THIS OPERATION SHALL START WITH A FLASHING YELLOW ARROW, FOLLOWED BY A SOLID YELLOW ARROW, AND ENDING WITH A SOLID RED ARROW. THERE SHALL BE A DELAY (AS DIRECTED BY THE ENGINEER) BETWEEN THE END OF THE PROTECTED PORTION OF THIS OPERATION AND THE BEGINNING OF THE PERMITTED PORTION OF THIS OPERATION. DURING THIS DELAY, THE OPPOSING PHASE THRU HEADS ARE CAPABLE OF DISPLAYING A GREEN BALL. SIGNAL CONTROLLER WITH FIRMWARE NECESSARY TO ACCOMPLISH THIS DELAY SHALL BE PROVIDED.

17. POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATION REMOVALS SHALL BE CUT OFF 6" BELOW GROUND, REMOVED AND AREA RESTORED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE ENGINEER.

18. ALL REMOVED EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFIC ITEMS ARE NOTED IN THE PLANS TO BE SALVAGED AS DIRECTED BY THE ENGINEER.

19. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE POWER SERVICE PEDESTIAL. FOR SPAN WIRE INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT AERIAL TO THE SIGNAL POLE NEAREST THE CONTROLLER, THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. FOR MAST ARM INSTALLATION, POWER SHALL RUN FROM THE POWER COMPANY SERVICE POINT UNDERGROUND DIRECTLY TO THE POWER SERVICE PEDESTAL, THEN TO THE CONTROLLER CABINET, AS SHOWN ON THE PLANS.

20. POWER SERVICE METER SHALL NOT BE MOUNTED ON THE CONTROLLER CABINET OR MAST ARM POLE SHAFTS. A SEPARATE POWER SERVICE PEDESTAL FOR MOUNTING THESE ITEMS IS REQUIRED. (SEE TSD-6 & TSD12).

21. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE NECESSARY ARRANGEMENTS WITH THE LOCAL POWER COMPANY TO PROVIDE THE POWER SUPPLY ASSEMBLY FOR ANY NEW INSTALLATION. THE CONTRACTOR SHALL PAY FOR, AT NO COST TO THE DEPARTMENT, ALL DEPOSITS, HOOK-UP CHARGES, OR OTHER SERVICE FEES REQUIRED BY THE POWER COMPANY FOR THE ESTABLISHMENT OF NEW SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF THE MONTHLY SERVICE BILL DURING THE LIFE OF THE PROJECT. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS. THE DEPARTMENT OR THE LOCAL AGENCY WILL BE RESPONSIBLE FOR PAYMENT OF THE MONTHLY SERVICE BILL FOR THE NEW POWER SERVICE INSTALLATION AFTER PROJECT ACCEPTANCE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SWAP THE ELECTRICAL SERVICE ACCOUNT OVER TO THE DEPARTMENT AFTER PROJECT ACCEPTANCE.
   WHEN ELECTRIC POWER SERVICE EXISTS AND IS USED FOR THE OPERATION OF AN EXISTING SYSTEM, THE MONTHLY SERVICE FEES SHALL CONTINUE TO BE PAID BY THE DEPARTMENT OR THE LOCAL AGENCY. IF THE EXISTING POWER SERVICE IS INTENDED FOR USE WITH A NEW SIGNAL SYSTEM, THEN ANY SERVICE CHARGE FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SIMILARLY, IF AN EXISTING POWER SERVICE IS TO BE DISCONNECTED, ANY SERVICE CHARGE FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF ALL SUCH FEES SHALL BE CONSIDERED INCIDENTAL AND ABSORBED WITHIN EXISTING PAY ITEMS.

22. WHEN CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS TO ACCOMMODATE ROADWAY CONSTRUCTION, IT SHALL BE PAID FOR UNDER PAY ITEM 619-H1, TRAFFIC SIGNAL, LUMP SUM, UNLESS OTHERWISE NOTED ON PLANS.

23. VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED (BASED ON 2" FINAL LIFT MAXIMUM).

24. WHEN RADAR, VIDEO , OR MULTI-SENSOR DETECTION IS USED, THE SYSTEM MAY REQUIRE BOTH STOP BAR AND ADVANCE DETECTION. TSI PLANS SHOW A GENERIC LAYOUT FOR DETECTION; DETECTOR MAY BE RELOCATED PER MANUFACTURER'S RECOMMENDATIONS. NO EXTRA PAY FOR MOVING OF DETECTORS. MANUFACTURER TO HAVE FACTORY REP ON SITE DURING INSTALLATIONS UNLESS CERTIFIED BY THE MANUFACTURER. THER SHOULD BE NO EXTRA PAY FOR MOVING OF DETECTORS. DETECTION CABLE WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR MAST ARM AND VERTICALLY ALONG THE POLE. DETECTION CABLE FOR CAMERAS, THE POWER AND VIDEO CABLE MAY BE IN THE SAME JACKET.
   ALL DETECTION UNITS SHALL BE NETWORKABLE DEVICES AND BE ON THE MDOT NETWORK IF NOTED ON PLANS.

25. ALL GROUNDING EQUIPMENT SHALL BE COST ABSORBED.

26. MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR SIGNAL CABLE.

27. THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH POLE FOUNDATION AND NOTIFY THE PROJECT ENGINEER FOR CONCURRENCE IN THE LOCATION BEFORE PROCEEDING WITH THE PURCHASE OF THE POLE.

28. THE CONTRACTOR SHALL BE REQUIRED TO ADEQUATELY AND COMPLETELY COVER TRAFFIC SIGNAL HEADS DURING TIMES THAT THEY ARE NOT IN OPERATION WITH A DURABLE, OUTDOOR- HARDENED MATERIAL THAT CONTRASTS WITH THE COLOR OF THE HEAD THAT CLEARLY DESIGNATES THAT THE SIGNAL IS NOT IN "STOP AND GO" MODE. HEAD COVERS ARE TO BE APPROVED BY THE ENGINEER.

29. A NEW TRAFFIC SIGNAL INSTALLATION SHALL BE PUT IN FLASH OPERATION FOR A PERIOD OF THREE (3) TO SEVEN (7) DAYS PRIOR TO THE ACTIVATION OF THE SIGNAL'S "STOP AND GO" OPERATION. ACTIVATION OF NEW TRAFFIC SIGNALS SHALL BE DURING A MID-WEEK WEEKDAY (TUESDAY – THURSDAY) DURING A NON-PEAK TIME AND SHALL BE COORDINATED WITH THE ENGINEER. UPON INITIAL INSPECTION AND ACCEPTANCE TESTING OF THE NEW TRAFFIC SIGNAL INSTALLATION, THE CONTRACTOR SHALL REQUEST THE START OF THE 30 DAY BURN-IN PERIOD TO COMMENCE, AS OUTLINED IN SUBSECTION 631.03.4 OF THIS SPECIFICATION. ANY NOTED DEFICIENCIES FOUND WITHIN THAT 30 DAY PERIOD SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER. THE 30 DAY BURN-IN PERIOD MUST COMMENCE WITHIN THE CONTRACT TIME, AND BEFORE SUBSTANTIAL COMPLETION OF THE PROJECT IS GRANTED.

30. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION MEETING WITH DISTRICT OFFICE, PROJECT OFFICE AND TRAFFIC ENGINEERING FOR SIGNAL PORTION OF THE PROJECT.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N–S PROJECT NO.: 8667–18–33	
FILENAME: TSD.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

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HATTIESBURG, MS
FORREST COUNTY

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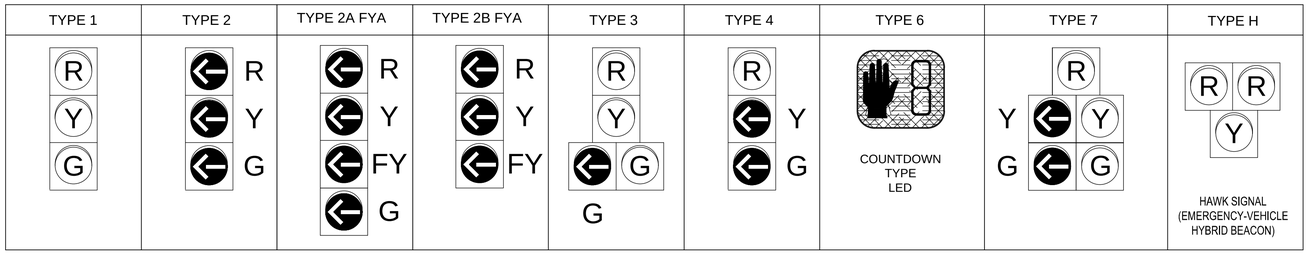
TRAFFIC SIGNAL
GENERAL NOTES

WORKING NUMBER:	DRAWING NUMBER:
TSD-1	26

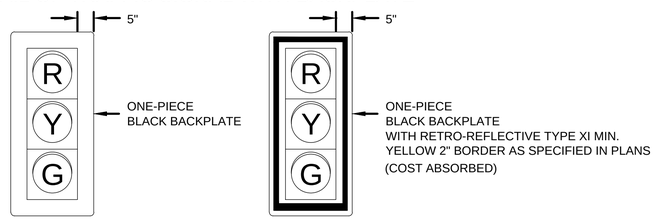
DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS



NOTES:

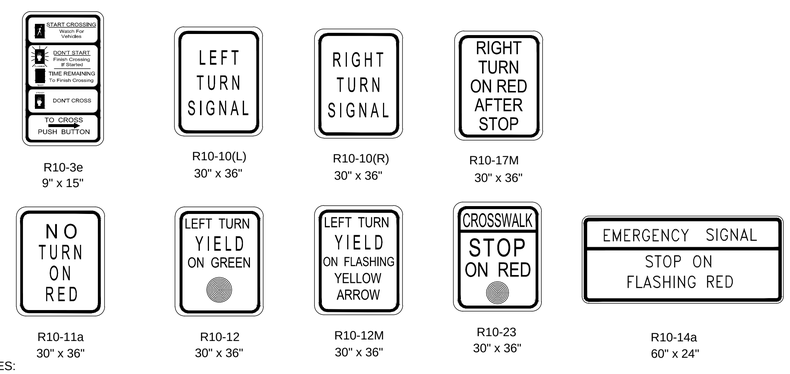
1. ALL SIGNAL HEADS SHALL BE BLACK IN COLOR UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL SIGNAL HEADS SHALL BE L.E.D. LENSES UNLESS OTHERWISE NOTED ON THE PLANS. TYPE "A" SIGNAL HEAD IS TO BE GEOMETRICALLY PROGRAMMED VIA LOUVERS.
3. LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROW(S).
4. TYPE 6 SIGNAL HEAD SYMBOLS/NUMBERS SHALL BE FULLY ILLUMINATED (NO OUTLINE SYMBOLS ALLOWED). THERE IS A SEPARATE PAY ITEM FOR PEDESTRIAN PUSHBUTTON. PEDESTRIAN PUSHBUTTON SHALL BE FURNISHED WITH R10-3e SIGN. (COST ABSORBED).
5. ALL FYA SIGNAL HEAD SHALL BE FURNISHED WITH R10-12M SIGN.
   WHEN NOTED ON PLANS, TYPE 4 & 5 SIGNAL HEADS SHALL BE FURNISHED WITH R10-10L , R10-10R, OR R10-17M SIGN.
   TYPE 7 SIGNAL HEAD SHALL BE FURNISHED WITH R10-12 SIGN. TYPE 7 R REQUIRES NO SIGN.
   TYPE H SIGNAL HEAD SHALL BE FURNISHED WITH R10-23 SIGN WHEN INDICATED ON PLANS.
   COST OF SIGNAL SIGNS, MOUNTING BRACKETS, HARDWARE, AND LABOR SHALL BE COST ABSORBED.
6. FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



NOTE:
ALL SIGNAL HEADS SHALL INCLUDE BACKPLATES AND VISORS
UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



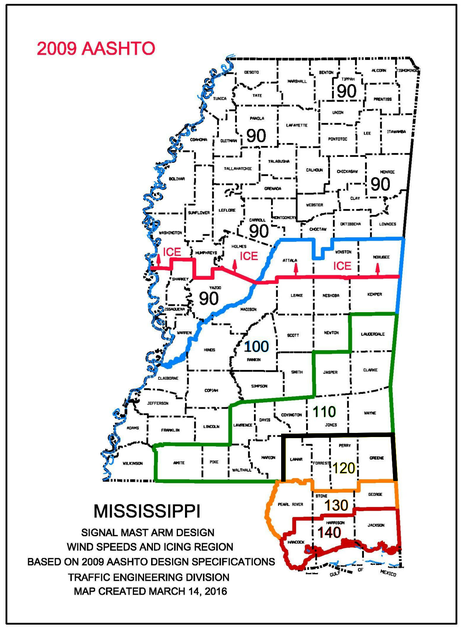
NOTES:

1. ALUMINUM SIGN BLANKS ARE TO BE ALUMINUM ALLOY 5052-H38 AND 0.10" THICK.
2. THE SIGNS SHALL BE SUPPLIED WITH MOUNTING BRACKETS AND HARDWARE AS REQUIRED.
3. NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
4. CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
5. THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D. (LATEST EDITION).
6. REFLECTIVE SHEETING FOR TRAFFIC SIGNS SHALL BE TYPE XI PRISMATIC RETROREFLECTIVE SHEETING.

SIGNAL PLAN LEGEND

1	SIGNAL HEAD REQUIRED / TYPE
6	PEDESTRAIN HEAD REQUIRED
	EXISTING SIGNAL HEAD
	SIGN
OR	VEHICLE LOOP DETECTOR
	QUADRAPOLE VEHICLE LOOP DETECTOR
1	VEHICLE LOOP DETECTOR NUMBER
M	WIRELESS MAGNETOMETER SENSOR
	BASE MOUNTED CABINET FOR SIGNAL CONTROLLER
	POLE MOUNTED CABINET FOR SIGNAL CONTROLLER
	EXISTING POLE
	POLE REQUIRED
	NEW PEDESTAL POLE
	MAST ARM POLE REQUIRED
	EXISTING PULLBOX
2 OR	PULLBOX REQUIRED (TYPE SPECIFIED ON PLAN SHEETS)
	RADAR DETECTOR (RD)
	VIDEO DETECTOR (VD)
	MULTI SENSOR DETECTOR (MS)
	OPTICAL DETECTOR UNIT
	CONDUIT
	ROLL PIPE
	LUMINAIRE
	DECORATIVE LUMINAIRE
	GROUND MOUNTED PEDESTAL SERVICE PANEL
	RADIO INTERCONNECT ANTENNA
	TWO-WAY WIRELESS ANTENNA
	WIRELESS REPEATER
CCTV	PTZ / FIXED CAMERA
P.B.	PUSH BUTTON
S.C.	SHIELDED CABLE
POW	POWER CABLE
LUM	LUMINAIRE POWER CABLE
ODC	OPTICAL DETECTOR CABLE
8c	NUMBER OF CONDUCTORS
I.C.	INTERCONNECT CABLE
RAD	RADIO COMMUNICATIONS CABLE
FO	FIBER OPTIC CABLE (72 SM)
FO DROP	FIBER DROP CABLE (12 SM)
DC	DETECTION CABLE
S	STOP BAR DETECTION ZONE
A	ADVANCED DETECTION ZONE

WIND SPEEDS AND ICING REGION MAP



2009/2013 AASHTO WIND LOAD LIST BY COUNTY

COUNTY	BASIC WIND SPEED MPH	ICE LOADING REQD
Adams	100	NO
Alcorn	90	YES
Amite	110	NO
Attala	100	YES
Benton	90	YES
Bolivar	90	YES
Calhoun	90	YES
Carroll	90	YES
Chickasaw	90	YES
Choctaw	90	YES
Claiborne	100	NO
Clarke	110	NO
Clay	90	YES
Coahoma	90	YES
Copiah	90	NO
Covington	110	NO
DeSoto	90	YES
Forrest	120	NO
Franklin	100	NO
George	130	NO
Greene	120	NO
Grenada	90	YES
Hancock	140	NO
Harrison	140	NO
Hinds	100	NO
Holmes	90	YES
Humphreys	90	YES
Issaquena	90	NO
Itawamba	90	YES
Jackson	140	NO
Jasper	110	NO
Jefferson	100	NO
Jefferson Davis	110	NO
Jones	110	NO
Kemper	100	NO
Lafayette	90	YES
Lamar	120	NO
Lauderdale	110	NO
Lawrence	110	NO
Leake	100	NO
Lee	90	YES
Leflore	90	YES
Lincoln	100	NO
Lowndes	90	YES
Madison	100	NO
Marion	110	NO
Marshall	90	YES
Monroe	90	YES
Montgomery	90	YES
Neshoba	100	NO
Newton	100	NO
Noxubee	100	YES
Oktibbeha	90	YES
Panola	90	YES
Pearl River	130	NO
Perry	120	NO
Pike	110	NO
Pontotoc	90	YES
Prentiss	90	YES
Quitman	90	YES
Rankin	100	NO
Scott	100	NO
Sharkey	90	NO
Simpson	100	NO
Smith	100	NO
Stone	130	NO
Sunflower	90	YES
Tallahatchie	90	YES
Tate	90	YES
Tippah	90	YES
Tishomingo	90	YES
Tunica	90	YES
Union	90	YES
Walthall	110	NO
Warren	90	NO
Washington	90	YES
Wayne	110	NO
Webster	90	YES
Wilkinson	100	NO
Winston	100	YES
Yalobusha	90	YES
Yazoo	90	NO

REVISIONS			
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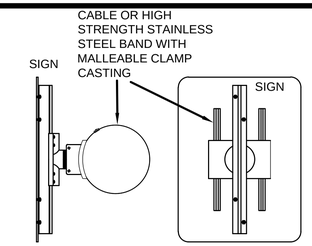
TRAFFIC SIGNAL STANDARDS

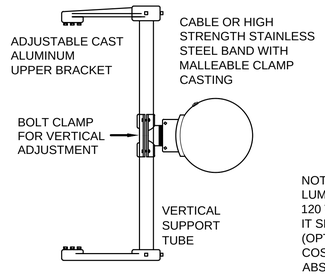
WORKING NUMBER: TSD-2

DRAWING NUMBER: 27



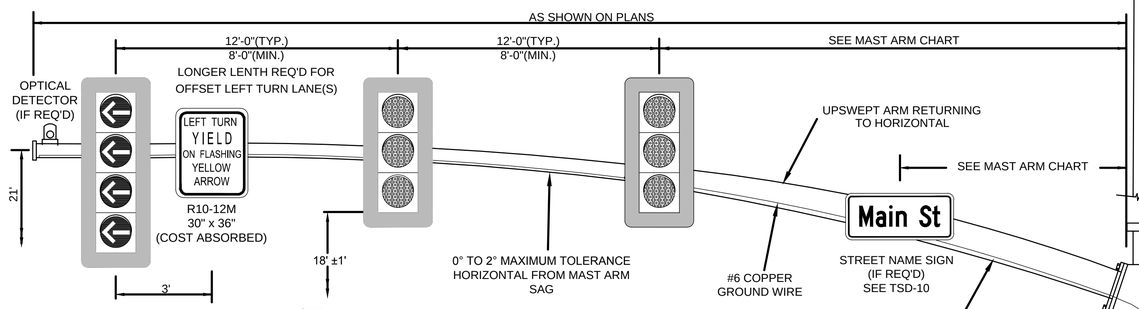
MAST ARM SIGN BRACKET

(TYPICAL)

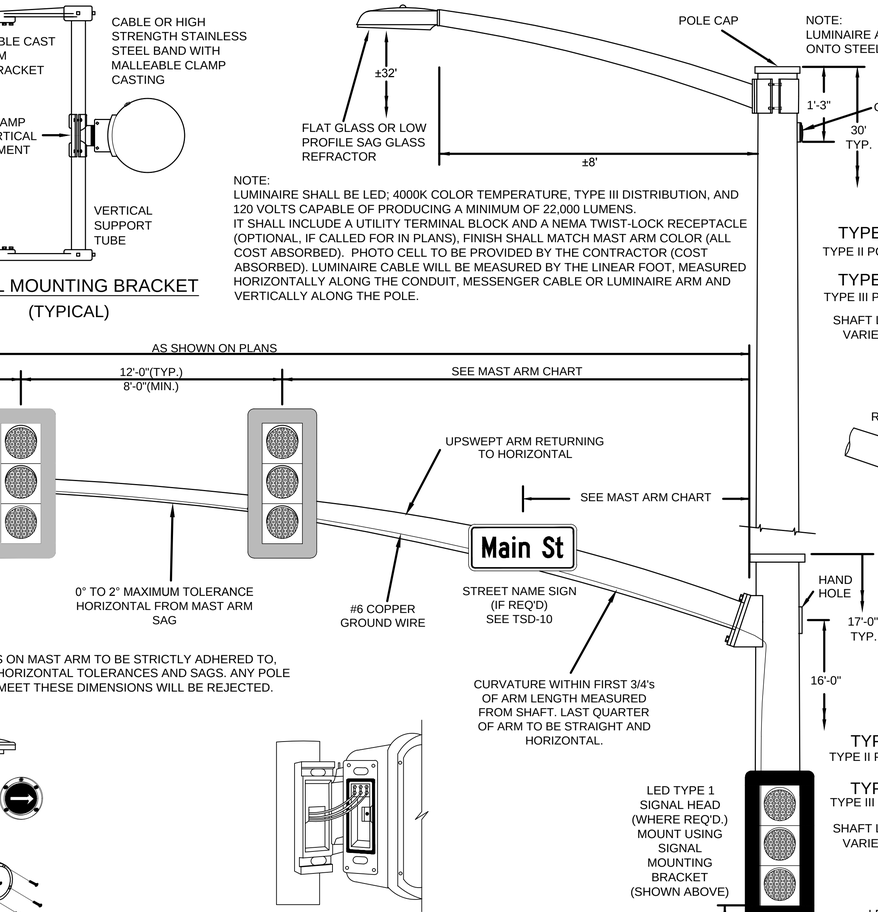


SIGNAL MOUNTING BRACKET

(TYPICAL)



NOTE:
DIMENSIONS ON MAST ARM TO BE STRICTLY ADHERED TO, INCLUDING HORIZONTAL TOLERANCES AND SAGS. ANY POLE FAILING TO MEET THESE DIMENSIONS WILL BE REJECTED.



NOTE:
LUMINAIRE ARM SHALL BE "CLAMPED" ONTO STEEL SIGNAL POLE.

NOTE:
LUMINAIRE SHALL BE LED; 4000K COLOR TEMPERATURE, TYPE III DISTRIBUTION, AND 120 VOLTS CAPABLE OF PRODUCING A MINIMUM OF 22,000 LUMENS.
IT SHALL INCLUDE A UTILITY TERMINAL BLOCK AND A NEMA TWIST-LOCK RECEPTACLE (OPTIONAL, IF CALLED FOR IN PLANS), FINISH SHALL MATCH MAST ARM COLOR (ALL COST ABSORBED). PHOTO CELL TO BE PROVIDED BY THE CONTRACTOR (COST ABSORBED). LUMINAIRE CABLE WILL BE MEASURED BY THE LINEAR FOOT, MEASURED HORIZONTALLY ALONG THE CONDUIT, MESSENGER CABLE OR LUMINAIRE ARM AND VERTICALLY ALONG THE POLE.

TYPE II (L) POLE

TYPE II POLE - (SINGLE ARM)

TYPE III (L) POLE

TYPE III POLE - (DOUBLE ARM)

SHAFT LENGTH - 30' TYP.
VARIES FROM 30' - 40'

TYPE II POLE

TYPE II POLE - (SINGLE ARM)

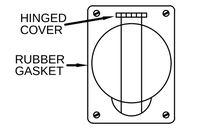
TYPE III POLE

TYPE III POLE - (DOUBLE ARM)

SHAFT LENGTH - 17' TYP.
VARIES FROM 16' - 22'

STEEL MAST ARM POLE DETAIL

NOT TO SCALE

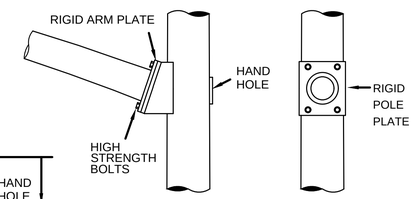


OUTLET BOX WITH SINGLE 15 AMP - 125 VOLT POLARIZED RECEPTACLE (GROUNDING TYPE)

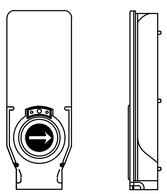
OUTLET DETAIL

NOTES:

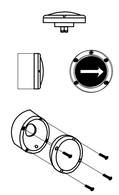
1. WIRE ENTRANCE TO MAST ARM WILL BE FIELD DRILLED TO CORRESPOND TO THE LOCATION OF THE SIGNAL HEADS WHEN ALIGNED IN FIELD.
2. RED SECTION INDICATIONS OF SIGNAL HEADS TO BE APPROXIMATELY SAME HEIGHT.
3. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE POLE MANUFACTURER.
4. THE CONTRACTOR SHALL PROVIDE MAST ARM POLE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS. DESIGN STANDARD FOR MAST ARM POLES SHALL BE 2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS. USE FATIGUE CATEGORY II. DO NOT CONSIDER GALLOPING OR TRUCK FORCES. USE 50 YEAR DESIGN LIFE. WIND AND ICE LOADS VARIABLE BASED UPON MAPS IN THE 2013 AASHTO SPECIFICATION. USE UPSWEPT MAST ARMS.
5. #6 COPPER GROUND WIRE INSIDE POLE AND MAST ARM TO BE COST ABSORBED.



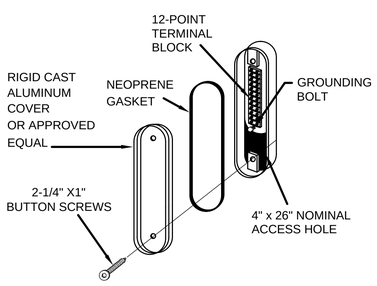
MAST ARM ATTACHMENT DETAIL



APS PUSH BUTTON

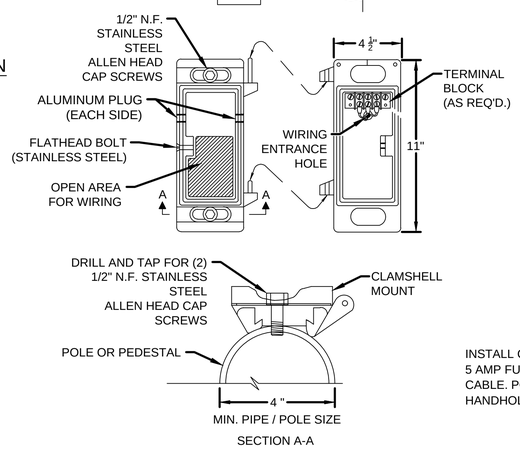


STANDARD PUSH BUTTON

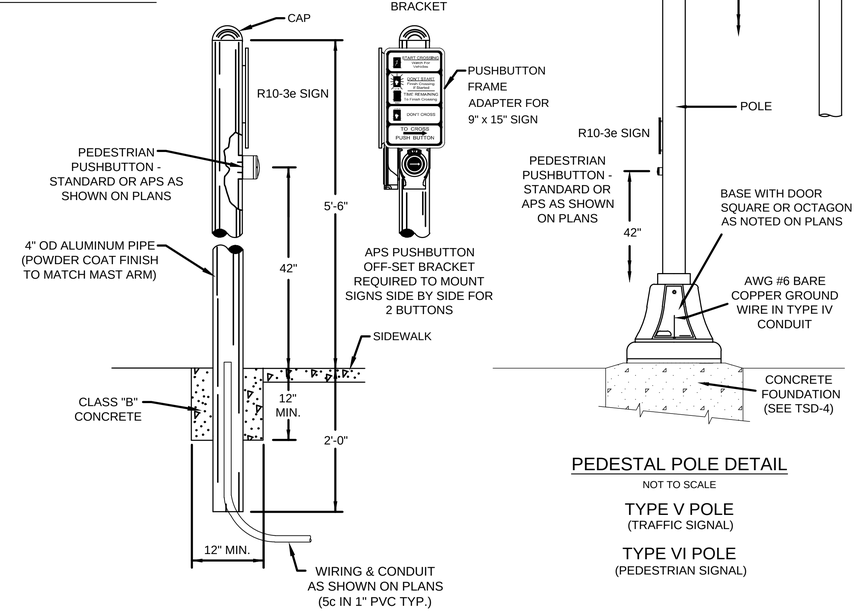


HANDHOLE WITH TERMINAL BLOCK DETAIL

NOTE:
HANDHOLE TO BE ORIENTED AWAY FROM ON COMING TRAFFIC AND NOT ON THE SAME SIDE AS PED PUSHBUTTON IF POSSIBLE.



HINGED PEDESTRIAN HEAD MOUNTING BRACKET (CLAM SHELL)



PEDESTRIAN PUSHBUTTON POLE DETAIL

NOT TO SCALE

PEDESTAL POLE DETAIL

NOT TO SCALE

TYPE V POLE

(TRAFFIC SIGNAL)

TYPE VI POLE

(PEDESTRIAN SIGNAL)

NOTICE TO DRAWING HOLDER

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

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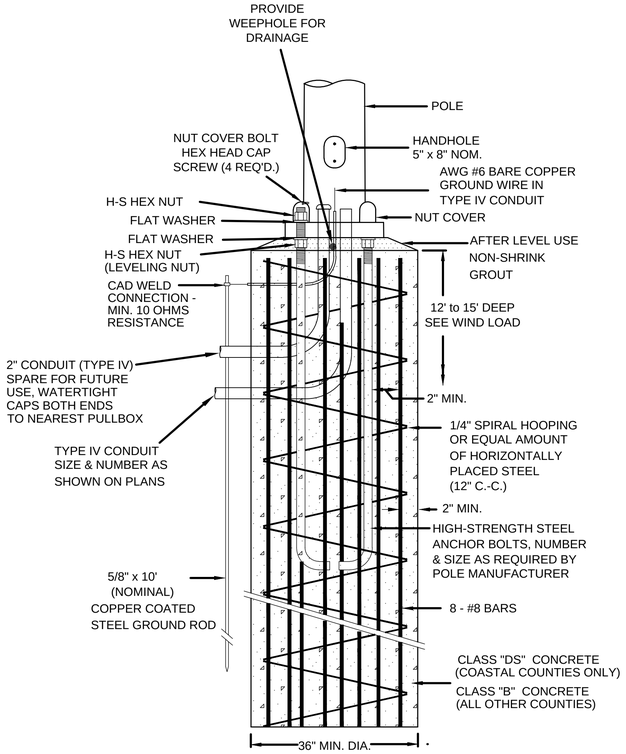
TRAFFIC SIGNAL STANDARDS

WORKING NUMBER: TSD-3

DRAWING NUMBER: 28

1/14/2019 10:37 AM J:\Civil 3d projects\8500\8667-18 - 38th ave\proj signal\tsd.dwg



TYPE I POLE FOUNDATION DETAIL

NOT TO SCALE

WIND SPEED DETERMINES SHAFT DIAMETER AND DEPTH:

FOUNDATION CHART

WIND SPEED	POLE TYPE	DIA. (IN.)	DEPTH (FT.)	CONCRETE	SLIP CASING
90 MPH	I	36"	12'	B	NO
100 - 130 MPH	I	36"	15'	B	NO
140 MPH	I	36"	15'	DS	YES

*SEE WIND SPEED MAP IN 2013 AASHTO GUIDELINES ON TSD-2.

TYPE II POLE
TYPE II POLE - (SINGLE ARM)

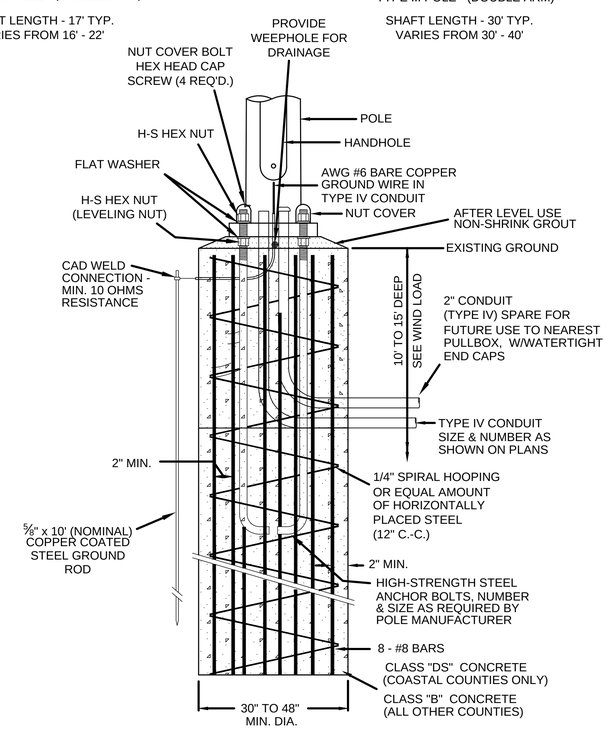
TYPE III POLE
TYPE III POLE - (DOUBLE ARM)

SHAFT LENGTH - 17' TYP.
VARIES FROM 16' - 22'

TYPE II (L) POLE
TYPE II POLE - (SINGLE ARM)

TYPE III (L) POLE
TYPE III POLE - (DOUBLE ARM)

SHAFT LENGTH - 30' TYP.
VARIES FROM 30' - 40'



STEEL MAST ARM POLE FOUNDATION DETAIL

NOT TO SCALE

WIND SPEED DETERMINES SHAFT DIAMETER AND DEPTH:

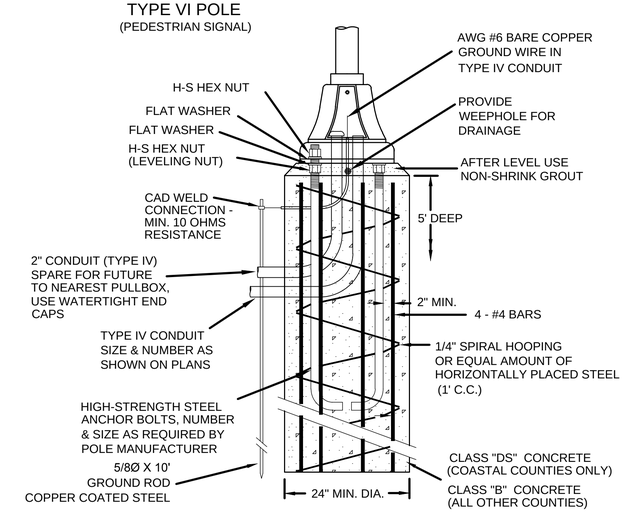
FOUNDATION CHART

WIND SPEED	POLE TYPE	ARM LENGTH	DIA. (IN.)	DEPTH (FT.)	CONCRETE	SLIP CASING
90 MPH	II, II (L)	5' - 45'	30"	10'	B	NO
90 MPH	II, II (L)	50' - 80'	36"	12'	B	NO
90 MPH	III, III (L)	5' - 80'	36"	15'	B	NO
90 MPH	II, II (L), III, III (L)	85' & OVER	48"	15'	B	NO
100 - 130 MPH	II, II (L), III, III (L)	5' - 80'	36"	15'	B	NO
100 - 130 MPH	II, II (L), III, III (L)	85' & OVER	48"	15'	B	NO
140 MPH	II, II (L), III, III (L)	5' - 80'	36"	15'	DS	YES
140 MPH	II, II (L), III, III (L)	85' & OVER	48"	15'	DS	YES

*SEE WIND SPEED MAP IN 2013 AASHTO GUIDELINES ON TSD-2.

TYPE V POLE
(TRAFFIC SIGNAL)

TYPE VI POLE
(PEDESTRIAN SIGNAL)



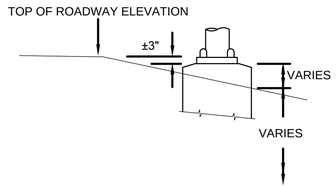
PEDESTAL POLE FOUNDATION DETAIL

NOT TO SCALE

FOUNDATION CHART

WIND SPEED	POLE TYPE	DIA. (IN.)	DEPTH (FT.)	CONCRETE	SLIP CASING
90 -130 MPH	V, VI	24"	5'	B	NO
140 MPH	V, VI	24"	5'	DS	NO

*SEE WIND SPEED MAP IN 2013 AASHTO GUIDELINES ON TSD-2.



LOW SHOULDER FOUNDATION DETAIL

NOT TO SCALE

FOUNDATION GENERAL NOTES

1. THE CONTRACTOR SHALL STAKE THE LOCATION OF EACH POLE FOUNDATION AND NOTIFY THE PROJECT ENGINEER FOR CONCURRENCE IN THE LOCATION BEFORE PROCEEDING WITH THE PURCHASE OF THE POLE.

2. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER. ANY FOUNDATIONS FAILING TO MEET MINIMUM DIMENSIONS WILL BE REJECTED.

3. DRY SHAFT EXCAVATION MUST MEET REQUIREMENTS OF SECTION 803.03.2.3.2. IF GROUNDWATER OR HOLE INSTABILITY IS ENCOUNTERED, SLIP CASING AND 10' TREMIE SHALL BE REQUIRED.

4. GROUND RODS TO BE DRIVEN UNTIL AT LEAST 12" BELOW FINISHED GROUND. SEE TRAFFIC SIGNAL GROUNDING DETAILS (TSD-8) FOR ADDITIONAL INFORMATION.

5. POLE FOUNDATIONS OF THE SIZE SPECIFIED WILL BE MEASURED BY THE CUBIC YARD, WHICH MEASUREMENT SHALL BE THE AREA BOUNDED BY THE VERTICAL PLANES OF THE NEAT LINES OF THE FOUNDATION. FIELD CONDITIONS MAY REQUIRE TALLER FOUNDATIONS THAN SPECIFIED IN THE PLANS IN WHICH THE CONTRACTOR SHALL BE PAID FOR ADDITIONAL CONCRETE PER CUBIC YARD AS BID IN THE POLE FOUNDATIONS PAY ITEM.

6. THE FINISHED TOP SURFACE OF EACH FOUNDATION SHALL BE ±3 INCHES FROM THE PAVEMENT EDGE ELEVATION AT THE FOUNDATION LOCATION. WHERE FOUNDATIONS ARE CONSTRUCTED IN AREAS WHERE THE PAVEMENT EDGE ELEVATION AND SHOULDER EDGE ELEVATION DIFFER MORE THAN TWELVE (12) INCHES, TALLER FOUNDATIONS MAY BE USED BUT MUST BE APPROVED BY THE ENGINEER. TALLER POLES SHOULD BE EVALUATED TO MINIMIZE EXPOSED FOUNDATION.

7. WHEN POLES ARE SET WITHIN OR ON EDGE OF SIDEWALK, POLES SHALL BE AS FLUSH AS POSSIBLE WITH SIDEWALK GRADE. THE FOOTPRINT OF THE NON-SHRINK GROUT PAD MAY BE REDUCED IN SIZE TO PROVIDE ADEQUATE CLEARANCE FOR SIDEWALK AND/OR ACCESSIBILITY CONSIDERATIONS.

8. SLIP CASINGS OF THE SIZE SPECIFIED WILL BE MEASURED BY THE LINEAR FOOT FROM THE GROUND ELEVATION TO THE BOTTOM OF THE STRATA NEEDING TO BE CASED.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: TSD.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
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TRAFFIC SIGNAL STANDARDS

WORKING NUMBER: TSD-4

DRAWING NUMBER: 29

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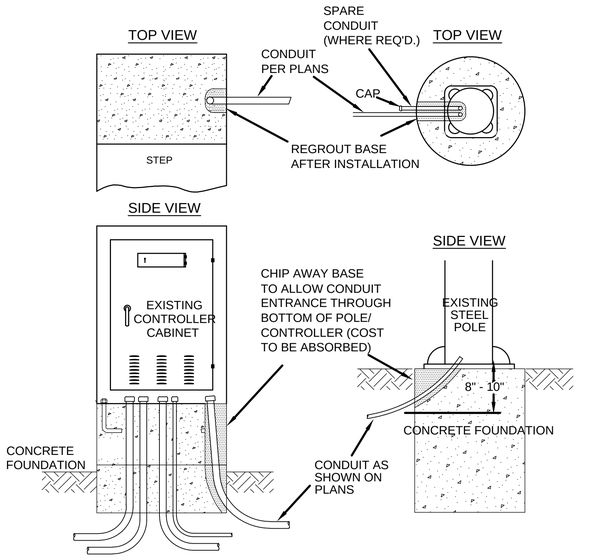
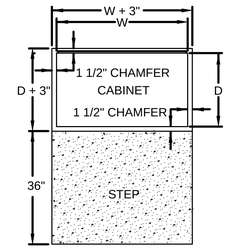
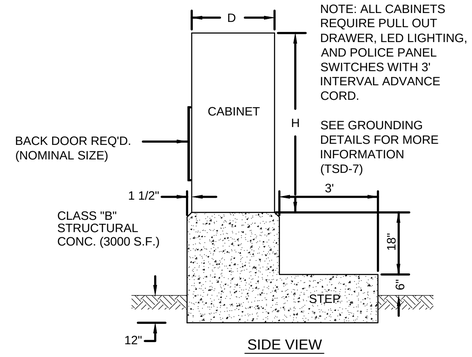


CONDUIT ENTRANCE DETAIL
(EXISTING CABINET OR POLE)



PLAN VIEW



SIDE VIEW

NOTE: ALL CABINETS REQUIRE PULL OUT DRAWER, LED LIGHTING, AND POLICE PANEL SWITCHES WITH 3' INTERVAL ADVANCE CORD.

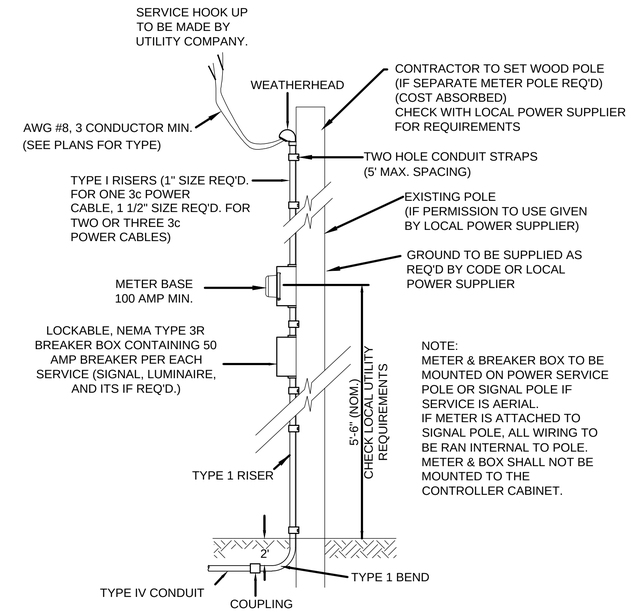
SEE GROUNDING DETAILS FOR MORE INFORMATION (TSD-7)

NOTE:
THE BASE MOUNTED CABINET IS TO BE SITUATED IN THE OPTIMUM POSITION FOR VIEWING THE CONTROLLER OPERATION AND THE ON STREET SIGNAL DISPLAYS SIMULTANEOUSLY. THIS POSITION IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

CABINET INFORMATION

TYPE	SIZE (MIN.)	LOAD BAY
TYPE I CABINET	51"H x 30"W x 18"D	8 POSITION
TYPE II CABINET	51"H x 36"W x 18"D	12 POSITION
TYPE III CABINET	56"H x 44"W x 27"D	16 POSITION
TYPE IV CABINET	56"H x 57"W x 29"D	16 POSITION
TYPE V CABINET	77"H x 44"W x 27"D	16 POSITION

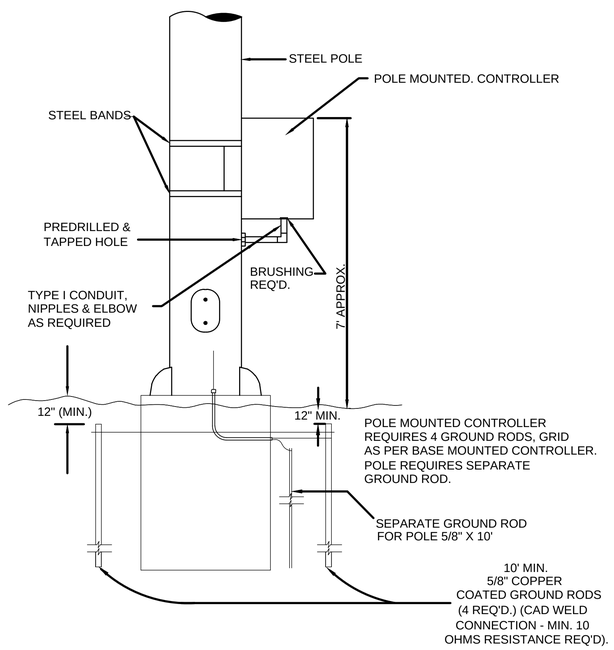
TYPE I AND II MAY BE POLE OR BASE MOUNTED, ALL OTHERS ARE BASE MOUNT.
CONTRACTOR TO VERIFY CABINET SIZE BEFORE POURING FOUNDATION.



NOTE:
METER & BREAKER BOX TO BE MOUNTED ON POWER SERVICE POLE OR SIGNAL POLE IF SERVICE IS AERIAL.
IF METER IS ATTACHED TO SIGNAL POLE, ALL WIRING TO BE RAN INTERNAL TO POLE.
METER & BOX SHALL NOT BE MOUNTED TO THE CONTROLLER CABINET.

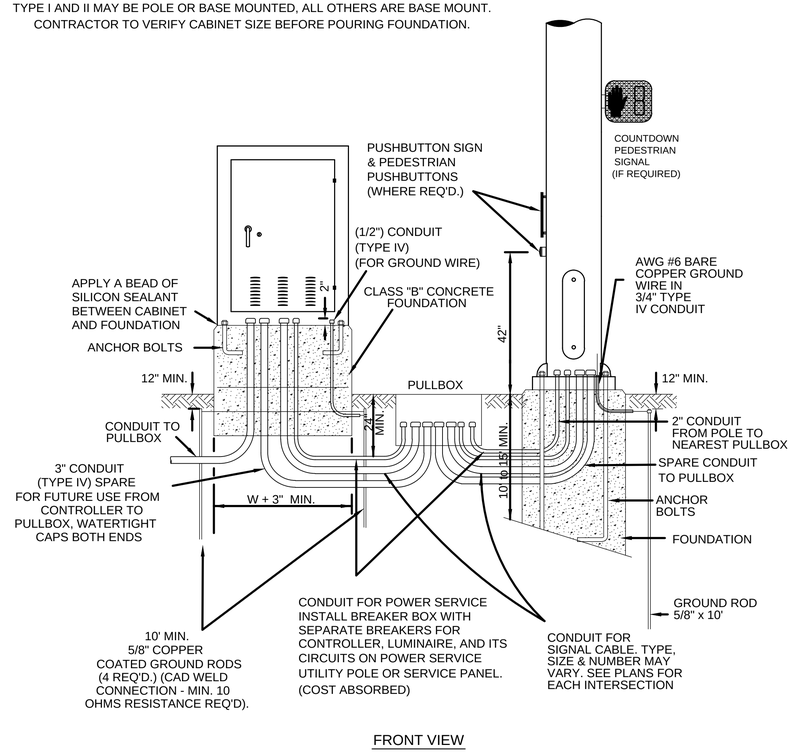
POWER SERVICE DETAIL

TO BE USED FOR SERVICE DOWN POLE OR WHEN METER IS SET ON POLE. SEE TSD-7 FOR POWER SERVICE PEDESTAL DETAILS.



TYPICAL DETAIL FOR POLE MOUNTED CONTROLLER

NOT TO SCALE



FRONT VIEW

TYPICAL DETAIL OF BASE FOR CONTROLLER EQUIPMENT CABINET

NOT TO SCALE

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: TSD.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

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TRAFFIC SIGNAL STANDARDS

WORKING NUMBER: TSD-5

DRAWING NUMBER: 30

1/14/2019 10:58 AM J:\Civil 3d projects\8600\8667-18 - 38th ave\Traffic Signal\Tsd.dwg

GROUNDING NOTES:

1. GROUND RODS USED SHALL BE COPPER CLAD, STEEL RODS OF THE DIAMETER AND LENGTH SHOWN ON THE PLANS. GROUND RODS SHALL CONFORM TO THE REQUIREMENTS OF UL-467. GROUNDING ROD COUPLERS SHALL BE UL APPROVED, MADE FROM BRONZE, STAINLESS STEEL OR COPPER CLAD WITH A SOLID CENTER PROVIDING 100 PERCENT CONDUCTIVITY.

2. SINGLE GROUND RODS SHALL BE DRIVEN VERTICALLY UNTIL THE TOP OF THE ROD IS AT LEAST 12 INCHES BELOW THE FINISHED GROUND.

3. SOLID CONDUCTOR COPPER WIRE, AWG 6 SHALL BE USED FOR GROUNDING CONDUCTOR AND BONDING JUMPERS UNLESS OTHERWISE STATED IN THE PLANS. BARE SOLID CONDUCTOR COPPER WIRE SHALL MEET THE REQUIREMENTS OF ASTM B2.

4. #10 THWN STRANDED - GREEN INSULATED WIRE SHALL BE USED FOR TRAVELING GROUND. THIS WIRE RUNS FROM POLE TO POLE BACK TO CONTROLLER CABINET TO TIE ALL EQUIPMENT TOGETHER. IT IS INSTALLED IN THE SAME CONDUIT AS THE OTHER SIGNAL CABLES.

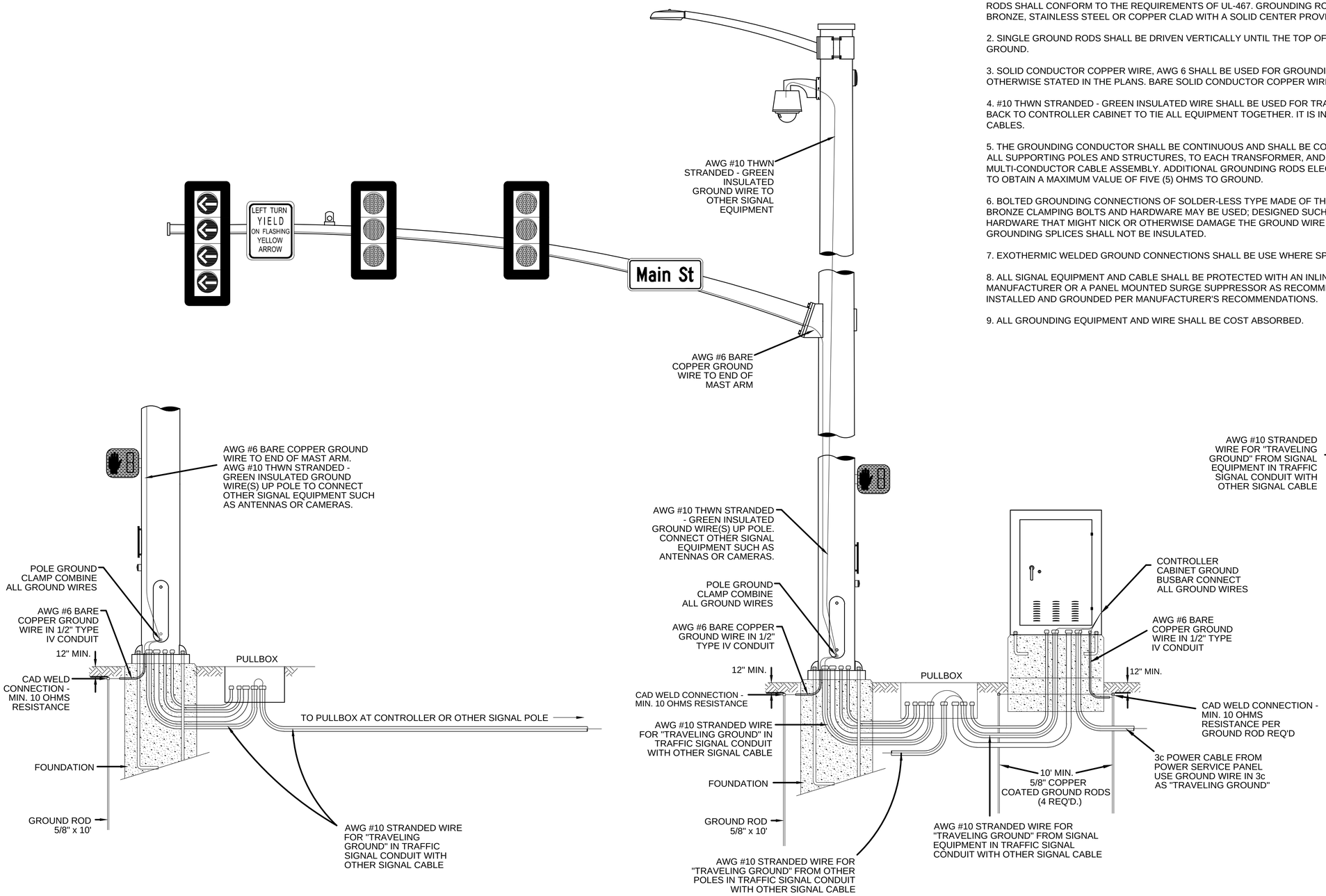
5. THE GROUNDING CONDUCTOR SHALL BE CONTINUOUS AND SHALL BE CONNECTED TO A COMMON GROUND SYSTEM BETWEEN ALL SUPPORTING POLES AND STRUCTURES, TO EACH TRANSFORMER, AND TO EACH GROUNDING CONDUCTOR IN A MULTI-CONDUCTOR CABLE ASSEMBLY. ADDITIONAL GROUNDING RODS ELECTRODES (UP TO FOUR (4) RODS) SHALL BE INSTALLED TO OBTAIN A MAXIMUM VALUE OF FIVE (5) OHMS TO GROUND.

6. BOLTED GROUNDING CONNECTIONS OF SOLDER-LESS TYPE MADE OF THE HIGH STRENGTH ELECTRICAL BRONZE WITH SILICON BRONZE CLAMPING BOLTS AND HARDWARE MAY BE USED; DESIGNED SUCH THAT, BOLTS, NUTS, LOCK WASHERS AND SIMILAR HARDWARE THAT MIGHT NICK OR OTHERWISE DAMAGE THE GROUND WIRE WILL NOT DIRECTLY CONTACT THE GROUND WIRE. GROUNDING SPLICES SHALL NOT BE INSULATED.

7. EXOTHERMIC WELDED GROUND CONNECTIONS SHALL BE USE WHERE SPECIFIED.

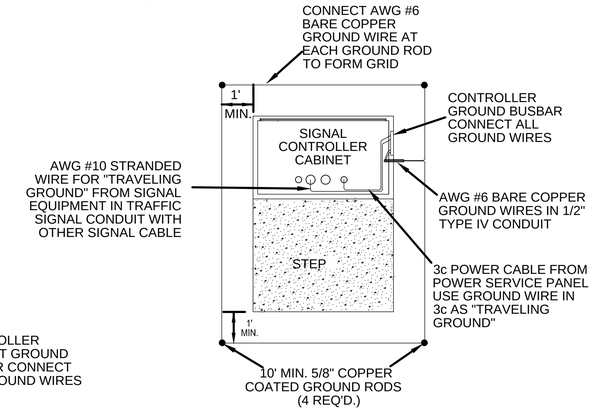
8. ALL SIGNAL EQUIPMENT AND CABLE SHALL BE PROTECTED WITH AN INLINE SURGE SUPPRESSOR IF RECOMMENDED BY THE MANUFACTURER OR A PANEL MOUNTED SURGE SUPPRESSOR AS RECOMMENDED BY THE MANUFACTURER OR APPROVED EQUAL, INSTALLED AND GROUNDED PER MANUFACTURER'S RECOMMENDATIONS.

9. ALL GROUNDING EQUIPMENT AND WIRE SHALL BE COST ABSORBED.



GROUNDING DETAIL

NOT TO SCALE



CONTROLLER PLAN VIEW

NOT TO SCALE

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

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FILENAME: TSD.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
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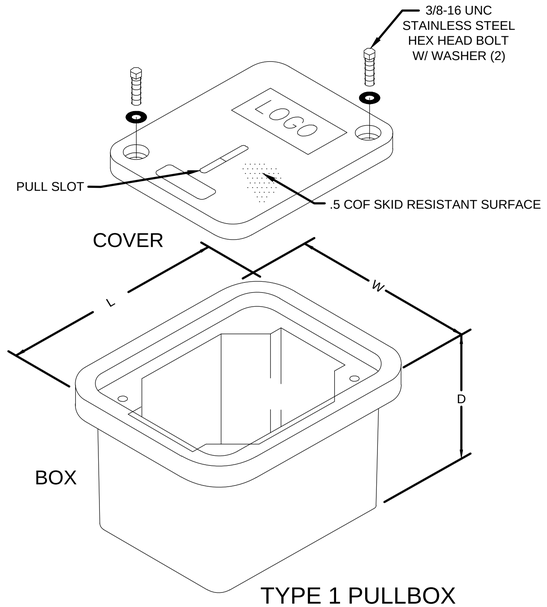
TRAFFIC SIGNAL STANDARDS

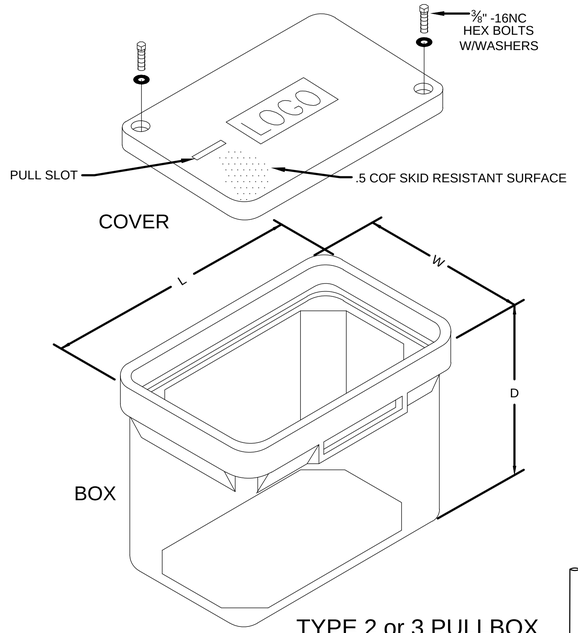
WORKING NUMBER: TSD-6

DRAWING NUMBER: 31



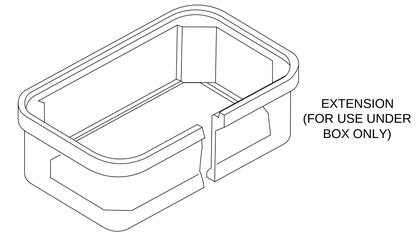
TYPE 1 PULLBOX

NOT TO SCALE



TYPE 2 or 3 PULLBOX

NOT TO SCALE



NOMINAL MINIMUM DIMENSIONS (W x L x D)

DIM	TYPE 1	TYPE 2	TYPE 3
W	11"	13"	17"
L	18"	24"	30"
D	12"	18"	24"

COLLARS AND GRAVEL UNDER PULLBOX REQUIRED FOR ALL TYPES OF PULLBOXES

PULLBOX NOTES:

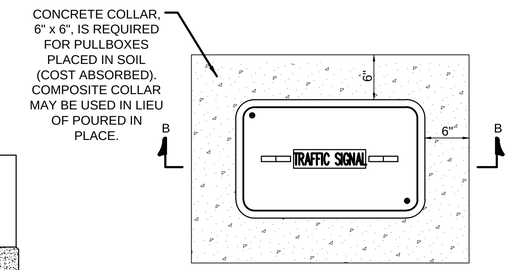
1. GRADE LEVEL PULL BOX, ENCLOSURES, STRUCTURAL JUNCTION BOXES AND COVERS SHALL MEET THE REQUIREMENTS OF SUBSECTION 722.06 OF SPECS. ALL PULLBOXES SHALL BE TIER 22 = 22,500-POUND DESIGN LOAD, 33,750-POUND TEST LOAD.

2. IN GENERAL, TYPE 2 BOXES ARE USED FOR CORNERS WHERE SIGNAL CONDUIT UNDER ROADWAY AND TO SIGNAL POLE MEET, TYPE 3 BOXES ARE USED AT CONTROLLER CORNER WHERE ADDITIONAL ROOM FOR EXTRA CONDUIT IS REQUIRED.

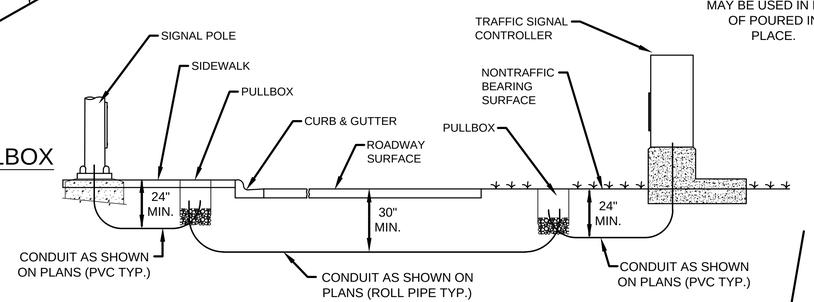
3. LOGOS SHALL READ TRAFFIC, SIGNAL, OR TRAFFIC SIGNAL.

4. PULLBOXES SHALL NOT BE LOCATED IN THE ROADWAY, SIDEWALK, DRIVEWAY OR OTHER PATHWAY SURFACES UNLESS SPECIFICALLY REQUIRED ON THE PLANS. THEY SHALL NOT BE LOCATED IN DRAINAGE COLLECTION AREAS AND LOCATIONS WHERE DRAINAGE RUNOFF OCCURS SHOULD BE AVOIDED WHENEVER POSSIBLE.

5. THE FINAL GRADE OF PULLBOX TOP SHALL BE FLUSH WITH ADJACENT MATERIAL WHEN THEY MUST BE INSTALLED WITHIN SIDEWALKS, ISLANDS OR BARRIER WALLS. THE FINAL GRADE OF TOP LOCATED IN SOIL OR SODDED AREAS SHALL BE APPROXIMATELY ONE (1) INCH HIGHER THAN ADJACENT EARTH OR SODDED AREAS.

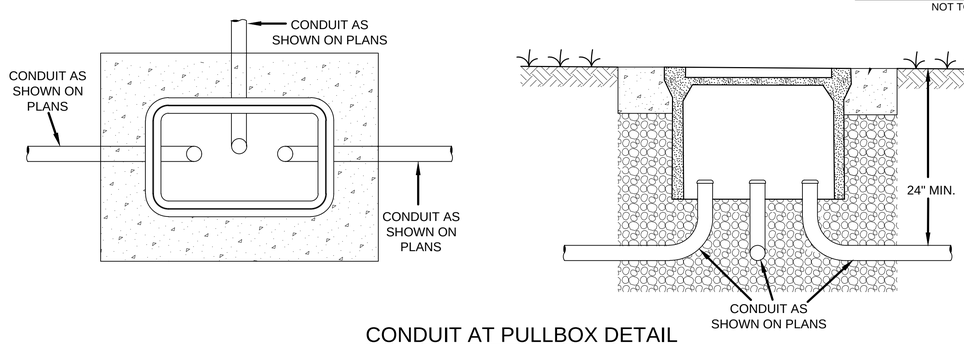


PLAN VIEW



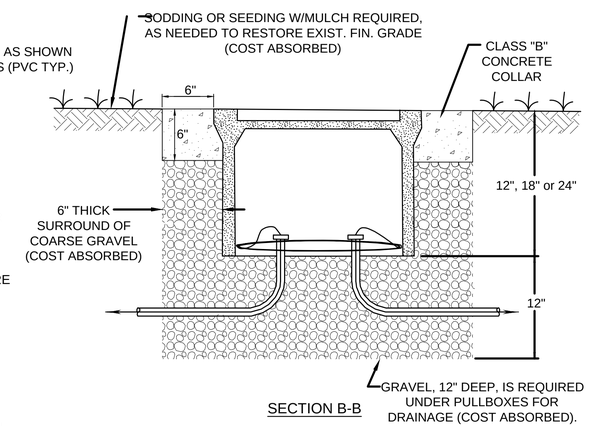
TYPICAL CONDUIT INSTALLATION SECTION

NOT TO SCALE



CONDUIT AT PULLBOX DETAIL

NOT TO SCALE



SECTION B-B

COLLAR AND GRAVEL DETAIL

NOT TO SCALE

CONDUIT NOTES:

1. TOP OF CONDUIT DEPTH SHALL BE A MINIMUM OF 24" UNLESS WHEN INSTALLED UNDER PAVED ROADWAY WHERE IT SHALL BE 30" MINIMUM DEPTH.

2. CONDUIT BORED OR DRILLED UNDER RAILROAD SHALL BE 10' MIN. BELOW RR BED, CONDUIT BORED OR DRILLED UNDER STREAMS SHALL BE 5' MIN. BELOW STEAM BED. BORE LOGS WILL BE REQUIRED FOR EACH LOCATION.

3. PULL TAPE SHALL BE INSTALLED INTO EACH EMPTY CONDUIT (COST ABSORBED).

4. CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED. BLANK DUCT PLUGS SHALL BE INSTALLED IN EACH EMPTY CONDUIT.

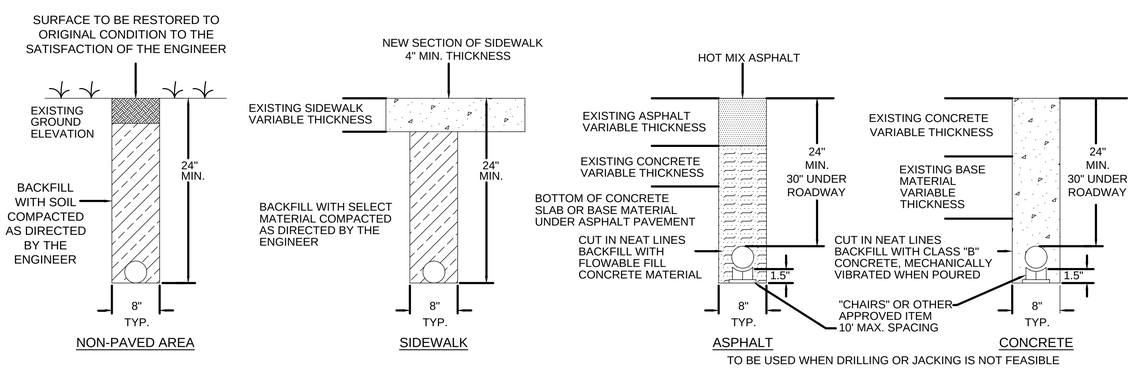
5. SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.

6. TYPE I CONDUIT IS RIGID GALV. STEEL; TYPE IV CONDUIT IS PVC; FLEXIBLE CONDUIT AND ROLL PIPE ARE HDPE.

7. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION WORK UNDER ROADWAY WITH ROADWAY CONSTRUCTION PHASING IN ORDER TO MINIMIZE JACKING.

8. MATERIAL REMOVED THAT IS NOT SUITABLE FOR BACKFILL OR IS EXCESS SHALL BE DISPOSED OF BY THE CONTRACTOR (COST ABSORBED).

9. CONDUIT WILL BE MEASURED PER LINEAR FEET TO THE NEAREST FOOT FROM CENTER TO CENTER OF PULL BOX AND/OR FOUNDATION. MEASUREMENT IN UNDERGROUND CONDUIT IS ONLY IN THE HORIZONTAL PLANE AND NO ADDITIONAL QUANTITY SHALL BE ADDED FOR CONDUIT DEPTH OR CHANGE IN ELEVATION OF THE CONDUIT. ANY ABOVE GROUND VERTICAL CONDUIT RUNS, AS INDICATED IN THE PLANS, SHALL BE MEASURED PER LINEAR FEET TO THE NEAREST FOOT.



TO BE USED WHEN DRILLING OR JACKING IS NOT FEASIBLE

CONDUIT TRENCHING DETAIL

NOT TO SCALE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: TSD.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
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38TH AVENUE PATHWAY

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TRAFFIC SIGNAL STANDARDS

WORKING NUMBER: TSD-7

DRAWING NUMBER: 32

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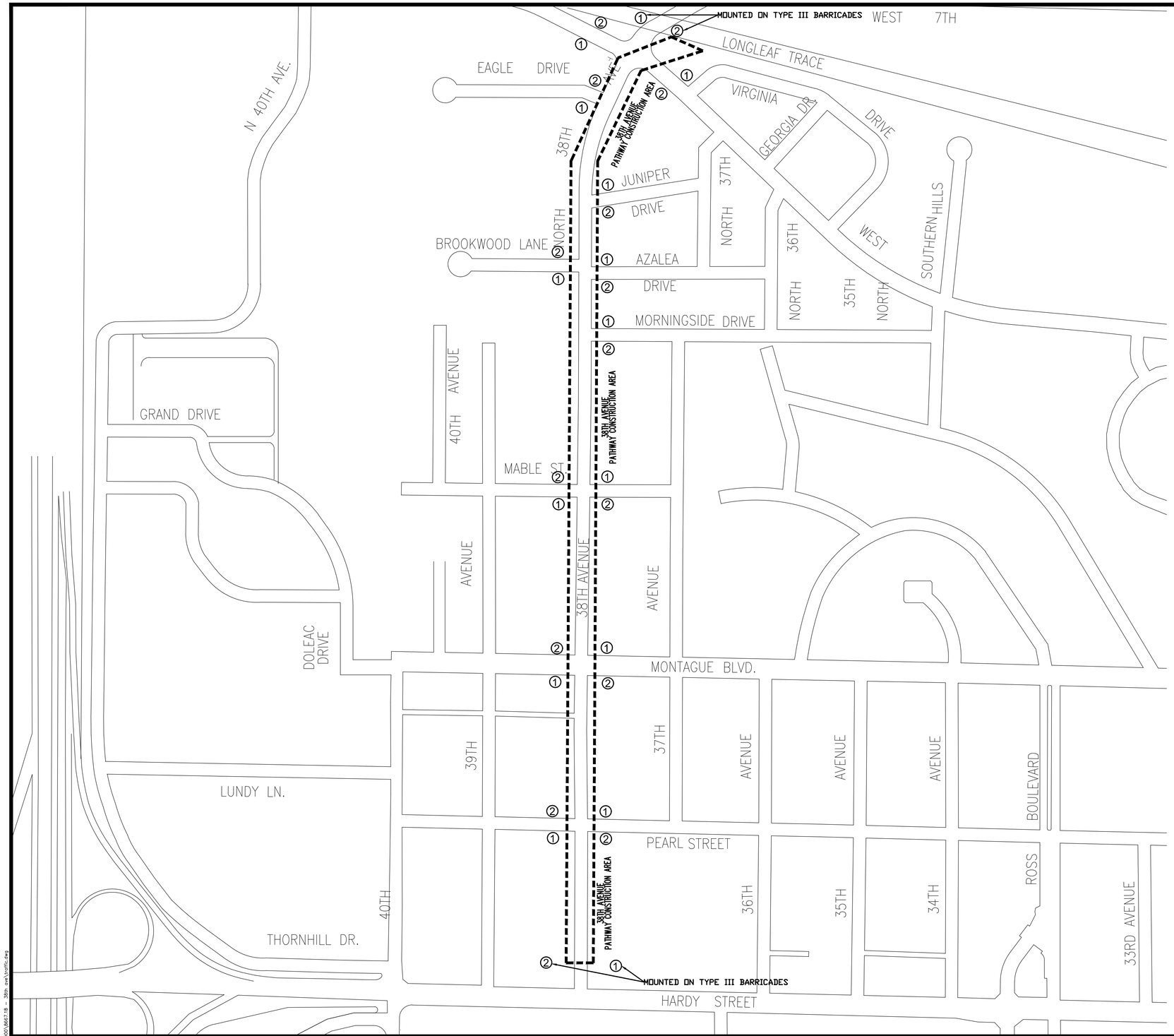

LEGEND

① ROAD WORK AHEAD W20-1 36x36
MOUNTED ON U-SECTION POST

② END ROAD WORK G20-2a 36x18
MOUNTED ON U-SECTION POST

NOTES:

1. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

2. CONTRACTOR TO MAINTAIN ACCESS TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION.

3. THE LOCATION AND SPACING OF SIGNS ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.

4. FLUORESCENT ORANGE SHEETING SHALL BE BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

5. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

6. SEE SHEET TCP-2 FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

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FILENAME: Traffic.dwg	
SCALE: 1" = 200'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
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TRAFFIC CONTROL PLAN

WORKING NUMBER: TCP-1

DRAWING NUMBER: 33

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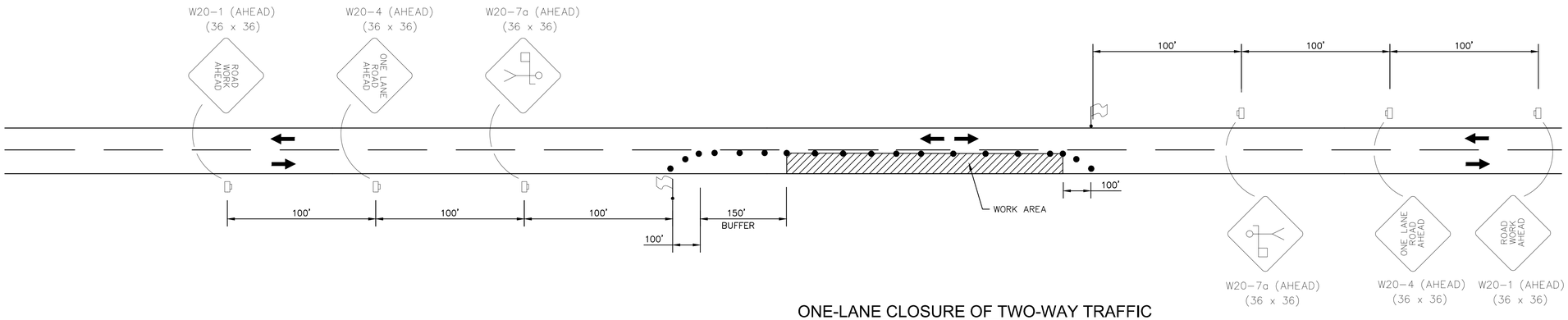


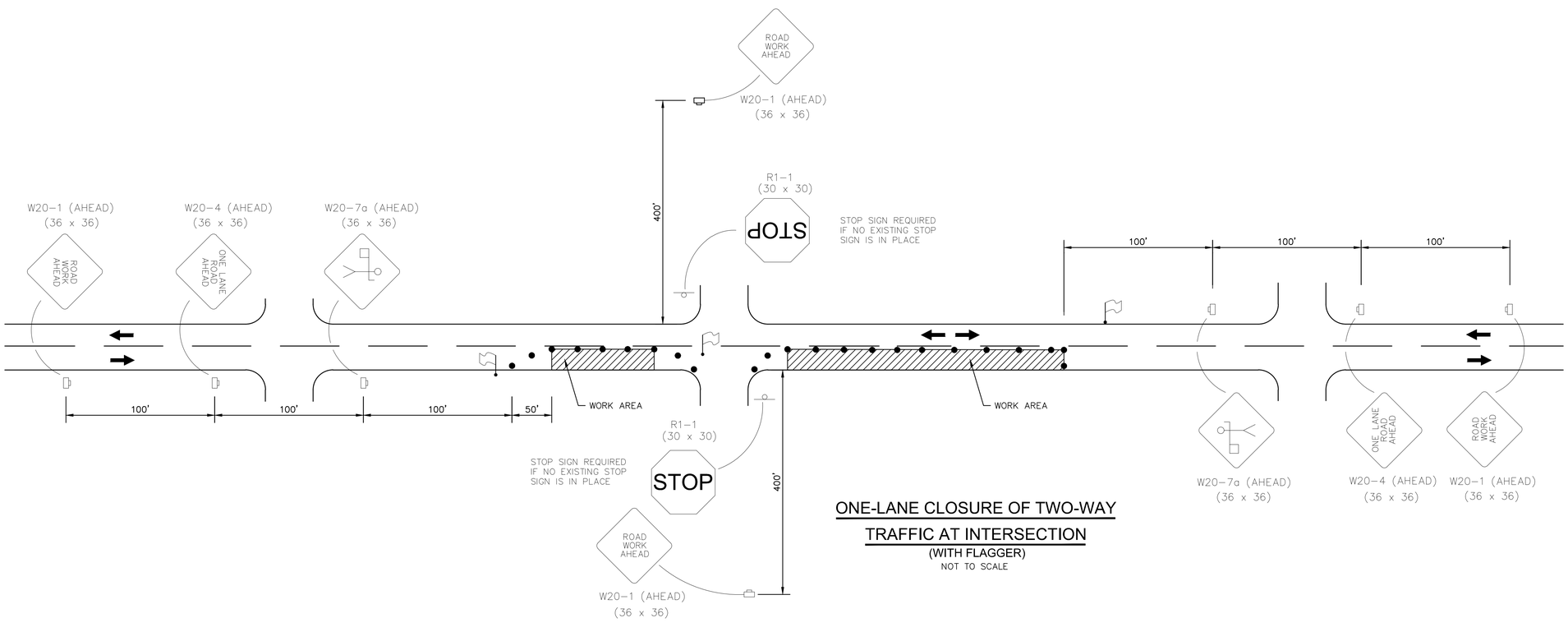
ONE-LANE CLOSURE OF TWO-WAY TRAFFIC

(WITH FLAGGER)

NOT TO SCALE

SYMBOLS

- WORK AREA
- TRAFFIC CONTROL SIGN
- WORK ZONE SIGN
- STOP SIGN
- TRAFFIC CONE OR REFLECTIVE PLASTIC DRUM
- LOCATION OF FLAGGER



ONE-LANE CLOSURE OF TWO-WAY TRAFFIC AT INTERSECTION

(WITH FLAGGER)

NOT TO SCALE

GENERAL NOTES:

1. CONTRACTOR SHALL SET UP ALL TRAFFIC CONTROL DEVICES AND SIGNS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK.
2. WORK OPERATIONS SHALL BE CONFINED TO ONE TRAVEL LANE, LEAVING THE OPPOSING TRAVEL LANE OPEN TO TRAFFIC.
3. ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGERS) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY.
4. FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
5. THE CONTRACTOR SHALL PROVIDE ACCESS (INGRESS AND EGRESS) TO LOCAL BUSINESSES AND HOMEOWNERS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO NOTIFY BUSINESSES AND HOMEOWNERS 48 HOURS IN ADVANCE OF ACCESS RESTRICTIONS.
6. CHANNELIZING DEVICES SHALL BE A MINIMUM HEIGHT OF 24".
7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" X 36".
8. SPACING OF CHANNELIZING DEVICES ALONG LANE LINE AND WORK ZONE TO BE EQUAL TO THE POSTED SPEED (M.P.H.) X 1 IN FEET. (EXAMPLE 35 M.P.H. X 1 = 35')
9. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
10. WHEN THE WORK ZONE IS STATIONARY, THE W20-7a SIGN SHOULD BE PLACED 200 FEET IN ADVANCE OF THE FLAGGER AND SHOULD INDICATE 200' AS THE DISTANCE.
11. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS.
12. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
13. DISTANCES BETWEEN SIGNS ARE APPROXIMATE. SIGN SPACING SHOULD BE ADJUSTED FOR CURVES, HILLS, INTERSECTIONS, DRIVEWAYS, ETC., TO IMPROVE VISIBILITY.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THROUGH AND LOCAL TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: Traffic.dwg	
SCALE: 1" = 10'	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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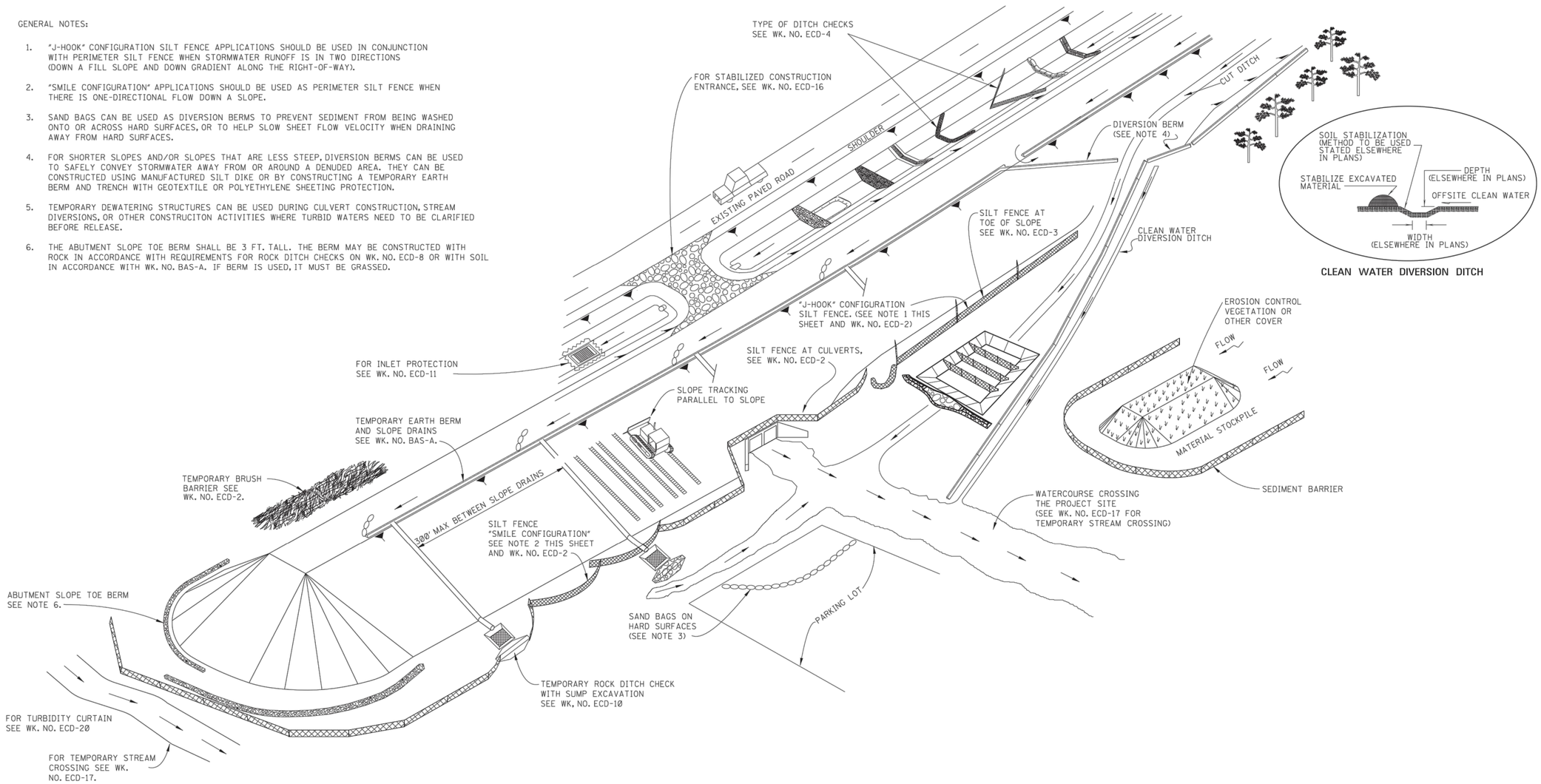
TRAFFIC CONTROL PLAN

WORKING NUMBER:	DRAWING NUMBER:
TCP-2	34

GENERAL NOTES:

1. "J-HOOK" CONFIGURATION SILT FENCE APPLICATIONS SHOULD BE USED IN CONJUNCTION WITH PERIMETER SILT FENCE WHEN STORMWATER RUNOFF IS IN TWO DIRECTIONS (DOWN A FILL SLOPE AND DOWN GRADIENT ALONG THE RIGHT-OF-WAY).
2. "SMILE CONFIGURATION" APPLICATIONS SHOULD BE USED AS PERIMETER SILT FENCE WHEN THERE IS ONE-DIRECTIONAL FLOW DOWN A SLOPE.
3. SAND BAGS CAN BE USED AS DIVERSION BERMS TO PREVENT SEDIMENT FROM BEING WASHED ONTO OR ACROSS HARD SURFACES, OR TO HELP SLOW SHEET FLOW VELOCITY WHEN DRAINING AWAY FROM HARD SURFACES.
4. FOR SHORTER SLOPES AND/OR SLOPES THAT ARE LESS STEEP, DIVERSION BERMS CAN BE USED TO SAFELY CONVEY STORMWATER AWAY FROM OR AROUND A DENUDED AREA. THEY CAN BE CONSTRUCTED USING MANUFACTURED SILT DIKE OR BY CONSTRUCTING A TEMPORARY EARTH BERM AND TRENCH WITH GEOTEXTILE OR POLYETHYLENE SHEETING PROTECTION.
5. TEMPORARY DEWATERING STRUCTURES CAN BE USED DURING CULVERT CONSTRUCTION, STREAM DIVERSIONS, OR OTHER CONSTRUCITON ACTIVITIES WHERE TURBID WATERS NEED TO BE CLARIFIED BEFORE RELEASE.
6. THE ABUTMENT SLOPE TOE BERM SHALL BE 3 FT. TALL. THE BERM MAY BE CONSTRUCTED WITH ROCK IN ACCORDANCE WITH REQUIREMENTS FOR ROCK DITCH CHECKS ON WK. NO. ECD-8 OR WITH SOIL IN ACCORDANCE WITH WK. NO. BAS-A. IF BERM IS USED, IT MUST BE GRASSED.



CLEAN WATER DIVERSION DITCH

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: ECD-1.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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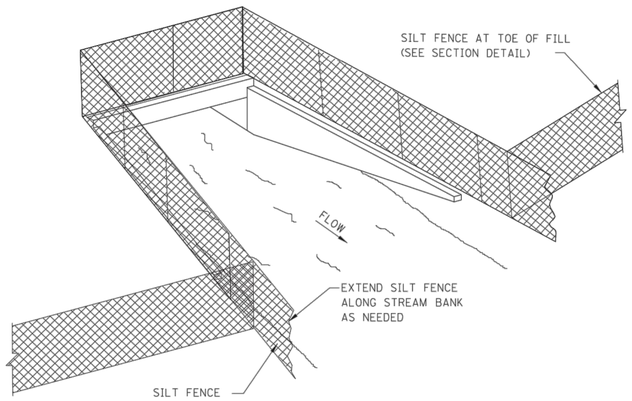
TYPICAL TEMPORARY EROSION / SEDIMENT CONTROL APPLICATIONS

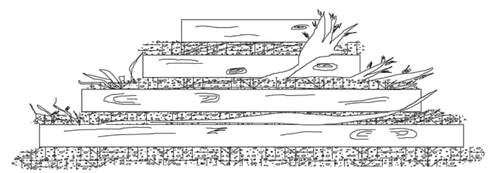
WORKING NUMBER: ECD-1

DRAWING NUMBER: 35

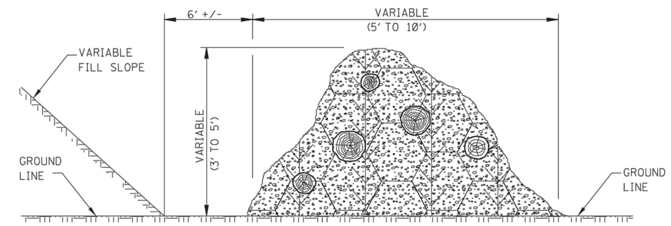
1/14/2019 11:02 AM J:\Civil 3d projects\8500\8667-18 - 38th ave\Hydro standards\ecd-1.dwg



SEDIMENT BARRIER AT CROSS DRAIN



FRONT ELEVATION



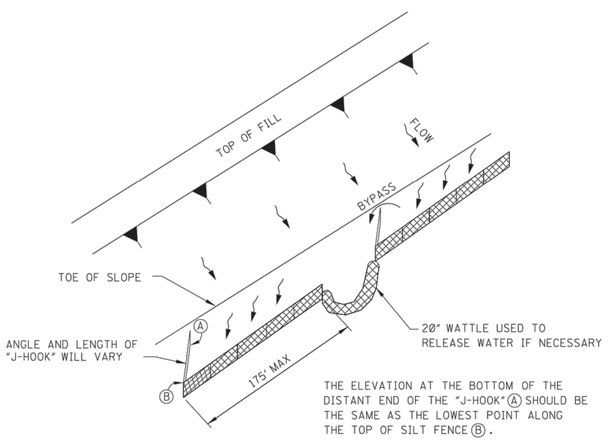
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

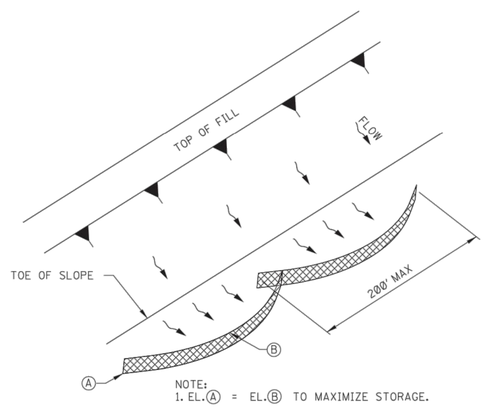
NOTES:

1. BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TO TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED OR PERMITTED BY THE ENGINEER.
3. TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
4. THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
5. TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

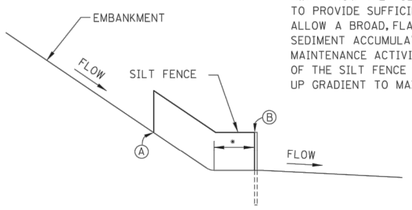
NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3



"J-HOOK" SILT FENCE
APPLICATION



"SMILE-CONFIGURATION" SILT FENCE
APPLICATION



* SILT FENCE SHOULD BE LOCATED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE SUFFICIENT SPACE TO ALLOW A BROAD, FLAT AREA FOR SEDIMENT ACCUMULATION AND MAINTENANCE ACTIVITIES. THE ENDS OF THE SILT FENCE SHOULD BE TURNED UP GRADIENT TO MAXIMIZE STORAGE.

SILT FENCE SECTION AT
TOE OF FILL

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: ECD-2.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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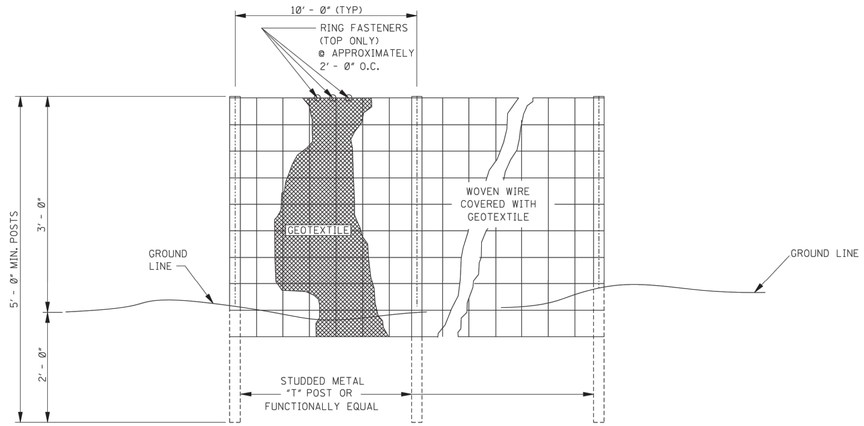
DETAILS OF SEDIMENT
BARRIER APPLICATIONS

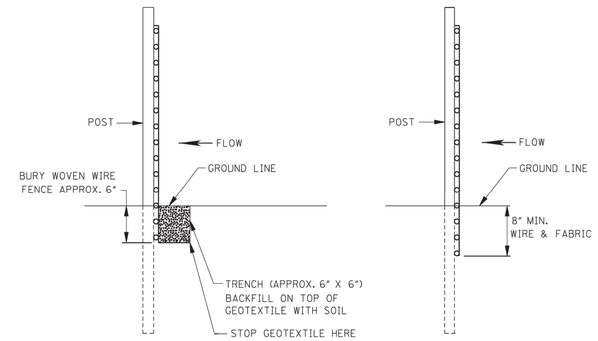
WORKING NUMBER: ECD-2

DRAWING NUMBER: 36

1/14/2019 11:02 AM - \\cad\ 38 projects\8500\8667-18 - 38th ave\mcad\ standards\ecd-2.dwg



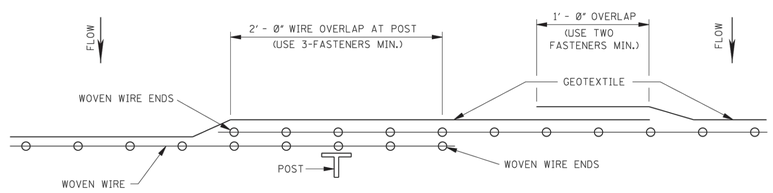
ELEVATION VIEW



METHOD I

METHOD II
MECHANICAL INSTALLATION

SIDE VIEW



PLAN VIEW

REQUIRED LAPPING

GENERAL NOTES:

1. SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
7. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

REVISIONS

NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION

N-S PROJECT NO.: 8667-18-33	
FILENAME: ECD-3.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
HATTIESBURG, MS
FORREST COUNTY

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DETAILS OF SILT FENCE INSTALLATION

WORKING NUMBER: ECD-3

DRAWING NUMBER: 37

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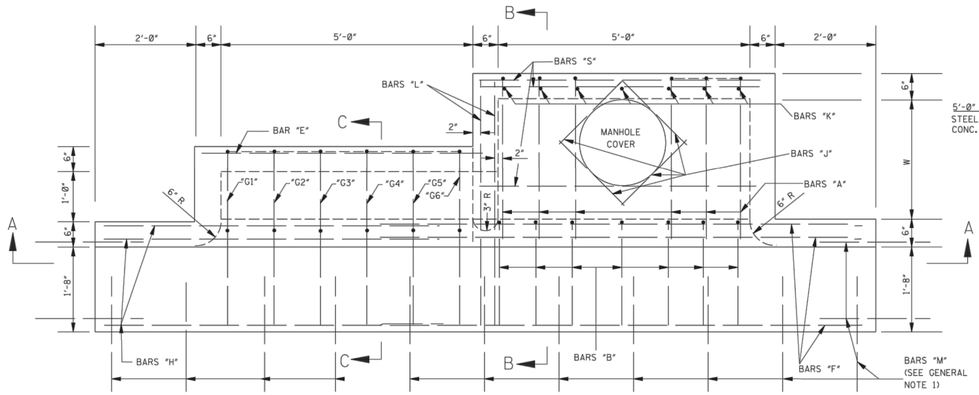
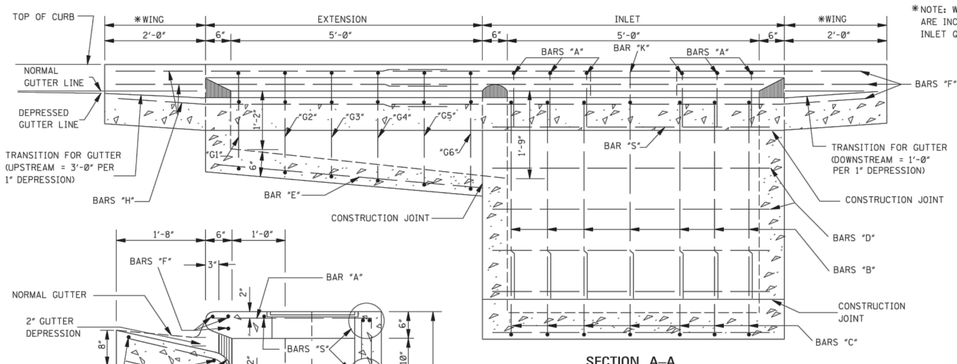
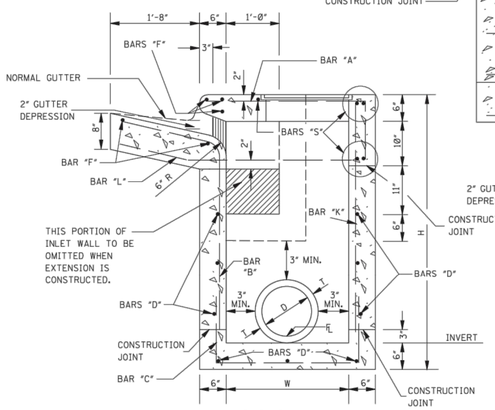


PLAN

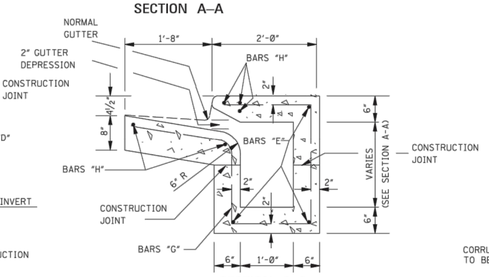


SECTION A–A

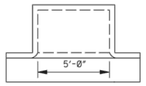
*NOTE: WING QUANTITIES ARE INCLUDED IN INLET QUANTITIES.



SECTION B–B

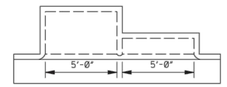


SECTION C–C



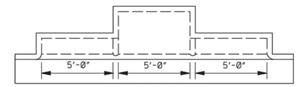
REGULAR INLET

5'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 121
CONC. = (WY + 5.5W + 6Y + 14.611)/27



INLET WITH ONE EXTENSION

10'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 231
CONC. = (WY + 5.5W + 6Y + 38.641)/27



INLET WITH TWO EXTENSIONS

15'-0" INLET
STEEL = 8.68W + 9.35Y +3.79W' + 7.57H' +341
CONC = (WY + 5.5W + 6Y + 62.671)/27

PLAN OF INLET AND EXTENSIONS

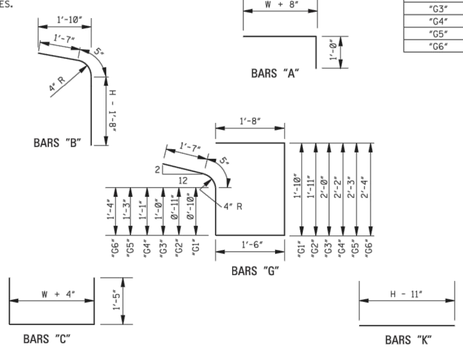
NOTES:
1. W AND H ARE EXPRESSED IN DECIMAL FEET.
2. W' = W ROUNDED TO NEAREST WHOLE FOOT.
3. Y = (H-0.5).
4. H' = (H - 2.08) ROUNDED TO NEAREST WHOLE FOOT.
5. NO DEDUCTIONS ARE MADE FOR PIPE OPENINGS IN FORMULAS.

ADD. CONCRETE PER FOOT OF H		ADD. CONCRETE PER FOOT OF W	
W	yd³/ft	H	yd³/ft
2'-6"	0.315	3'-6"	0.315
3'-0"	0.333	4'-0"	0.333
3'-6"	0.352	4'-6"	0.352
4'-0"	0.371	5'-0"	0.370
4'-6"	0.389	5'-6"	0.389
5'-0"	0.408	6'-0"	0.408
5'-6"	0.426	6'-6"	0.426
6'-0"	0.445	7'-0"	0.445
6'-6"	0.463	7'-6"	0.463
7'-0"	0.481	8'-0"	0.482
		8'-6"	0.500

QUANTITIES FOR ONE EXTENSION					
BAR	SIZE	LENGTH	SPACING	NUMBER	†WEIGHT
"E"	#4	5'-8"	AS SHOWN	3	11
"G"	#4	SEE SCHEDULE	0'-11"	6	34
"H"	#6	6'-9"	AS SHOWN	5	51
"L"	#6	4'-9"	AS SHOWN	2	14
TOTAL STEEL FOR ONE EXTENSION = 110 lbs					
TOTAL CONCRETE FOR ONE EXTENSION = 0.89 yd³					

†NOTE: WHERE EXTENSION IS USED WITH CONCRETE PAVEMENT, ADD 27 lbs OF STEEL FOR BARS "M".

BAR "G" SCHEDULE
BAR "G"	LENGTH
"G1"	7'-10"
"G2"	8'-0"
"G3"	8'-2"
"G4"	8'-5"
"G5"	8'-8"
"G6"	8'-10"



BAR DETAILS

W=2'-6"	BILL OF REINFORCING STEEL FOR 1-5'-0" INLET																		
H	BAR "A" L = 4'-2" #4 ø 9"		BAR "C" L = 5'-8" #4 ø 9"		BAR "S" L = 5'-8" #4 ø 12"		BAR "D" L = 5'-8" #4 ø 12"±		BAR "F" L=9'-8" #6		BAR "J" L=2'-3" #4		BAR "B" #4 ø 9"		BAR "K" #4 ø 9"±		* TOTAL STEEL	TOTAL CONC.
	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	LGTH.	NO.	LGTH.	NO.	lbs	lbs	yd³
3'-6"	6	17	7	27	5	19	5	19	5	73	4	6	3'-10"	7	18	2'-7"	7	12	190	1.99
4'-0"	6	17	7	27	5	19	7	26	5	73	4	6	4'-4"	7	20	3'-1"	7	14	202	2.15
4'-6"	6	17	7	27	5	19	7	26	5	73	4	6	4'-10"	7	23	3'-7"	7	17	207	2.31
5'-0"	6	17	7	27	5	19	9	34	5	73	4	6	5'-4"	7	25	4'-1"	7	19	219	2.47
5'-6"	6	17	7	27	5	19	9	34	5	73	4	6	5'-10"	7	27	4'-7"	7	21	224	2.62
6'-0"	6	17	7	27	5	19	11	42	5	73	4	6	6'-4"	7	30	5'-1"	7	24	238	2.78
6'-6"	6	17	7	27	5	19	11	42	5	73	4	6	6'-10"	7	32	5'-7"	7	26	240	2.94
7'-0"	6	17	7	27	5	19	13	49	5	73	4	6	7'-4"	7	34	6'-1"	7	28	253	3.10
7'-6"	6	17	7	27	5	19	13	49	5	73	4	6	7'-10"	7	37	6'-7"	7	31	257	3.25

W=3'-0"	BILL OF REINFORCING STEEL FOR 1-5'-0" INLET																		
H	BAR "A" L = 4'-8" #4 ø 9"		BAR "C" L = 6'-2" #4 ø 9"		BAR "S" L = 5'-8" #4 ø 12"		BAR "D" L = 5'-8" #4 ø 12"±		BAR "F" L=9'-8" #6		BAR "J" L=2'-3" #4		BAR "B" #4 ø 9"		BAR "K" #4 ø 9"±		* TOTAL STEEL	TOTAL CONC.
	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	LGTH.	NO.	LGTH.	NO.	lbs	lbs	yd³
3'-6"	6	19	7	29	5	19	5	19	5	73	4	6	3'-10"	7	18	2'-7"	7	12	194	2.15
4'-0"	6	19	7	29	5	19	7	26	5	73	4	6	4'-4"	7	20	3'-1"	7	14	206	2.32
4'-6"	6	19	7	29	5	19	7	26	5	73	4	6	4'-10"	7	23	3'-7"	7	17	211	2.49
5'-0"	6	19	7	29	5	19	9	34	5	73	4	6	5'-4"	7	25	4'-1"	7	19	223	2.65
5'-6"	6	19	7	29	5	19	9	34	5	73	4	6	5'-10"	7	27	4'-7"	7	21	228	2.82
6'-0"	6	19	7	29	5	19	11	42	5	73	4	6	6'-4"	7	30	5'-1"	7	24	240	2.99
6'-6"	6	19	7	29	5	19	11	42	5	73	4	6	6'-10"	7	32	5'-7"	7	26	245	3.15
7'-0"	6	19	7	29	5	19	13	49	5	73	4	6	7'-4"	7	34	6'-1"	7	28	257	3.32
7'-6"	6	19	7	29	5	19	13	49	5	73	4	6	7'-10"	7	37	6'-7"	7	31	262	3.49

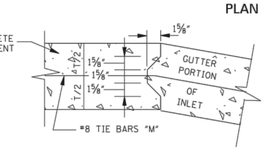
W=3'-6"	BILL OF REINFORCING STEEL FOR 1-5'-0" INLET																		
H	BAR "A" L = 5'-2" #4 ø 9"		BAR "C" L = 6'-8" #4 ø 9"		BAR "S" L = 5'-8" #4 ø 12"		BAR "D" L = 5'-8" #4 ø 12"±		BAR "F" L=9'-8" #6		BAR "J" L=2'-3" #4		BAR "B" #4 ø 9"		BAR "K" #4 ø 9"±		* TOTAL STEEL	TOTAL CONC.
	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	LGTH.	NO.	LGTH.	NO.	lbs	lbs	yd³
3'-6"	6	21	7	31	5	19	6	23	5	73	4	6	3'-10"	7	18	2'-7"	7	12	202	2.31
4'-0"	6	21	7	31	5	19	8	30	5	73	4	6	4'-4"	7	20	3'-1"	7	14	214	2.49
4'-6"	6	21	7	31	5	19	8	30	5	73	4	6	4'-10"	7	23	3'-7"	7	17	219	2.66
5'-0"	6	21	7	31	5	19	10	38	5	73	4	6	5'-4"	7	25	4'-1"	7	19	231	2.84
5'-6"	6	21	7	31	5	19	10	38	5	73	4	6	5'-10"	7	27	4'-7"	7	21	236	3.01
6'-0"	6	21	7	31	5	19	12	45	5	73	4	6	6'-4"	7	30	5'-1"	7	24	248	3.19
6'-6"	6	21	7	31	5	19	12	45	5	73	4	6	6'-10"	7	32	5'-7"	7	26	253	3.37
7'-0"	6	21	7	31	5	19	14	53	5	73	4	6	7'-4"	7	34	6'-1"	7	28	265	3.54
7'-6"	6	21	7	31	5	19	14	53	5	73	4	6	7'-10"	7	37	6'-7"	7	31	270	3.72

* NOTE: WHERE INLET IS USED WITH CONCRETE PAVEMENT, ADD 73 lbs OF STEEL FOR BARS "M".

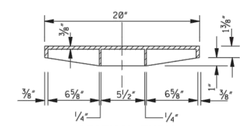
* NOTE: WHERE INLET IS USED WITH CONCRETE PAVEMENT, ADD 73 lbs OF STEEL FOR BARS "M".

GENERAL NOTES:

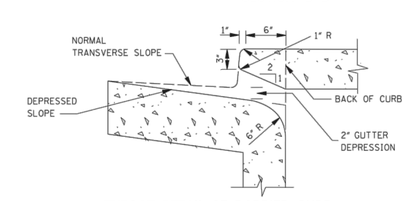
1. WHERE INLET OR INLET WITH EXTENSION(S) IS USED WITH CONCRETE PAVEMENT WITH INTERGRAL CURB, THE PAVEMENT SHALL BE BLOCKED OUT TO THE DIMENSIONS AS SHOWN FOR THE GUTTER PORTION OF THE INLET OR INLET WITH EXTENSION(S). THE PORTION BLOCKED OUT SHALL BE PLACED INTEGRAL WITH THE TOP OF THE INLET OR INLET WITH EXTENSION(S). #8 DEFORMED BARS 30" LONG SHALL BE PLACED ON 18" CENTERS AT THE CENTER OF THE PAVEMENT. THESE BARS SHALL EXTEND INTO THE GUTTER PORTION OF THE INLET OR INLET WITH EXTENSION(S) 15". THE CONSTRUCTION JOINT BETWEEN THE CONCRETE PAVEMENT AND THE INLET OR INLET WITH EXTENSION(S) SHALL BE A KEYED JOINT AS SHOWN. A SMOOTH CONSTRUCTION JOINT WILL NOT BE PERMITTED. QUANTITIES FOR BLOCKED OUT AREA OF PAVEMENT SHALL BE INCLUDED IN QUANTITIES FOR INLET OR INLET WITH EXTENSION(S).
2. THE QUANTITIES SHOWN, MINUS VOLUMETRIC DISPLACEMENT OF CONCRETE BY PIPE CULVERTS THROUGH INLET WALLS, WILL BE USED AS THE BASIS OF FINAL PAYMENT UNLESS THIS PLAN IS MODIFIED.
3. FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLE ARE INCREMENTS OF 6". BUT ANY DEPTHS OTHER THAN THESE SHOWN MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS, FALLING WITHIN THE LIMITS OF THE TABLE, MAY BE FOUND BY INTERPOLATION.
4. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMMODATE STORM SEWER. NO DEDUCTIONS ARE TO BE MADE IN STEEL QUANTITIES.
5. WHERE INLET IS BEING USED ADJACENT TO SIDEWALK, REFER TO OTHER SHEETS FOR TOP DETAIL.



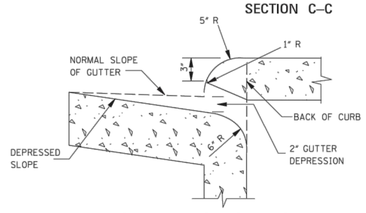
PLAN



SECTION THRU MANHOLE COVER



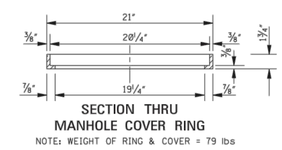
THROAT DETAIL OF BARRIER CURB



THROAT DETAIL OF ROLLED CURB

DETAIL OF KEYED CONSTRUCTION JOINTS

NOTE: FIELD BEND BARS "L" TO CENTER OF GUTTER SECTION



SECTION THRU MANHOLE COVER RING

NOTE: WEIGHT OF RING & COVER = 79 lbs

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667-18-33	
FILENAME: SS-2.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

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FORREST COUNTY

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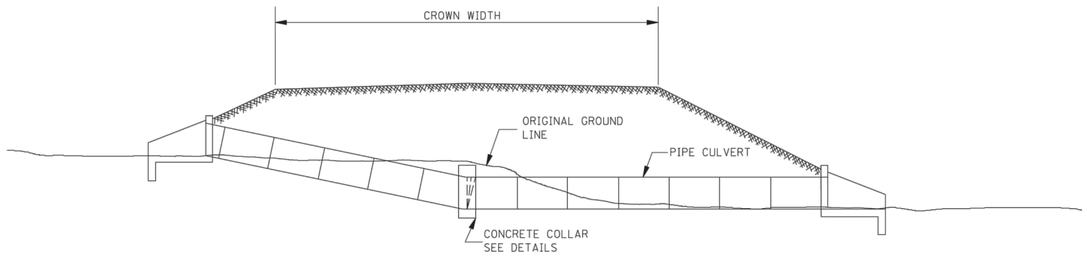
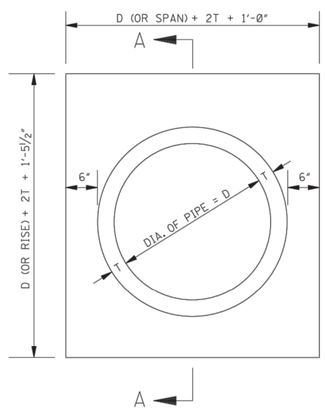
CURB INLET DETAILS

WORKING NUMBER: SS-2

DRAWING NUMBER: 38

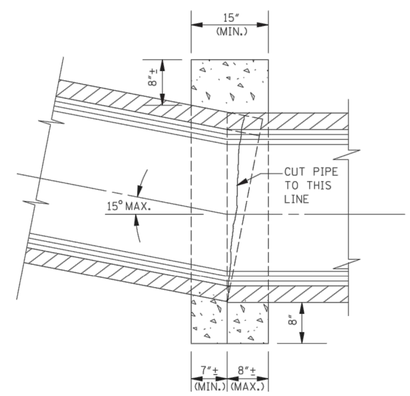


TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR

NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.



SECTION A–A

GENERAL NOTES:

1. THE MAXIMUM BEND ANGLE IS 15 DEGREES.
2. THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR CONCRETE COLLAR FOR PIPE CULVERTS

CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd^3)	SIZE OF PIPE	CLASS "B" CONCRETE (yd^3)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N–S PROJECT NO.: 8667–18–33	
FILENAME: PC–1.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

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HATTIESBURG, MS
FORREST COUNTY

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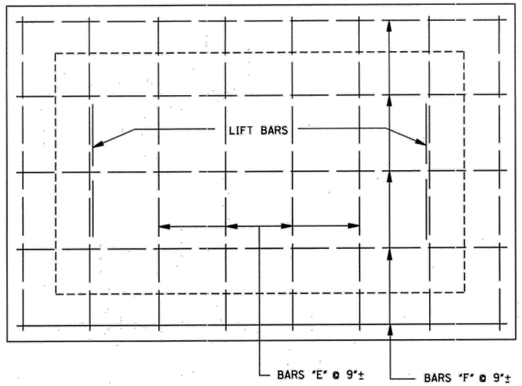
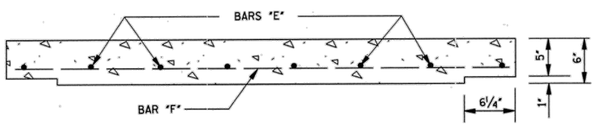
PIPE COLLAR DETAILS

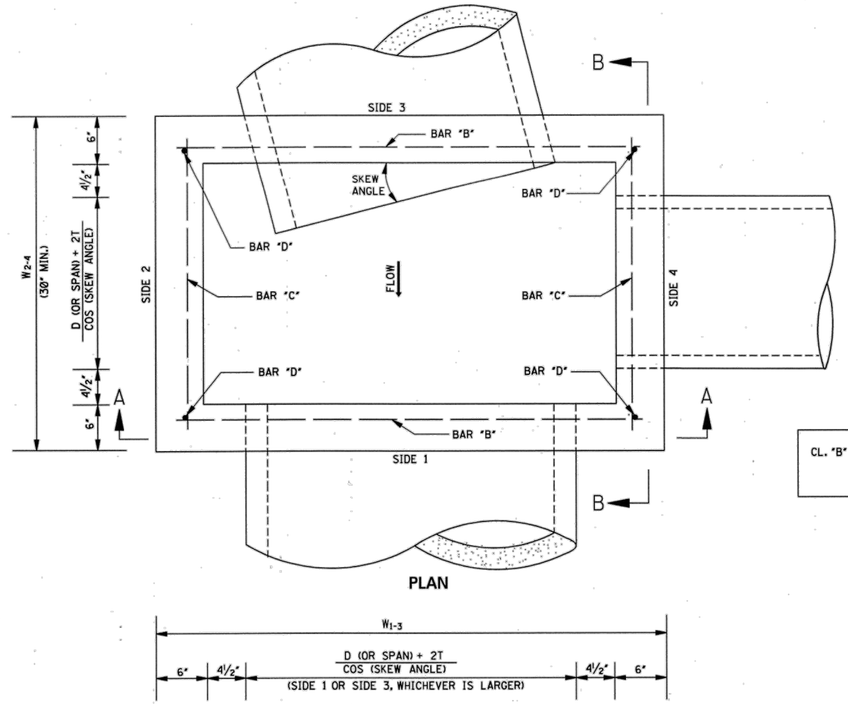
WORKING NUMBER:	DRAWING NUMBER:
PC-1	39



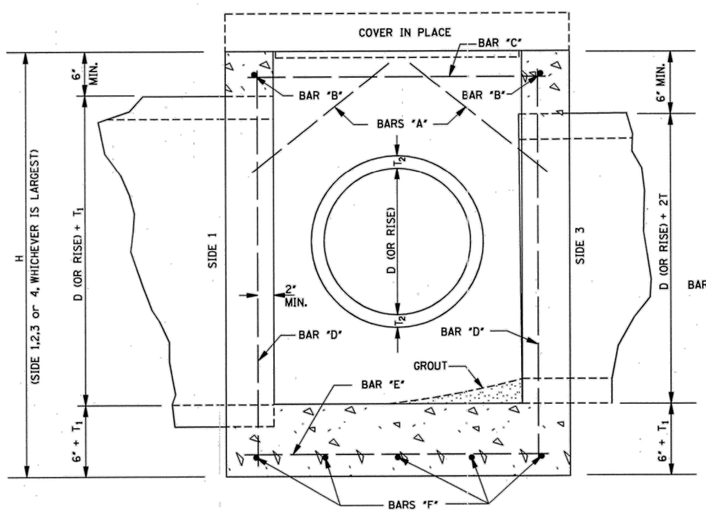
PLAN OF COVER



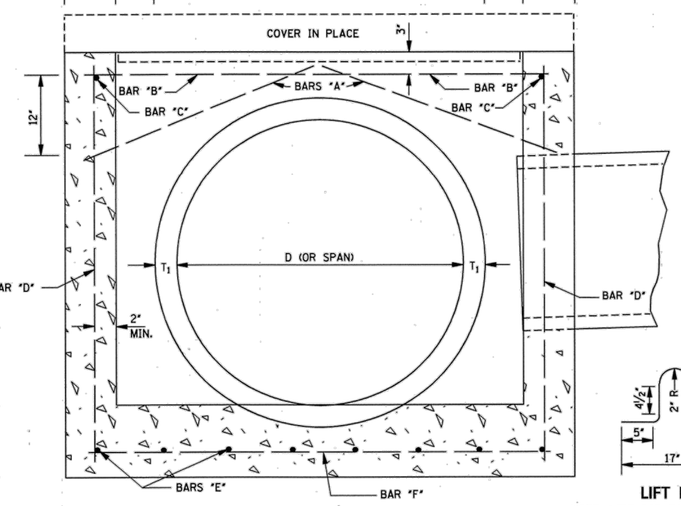
ELEVATION OF COVER



PLAN



SECTION B–B



SECTION A–A

REINFORCING BAR LIST			
BAR	SIZE	NUMBER REQUIRED	LENGTH
A	#4	2 PER PIPE OPENING	$\sqrt{196" + \left(\frac{W^*}{2} + 2"\right)^2}$
B	#4	2	W_{1-3} - 6"
C	#4	2	W_{2-4} - 6"
D	#4	4	H - 6"
E	#4	$2\left[\left(\frac{W_{1-3}}{9"}\right)^{**} + 1\right]$	W_{2-4} - 4"
F	#4	$2\left[\left(\frac{W_{2-4}}{9"}\right)^{**} + 1\right]$	W_{1-3} - 4"

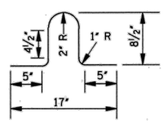
NOTE: VARIABLES AND DESIGNATIONS ARE AS FOLLOWS:
D (OR SPAN) = PIPE DIAMETER (OR SPAN)
W_{1-3} = WIDTH OF SIDE 1 & SIDE 3
W_{2-4} = WIDTH OF SIDE 2 & SIDE 4
W* = W_{1-3} OR W_{2-4} (SIDE OF ENTERING PIPE)
** = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (yd^3) = [(Q1 + Q2) / 46,656] - ∑ PIPE OPENING DEDUCTIONS
WHERE: $Q1 = [5"*W_{1-3}W_{2-4}] + [1"(W_{1-3} - 12.5")(W_{2-4} - 12.5")] + [(T_1 + 6")W_{1-3}W_{2-4}]$
$Q2 = 12"[H - (T_1 + 6")][(W_{1-3} - 12") + W_{2-4}]$

COMMON PIPE SIZE					
CIRCULAR PIPE			ARCH PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd^3)	PIPE SIZE	T	PIPE OPENING DEDUCTION (yd^3)
18"	2½"	0.053	22" × 13"	2½"	0.053
24"	3"	0.091	29" × 18"	3"	0.087
30"	3½"	0.138	36" × 23"	3½"	0.129
36"	4"	0.196	44" × 27"	4"	0.185
42"	4½"	0.263	51" × 31"	4½"	0.245
48"	5"	0.340	58" × 36"	5"	0.318
54"	5½"	0.427	65" × 40"	5½"	0.394
60"	6"	0.524	73" × 45"	6"	0.489
66"	6½"	0.630			
72"	7"	0.747			

GENERAL NOTES:

1. REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.
2. QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
3. CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS.
4. SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
5. IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.



LIFT BAR

NOTE: LIFT BAR TO BE FABRICATED FROM A #4 BAR 30" LONG. TWO LIFT BARS ARE REQUIRED. REINFORCING STEEL FOR 2 LIFT BARS = 3.3 lbs.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N–S PROJECT NO.: 8667–18–33	
FILENAME: JB–1.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

CITY OF HATTIESBURG
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FORREST COUNTY

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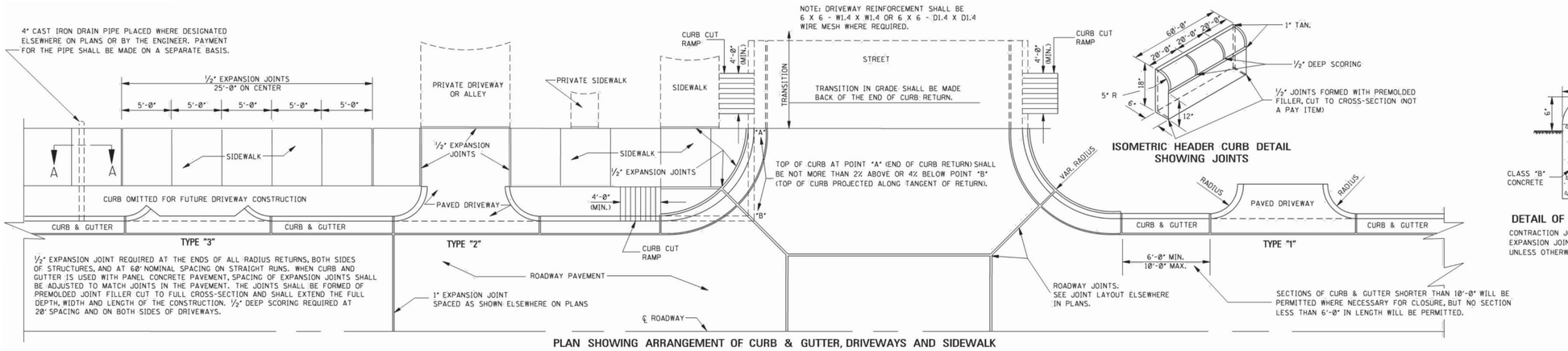
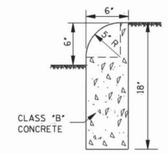
JUNCTION BOX FOR PIPE CULVERTS

WORKING NUMBER: JB-1

DRAWING NUMBER: 40



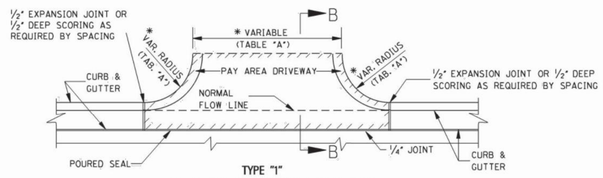
PLAN SHOWING ARRANGEMENT OF CURB & GUTTER, DRIVEWAYS AND SIDEWALK



DETAIL OF HEADER CURB

CONTRACTION JOINTS REQUIRED AT 20' O.C.
EXPANSION JOINTS REQUIRED AT 60' O.C.
UNLESS OTHERWISE DIRECTED BY ENGINEER.

ISOMETRIC HEADER CURB DETAIL SHOWING JOINTS

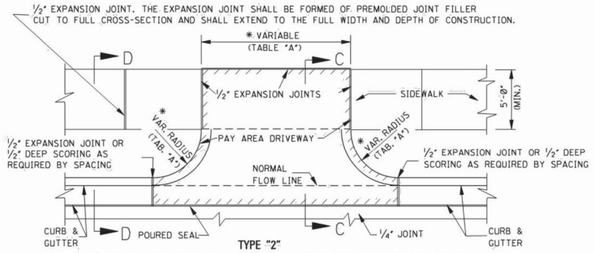


TYPE "1"
PLAN OF CONCRETE DRIVEWAY

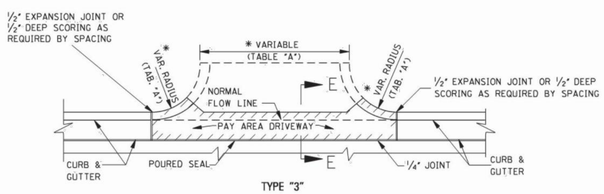
11.058 yd² FOR DRIVEWAY 16'-0" IN WIDTH.
0.574 yd² FOR EACH ADDED OR SUBTRACTED FOOT OF WIDTH.
NOTE: THIS DRIVEWAY AREA EXAMPLE IS COMPUTED ON THE BASIS OF 3'-0" RADIUS. PAYMENT FOR CURB RADIUS SHALL BE INCLUDED IN COMPENSATION FOR DRIVEWAY.

*TABLE "A"

DRIVEWAY TYPE	DRIVEWAY WIDTH (ft)	CURB RETURN RADIUS (ft)
RESIDENTIAL	16'	3' - 10'
COMMERCIAL/ INDUSTRIAL	30' - 50'	5' - 30'

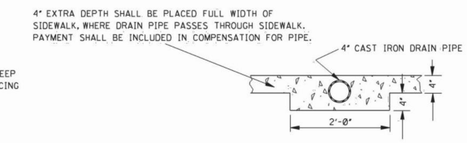


TYPE "2"
PLAN OF CONCRETE DRIVEWAY ACROSS SIDEWALK AREA

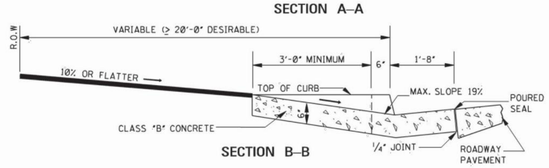


TYPE "3"
PLAN–CURB OMITTED FOR FUTURE DRIVEWAY CONSTRUCTION

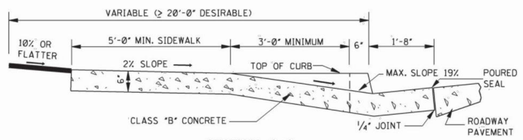
NOTE: THIS TYPE CONSTRUCTION SHALL BE USED WHERE DESIGNATED ELSEWHERE ON PLANS OR BY THE ENGINEER.



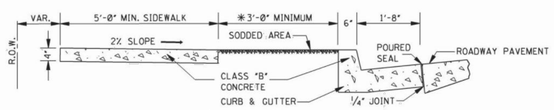
SECTION A–A



SECTION B–B

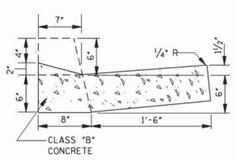


SECTION C–C

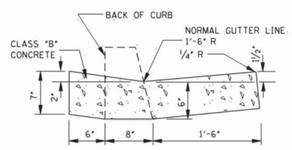


SECTION D–D

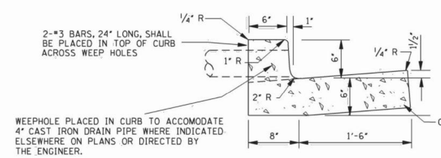
* NOTE: THE 3'-0" BUFFER SHOWN IS FOR A BUFFER ZONE. BUFFER ZONE IS NOT REQUIRED UNLESS INDICATED ELSEWHERE ON PLANS.



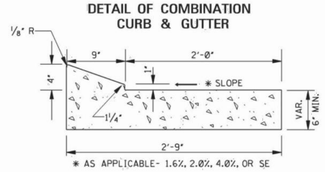
SECTION E–E



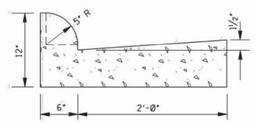
DETAIL OF VALLEY GUTTER



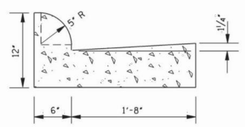
TYPE "1"
DETAIL OF COMBINATION CURB & GUTTER



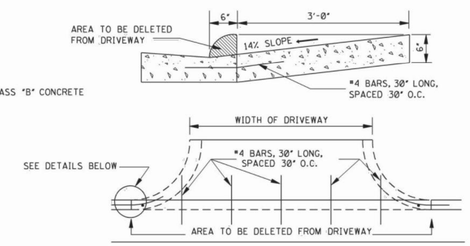
TYPE "2"
DETAIL OF COMBINATION CURB & GUTTER

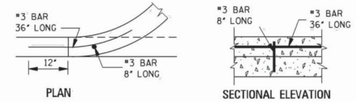


TYPE "3A"
DETAIL OF COMBINATION CURB & GUTTER



TYPE "3B"
DETAIL OF COMBINATION CURB & GUTTER





PERMISSIBLE DRIVEWAY CONSTRUCTION METHOD FOR SLIP–FORM PLACEMENT OF CURB & GUTTER

GENERAL NOTES:

1. THE STANDARD SPECIFICATIONS ADOPTED BY THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION SHALL, UNLESS OTHERWISE SPECIFIED HEREIN, APPLY TO ALL ITEMS INCLUDED ON THIS DRAWING.
2. TRAVERSE CONTRACTION JOINTS ARE REQUIRED AT 20' ON CENTER FOR ALL CONCRETE DRIVEWAYS THAT EXTEND PAST THE END OF THE CURB RETURN. A ½" WIDE EXPANSION JOINT IS REQUIRED AT THE END OF THE CURB RETURN AND AT 60' ON CENTER THROUGHOUT THE LENGTH OF THE DRIVEWAY. A LONGITUDINAL CONTRACTION JOINT IS REQUIRED FOR ALL DRIVEWAYS EXCEEDING 20' IN WIDTH.
3. SEE SHEET CCR-1 FOR DETAILS OF CURB-CUT RAMPS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DRAWING INFORMATION	
N-S PROJECT NO.: 8667–18–33	
FILENAME: SD–1.dwg	
SCALE:	
SURVEYED BY: CLEARPOINT ENGINEERS	
DSGN: MWE	DATE: 01/2019
DRWN: WTA	DATE: 01/2019
CHKD:	DATE:
QA/QC:	DATE:

38TH AVENUE PATHWAY

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FORREST COUNTY

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DRIVEWAYS, CURB & GUTTER & SIDEWALK

WORKING NUMBER: SD-1

DRAWING NUMBER: 41

1/28/2019 3:35 PM c:\Civil 3d projects\80501\8667-18 - 38th ave\acad drawings\sd-1.dwg