

UTILITIES

SEWERS
 CITY OF SOUTH BEND
 DEPT. OF PUBLIC WORKS
 1316 COUNTY-CITY BUILDING
 227 W. JEFFERSON BLVD.
 SOUTH BEND, IN 46601
 (574) 235-9251

WATER
 SOUTH BEND WATER WORKS
 830 N. MICHIGAN STREET
 SOUTH BEND, IN 46601
 (574) 245-6108

GAS
 NIPSCO
 1039 E. PENNSYLVANIA AVE.
 SOUTH BEND, IN 46601
 (574) 284-2214

ELECTRIC
 AMERICAN ELECTRIC POWER (I&M)
 2929 LATHROP STREET
 SOUTH BEND, IN 46628
 (574) 283-1871

TELEPHONE
 AT&T
 307 S. MAIN STREET
 SOUTH BEND, IN 46601
 (574) 237-8380

CABLE
 COMCAST
 1920 E. MCKINLEY
 MISHAWAKA, IN 46545
 (574) 252-2562

FIBER OPTIC
 METRONET
 121 S. MICHIGAN STREET
 SOUTH BEND, IN 46601
 (574) 360-7812

REVISIONS

SHEET NO.	DATE	REVISED
19 , 20	1/16/2016	WATER MAIN REVISIONS
20A, 20B, 20C	1/16/2016	MICHIGAN STREET ADDITIONAL MILL & RESURFACE PLANS
2	1/21/2016	ADDED REVISION TABLE
16	1/21/2016	ADD STORM WATER QUALITY TREATMENT UNIT
20A, 20B, 20C	1/21/2016	MILL AND RSURFACE PLAN REVISIONS
20D, 20E	1/21/2016	ADDED MILL AND RESURFACE INTERSECTION DETAILS SHEETS
21	1/21/2016	ADD STORM WATER QUALITY TREATMENT UNIT
32	1/21/2016	ADD EXPANSION JOINT
33	1/25/2016	ADD EARTHWORK CALCULATIONS
38 - 40	1/28/2016	CROSSWALK SYSTEM AS ALTERNATE WORK ITEM
6	2/12/2016	SHIFT BIKE LANES OFF OF MICHIGAN ST, SOUTH OF ROUNDABOUT, & UPDATE GEOMETRY
19	2/12/2016	SHIFT BIKE LANES OFF OF MICHIGAN ST, SOUTH OF ROUNDABOUT, & UPDATE GEOMETRY
		WATER MAIN REVISIONS
20	2/16/2016	WATER MAIN REVISIONS
21	2/12/2016	UPDATE SHIFTED STRUCTURE INFORMATION
24	2/12/2016	REVISE MICHIGAN STREET SPOT GRADES
25 , 26	2/12/2016	UPDATE MICHIGAN ST GEOMETRY, DIMENSIONS & COORDINATES FOR BIKE LANE SHIFT
31	2/12/2016	REVISE BRICK PAVER CALLOUTS
32	2/12/2016	REVISE JOINT LAYOUT FOR MICHIGAN ST BIKE LANE SHIFT
36	2/12/2016	UPDATE PAVEMENT MARKINGS FOR MICHIGAN ST BIKE LANE SHIFT
38	2/12/2016	REVISED LIGHT FIXTURE HEADS & FIXTURE SCHEDULE
40	2/12/2016	REVISED DETAIL 4/40

INDEX

SHEET NO.	DRAWING INDEX
	COVER SHEET
1	TABLE OF CONTENTS - INDEX SHEET
2-4	TOPOGRAPHIC SURVEY SHEET & DATA
5	PLAT No. 1
6	BARTLETT ROUNDABOUT PLAN
7-8	TYPICAL PAVEMENT SECTIONS
9-13	MAINTENANCE OF TRAFFIC
14	PLAN & PROFILE LINE 'B' - BARTLETT ST
15-17	PLAN & PROFILE LINE 'E' - BARTLETT ST
18-20	PLAN & PROFILE LINE 'CC' - MICH ST
21	STRUCTURE DATA TABLE
22	SHEET SIGN & POST TABLE
23	PAVEMENT QUANTITIES & APPROACH TABLE
24	SPOT ELEVATION DETAIL
25-26	GEOMETRIC PLAN
27-28	SITE DIMENSIONAL PLAN
29-30	SITE GRADING PLAN
31	SPLITTER ISLAND DETAILS
32	JOINT LAYOUT
33	ROUNDABOUT ISLAND LAYOUT
34	ROUNDABOUT CROSS SECTIONS
35-36	PAVEMENT MARKING & SIGNAGE PLAN
37	EROSION CONTROL PLAN
38-40	SITE LIGHTING PLAN
41-42	LANDSCAPE PLAN & DETAILS
43-44	IRRIGATION PLAN & DETAILS
45-46	DETAILS
47-55	CROSS SECTIONS



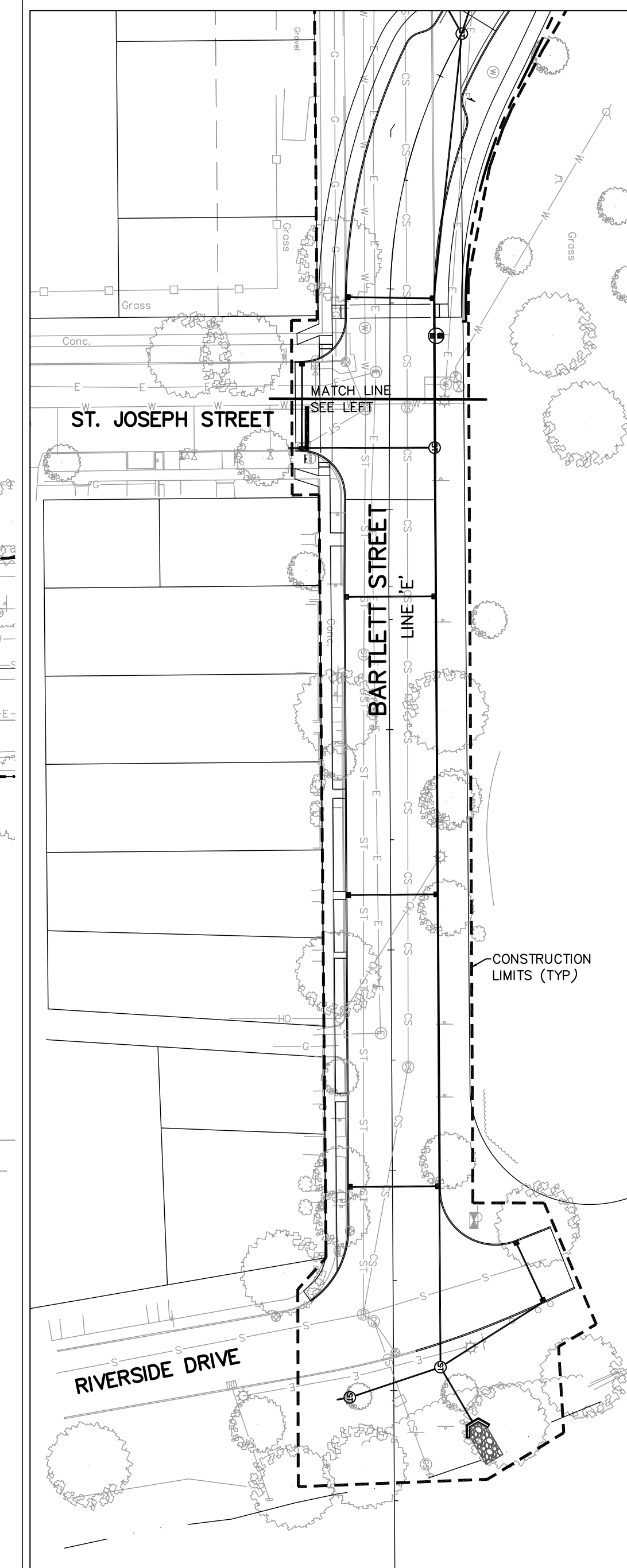
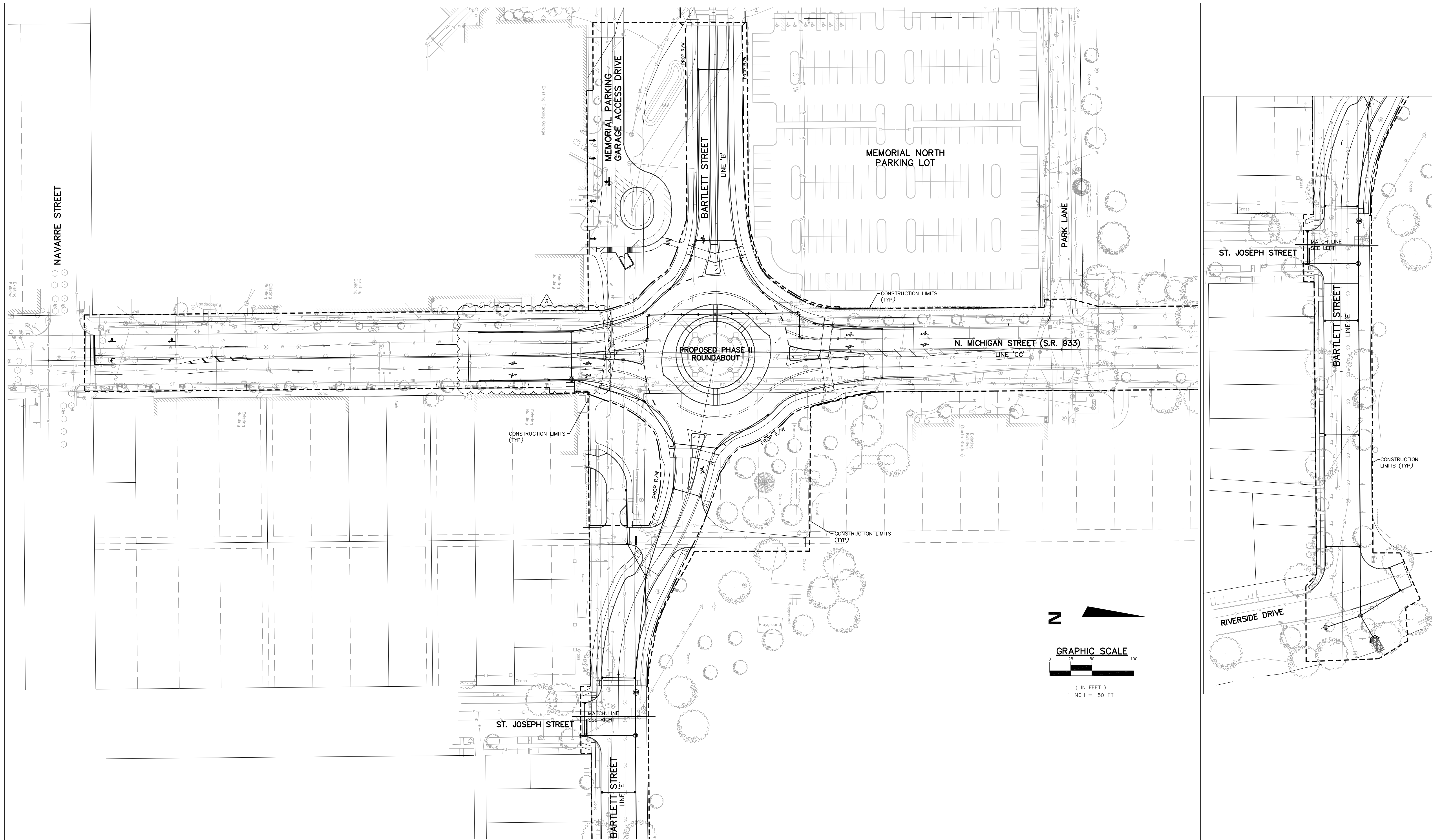
RECOMMENDED FOR APPROVAL *Mark E. Wilson* 2/12/2016
 DESIGN ENGINEER DATE

DESIGNED: C.R.C. DRAWN: R.J.H.
 CHECKED: B.B.K. CHECKED: M.E.W.

CITY OF SOUTH BEND
 BARTLETT ST IMPROVEMENTS PHASE II

TABLE OF CONTENTS - INDEX SHEET

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
	--
SURVEY BOOK	SHEETS
	1 of 55
CONTRACT	PROJECT
--	114-032B



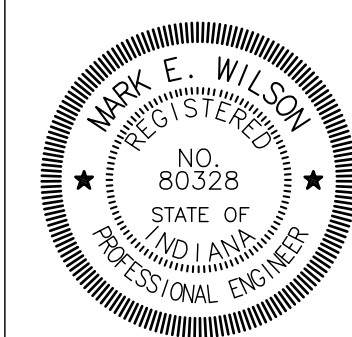
REV.	DESCRIPTION	BY	DATE
1	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT	MEW	2/12/2016

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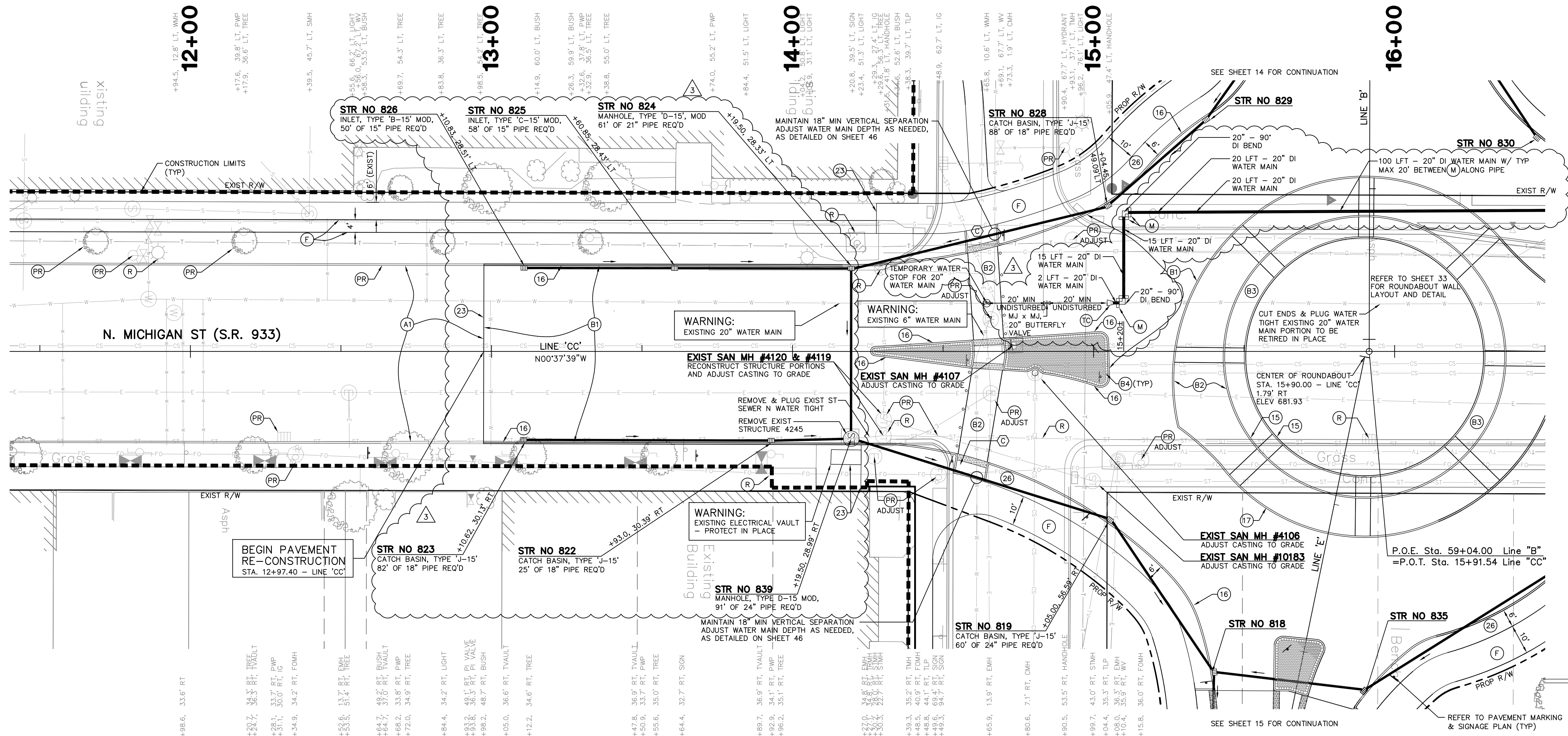


RECOMMENDED FOR APPROVAL	<i>Mark E. Wilson</i>	2/12/2016
	DESIGN ENGINEER	DATE
DESIGNED: C.R.C.	DRAWN: R.J.H.	
CHECKED: B.B.K.	CHECKED: M.E.W.	

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 BARTLETT ST IMPROVEMENTS PHASE II

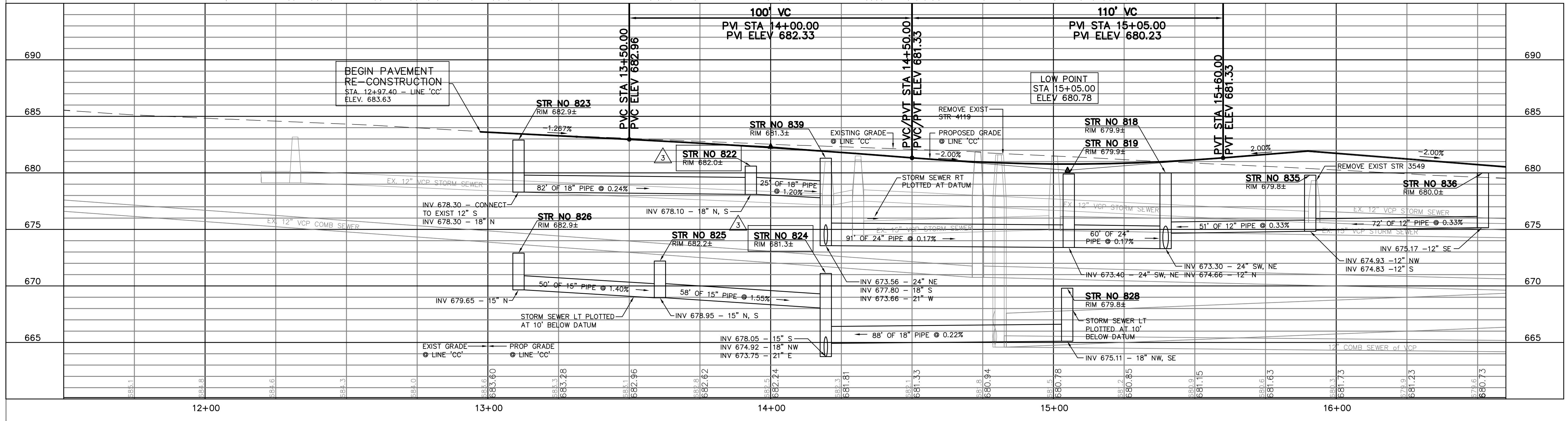
BARTLETT ROUNDABOUT PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
SURVEY BOOK	SHEETS
	6 of 55
CONTRACT	PROJECT
	114-032B



- LEGEND**
- (A1) 1.5" SURFACE MILLING AND RESURFACE WITH 165#/SYD QC/QA-HMA, 4, 76, SURFACE, 9.5mm, ON TACK COAT OVER MILLED ASPHALT SURFACE
 - (B1) 10" PLAIN PCPP OVER 6" COMPACTED AGGREGATE NO. 53 BASE OVER COMPACTED SUBGRADE
 - (B2) 10" PCPP, FULL DEPTH COLORIZED 6" COMPACTED AGGREGATE NO. 53 BASE OVER COMPACTED SUBGRADE
 - (B3) 6" PCPP, FULL DEPTH COLORIZED OVER 6" COMPACTED AGGREGATE NO. 53 BASE OVER COMPACTED SUBGRADE
 - (B4) BRICK PAVERS OVER 6" CRUSHED LIMESTONE OVER 8" PERVIOUS CONCRETE OVER 6" WASHED AGGREGATE NO. 8 BASE OVER COMPACTED SUBGRADE
 - (F) SIDEWALK, CONCRETE, 5 IN ON COMPACTED SUBGRADE
 - (C) CURB RAMP, CONCRETE, C
 - (15) CURB, CONCRETE, 6 IN
 - (16) CURB, INTEGRAL, CONCRETE
 - (17) CURB, INTEGRAL, B, CONCRETE, MODIFIED
 - (23) HEAT LINE SAW CUT
 - (26) SODDING
 - (PR) PROTECT
 - (R) REMOVE

- NOTE:**
1. REFER TO THE LANDSCAPE PLAN FOR PROPOSED GROUND TREATMENTS WITHIN THE CENTER OF THE ROUNDABOUT.
 2. REFER TO SHEET NO. 25 FOR ROUNDABOUT LAYOUT AND GEOMETRY.
 3. CONTRACTOR SHALL COORDINATE WITH NECESSARY UTILITY COMPANY ALL EXISTING ELECTRIC, FIBER OPTIC, AND TELEPHONE MANHOLES WITHIN EXISTING BARTLETT STREET INTERSECTION TO BE ADJUSTED TO PROPOSED GRADE.



- WATER MAIN LEGEND**
- (M) "MEGALUG" SERIES 1100, OR APPROVED EQUAL, MECHANICAL JOINT RESTRAINT FOR 20" DI PIPE
 - (TC) "JCM 204" STEEL REDUCING COUPLING, OR APPROVED EQUAL, FOR 20" PIPE
- WATER MAIN NOTE:**
1. MAINTAIN EXISTING 20" WATER MAIN DEPTH FOR COVER.

REV	DESCRIPTION	BY	DATE
5	WATER MAIN REVISIONS PER CITY OF SOUTH BEND	MEW	2/16/2016
3	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT	MEW	2/12/2016
2	WATER MAIN REVISIONS PER CITY OF SOUTH BEND	MEW	1/16/2016

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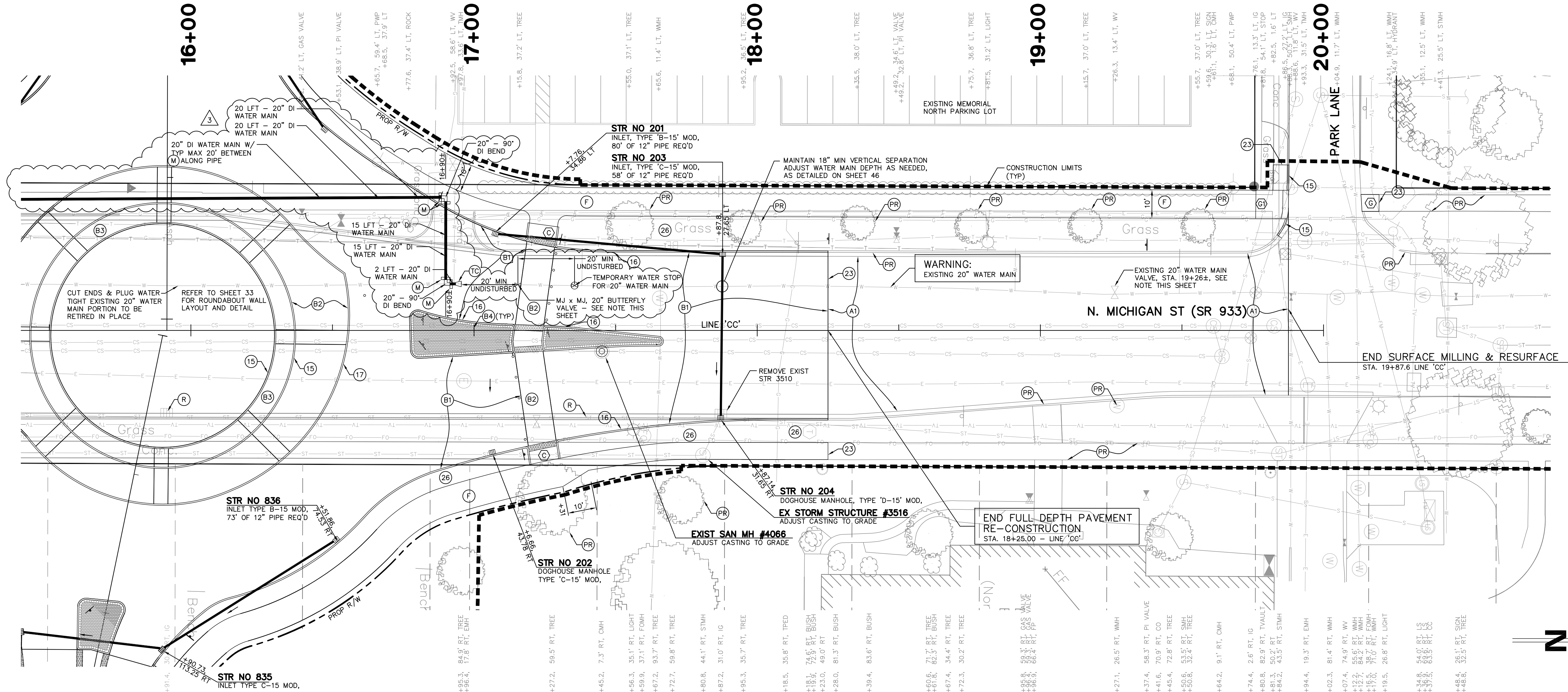


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CHECKED:	B.B.K.	CHECKED:
		M.E.W.

CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

PLAN & PROFILE
LINE 'CC' - MICHIGAN ST (SR 933)

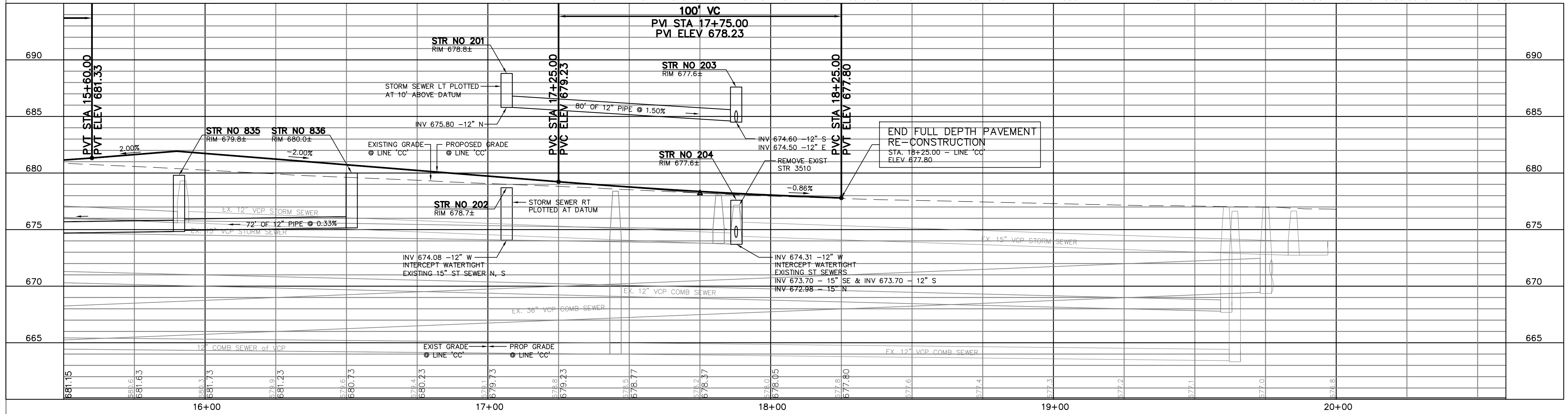
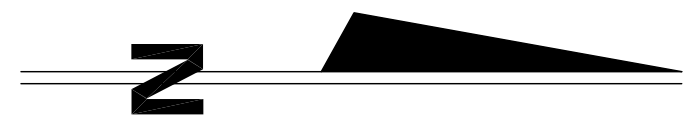
HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	
SURVEY BOOK	SHEETS
	19 of 55
CONTRACT	PROJECT
	114-032B



- LEGEND**
- (A1) 1.5" SURFACE MILLING AND RESURFACE WITH 165#/SYD QC/QA-HMA, 4, 76, SURFACE, 9.5mm, ON TACK COAT OVER MILLED ASPHALT SURFACE
 - (B1) 10" PLAIN PCCP OVER 6" COMPACTED AGGREGATE NO. 53 BASE OVER COMPACTED SUBGRADE
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 - (G) CURB RAMP, CONCRETE, G
 - (G1) CURB RAMP, CONCRETE, G, MODIFIED
 - (P) PROTECT
 - (15) CURB, CONCRETE, 6 IN
 - (16) CURB, INTEGRAL, CONCRETE
 - (17) CURB, INTEGRAL, B, CONCRETE, MODIFIED
 - (23) NEAT LINE SAW CUT
 - (26) SODDING
 - (PR) PROTECT
 - (R) REMOVE

NOTE:

- REFER TO THE LANDSCAPE PLAN FOR PROPOSED GROUND TREATMENTS WITHIN THE CENTER OF THE ROUNDABOUT.
- REFER TO SHEET NO. 25 FOR ROUNDABOUT LAYOUT AND GEOMETRY.



- WATER MAIN LEGEND**
- (M) "MEGALUG" SERIES 1100, OR APPROVED EQUAL, MECHANICAL JOINT RESTRAINT FOR 20" DI PIPE
 - (TC) "JCM 204" STEEL REDUCING COUPLING, OR APPROVED EQUAL, FOR 20" PIPE

WATER MAIN NOTES:

- MAINTAIN EXISTING 20" WATER MAIN DEPTH FOR COVER.
- THE CONTRACTOR SHALL DEMONSTRATE TO THE CITY THAT THE EXISTING 20" WATER MAIN VALVE AT STATION 19+26± IS SUFFICIENTLY OPERATIONAL OR NOT. IF THE EXISTING VALVE IS SUFFICIENTLY OPERATIONAL, THE PROPOSED NORTH 20" BUTTERFLY VALVE SHALL NOT BE REQUIRED, AND THE TEMPORARY 20" WATER STOP, SHALL BE LOCATED A MINIMUM 20' OF UNDISTURBED SOIL NORTH OF THE PROPOSED WATER MAIN BEND CONNECTION TO EXISTING WATER MAIN.

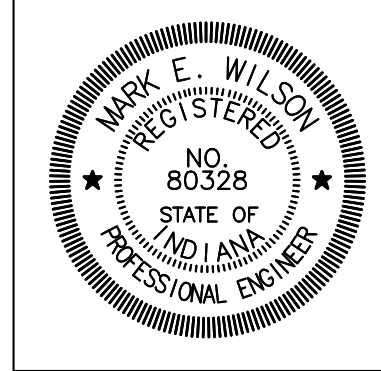
REV	DESCRIPTION	BY	DATE
3	WATER MAIN REVISIONS PER CITY OF SOUTH BEND	MEW	2/16/2016
1	WATER MAIN REVISIONS PER CITY OF SOUTH BEND	MEW	1/16/2016

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DESIGN ENGINEER DATE

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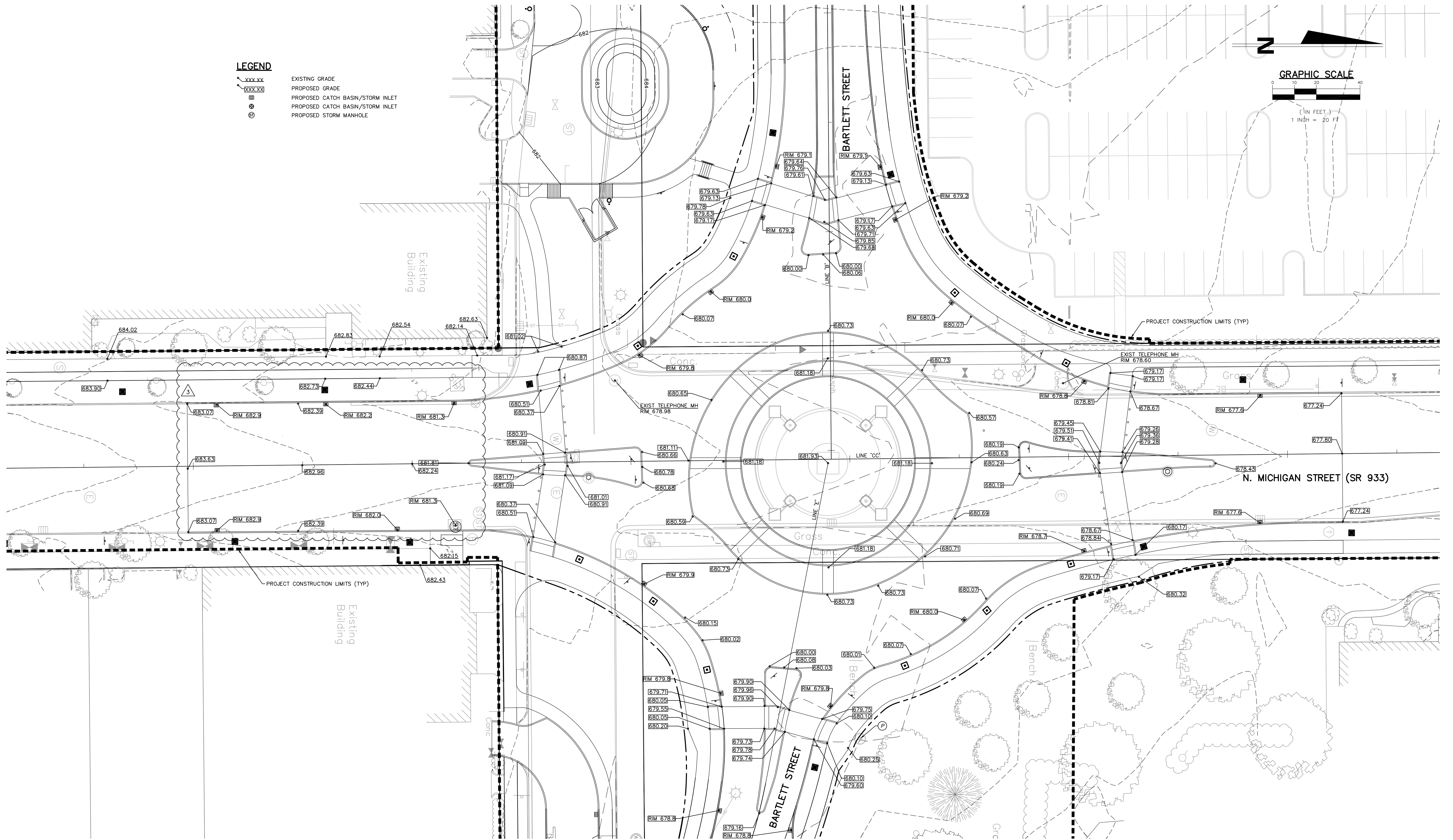
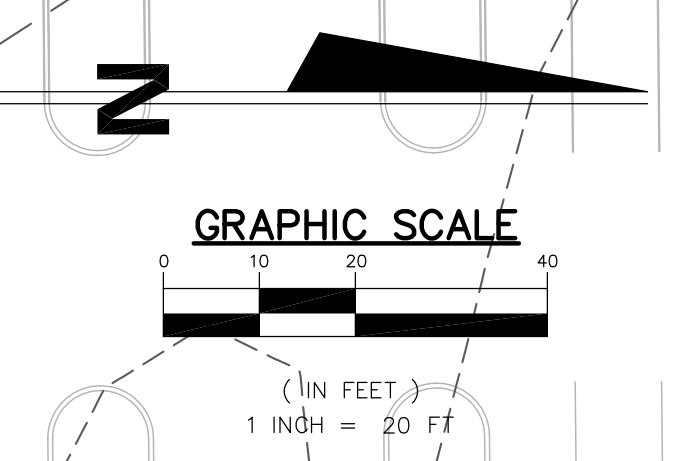
CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

PLAN & PROFILE
LINE 'CC' - MICHIGAN ST (SR 933)

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	
SURVEY BOOK	SHEETS
	20 of 55
CONTRACT	PROJECT
	114-032B

LEGEND

- xxx.xx EXISTING GRADE
- xxx.xx PROPOSED GRADE
- ☐ PROPOSED CATCH BASIN/STORM INLET
- ⊕ PROPOSED CATCH BASIN/STORM INLET
- ⊕ PROPOSED STORM MANHOLE



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 DESIGN ENGINEER DATE

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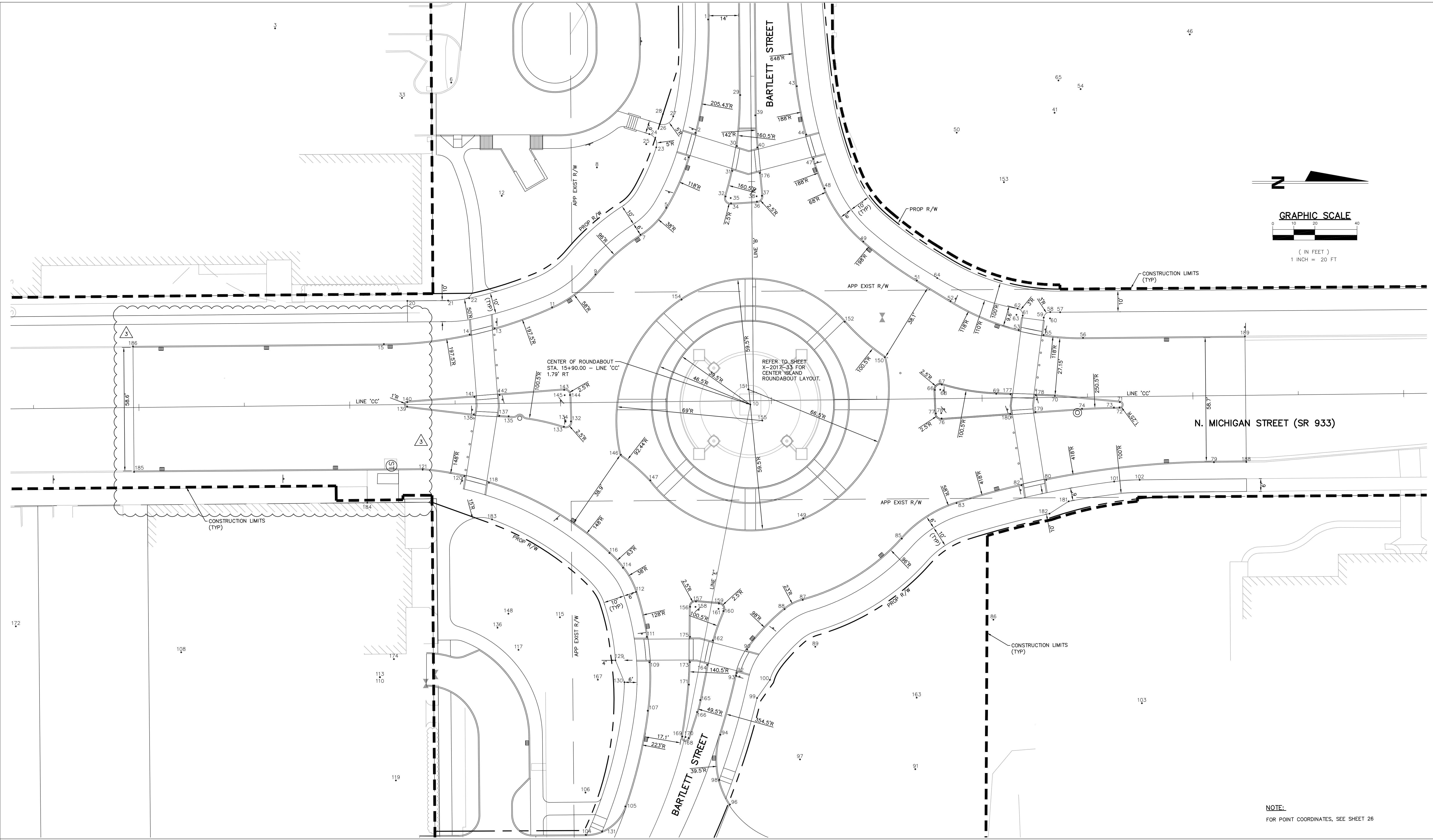
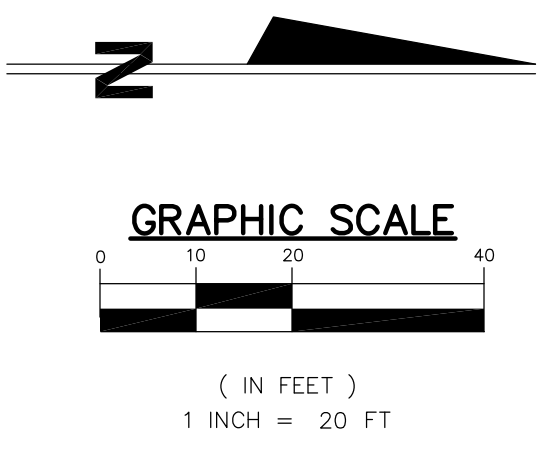
CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

SPOT ELEVATION DETAIL

REV.	DESCRIPTION	BY	DATE
1	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT	MEW	2/12/2016

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HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	DESIGNATION
VERTICAL SCALE	-
SURVEY BOOK	SHEETS
-	24 of 55
CONTRACT	PROJECT
-	114-032B



NOTE:
FOR POINT COORDINATES, SEE SHEET 26

REV.	DESCRIPTION	BY	DATE
3	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT	MEW	2/12/2016

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DESIGN ENGINEER *Mark E. Wilson* DATE 2/12/2016

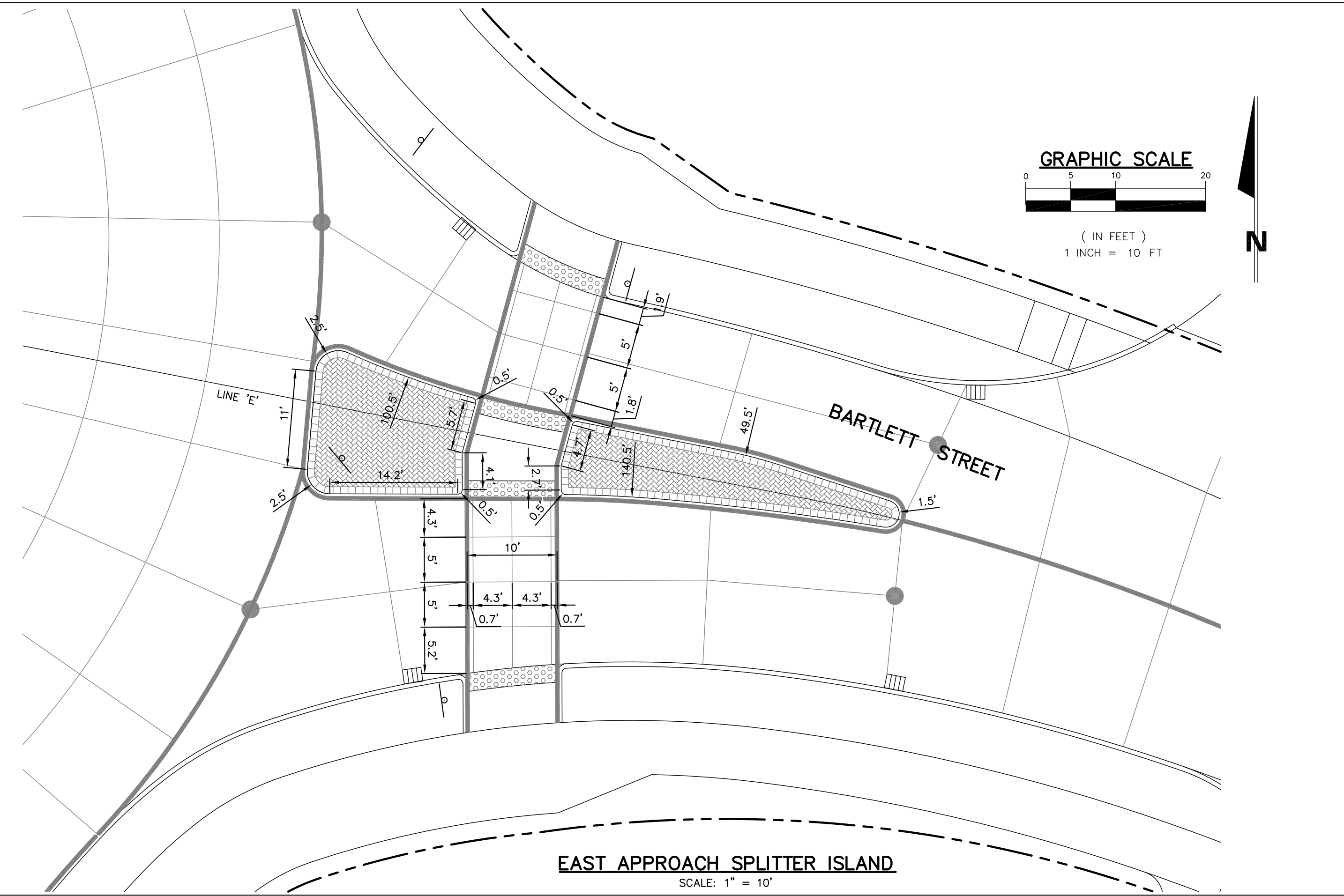
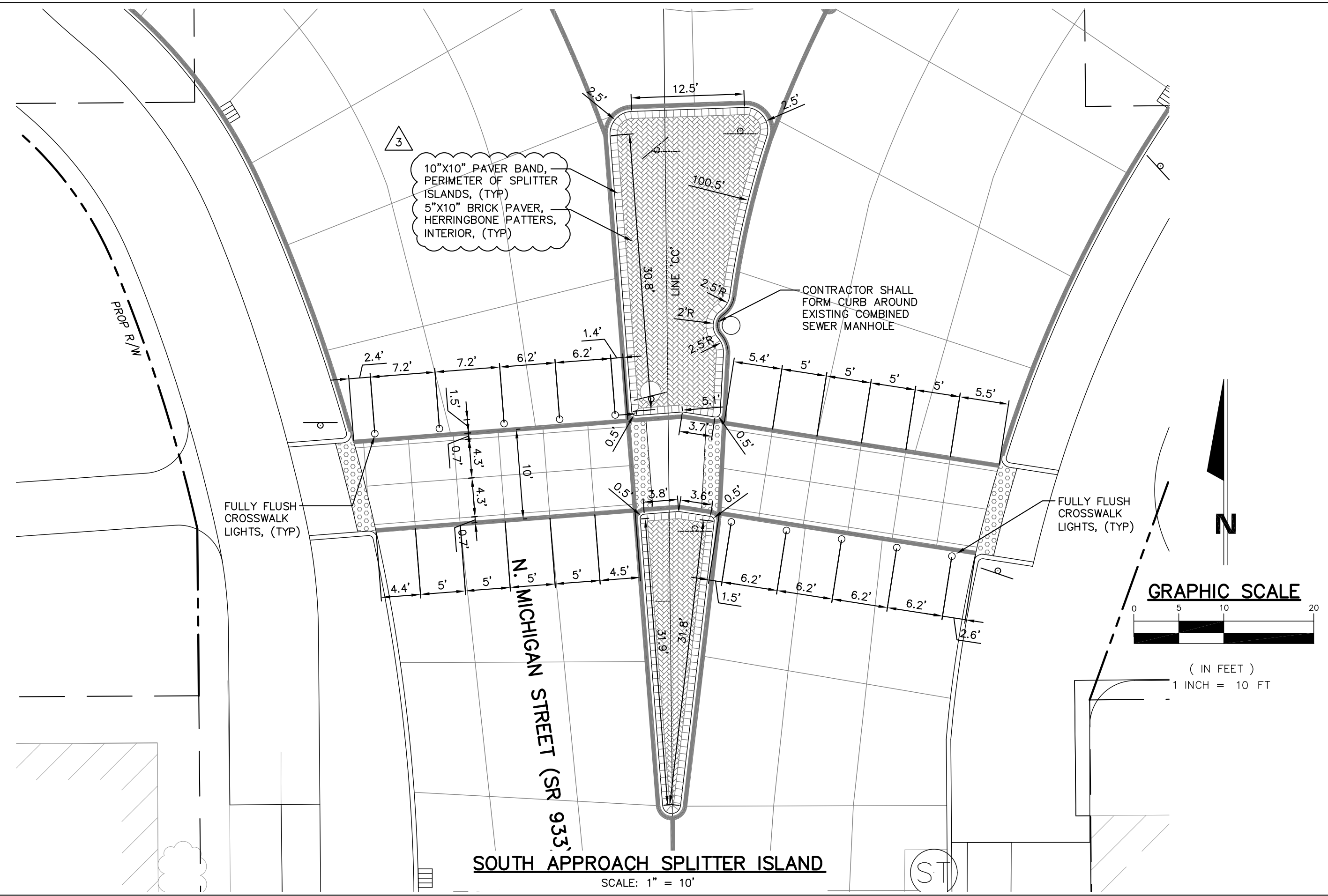
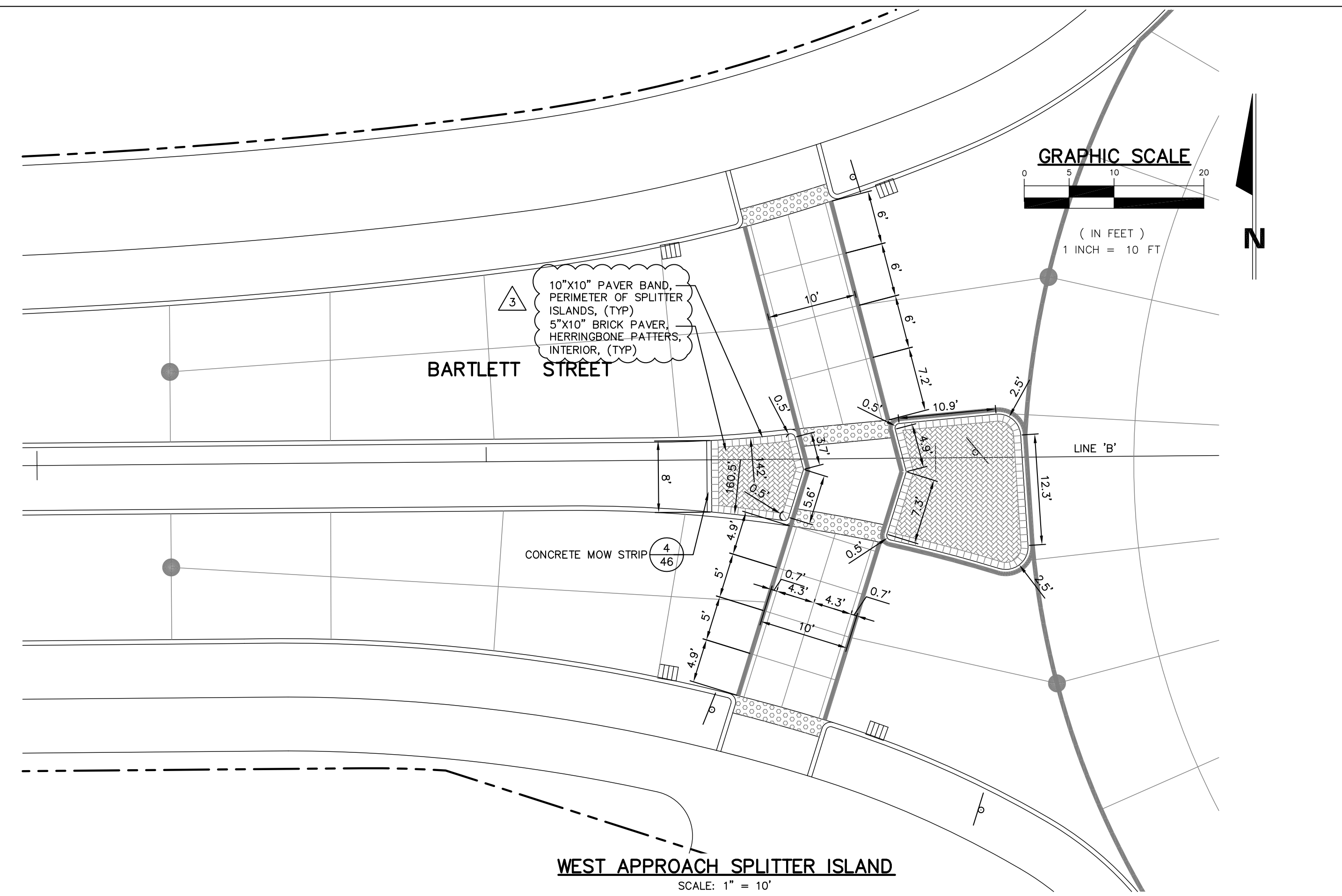
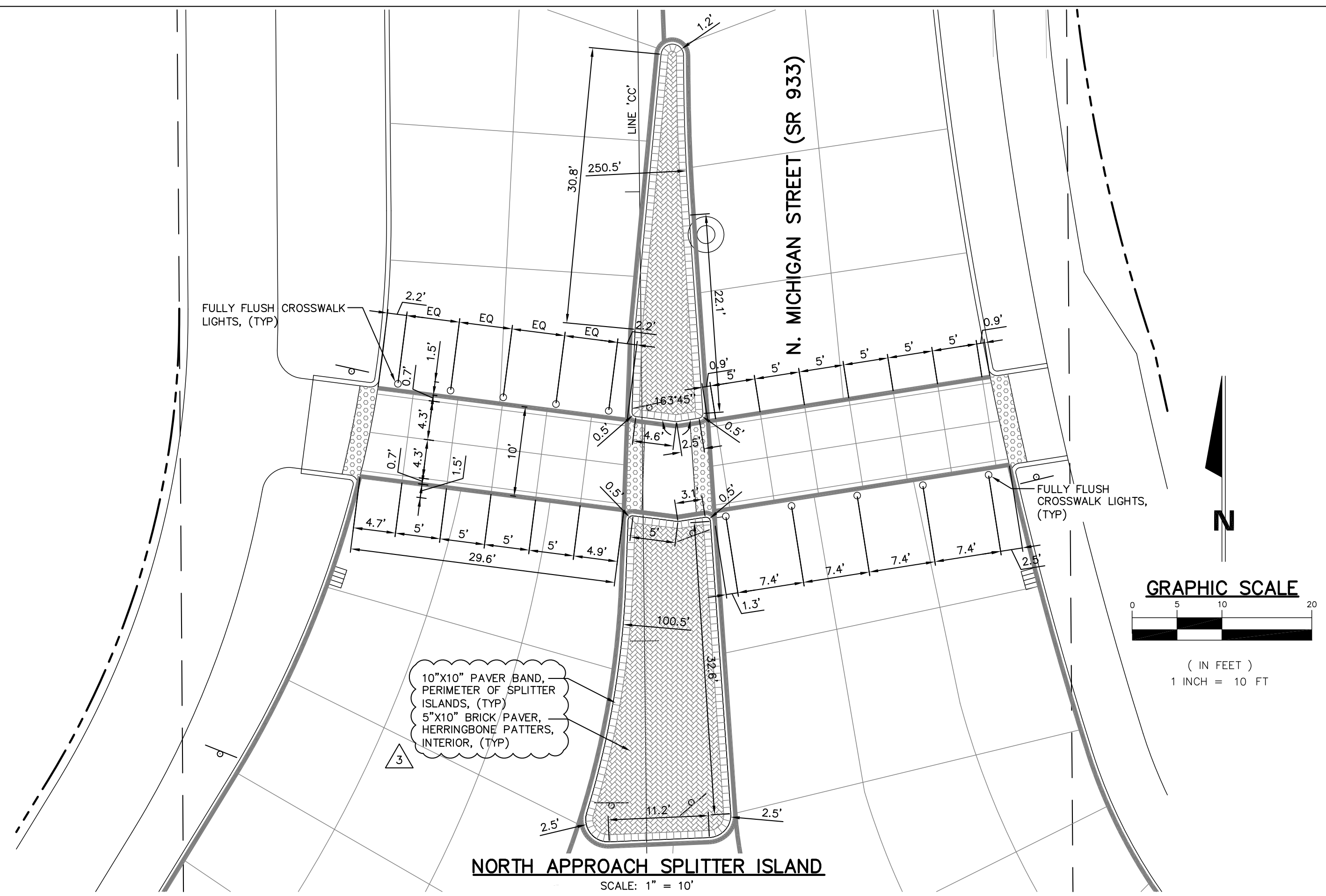
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CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

GEOMETRIC PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	DESIGNATION
VERTICAL SCALE	-
SURVEY BOOK	SHEETS
-	25 of 55
CONTRACT	PROJECT
-	114-032B



3	REVISION TO SPLITTER ISLAND PAVEMENT TYPE	MEW	2/12/2016
2	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT	MEW	2/12/2016
REV.	DESCRIPTION	BY	DATE

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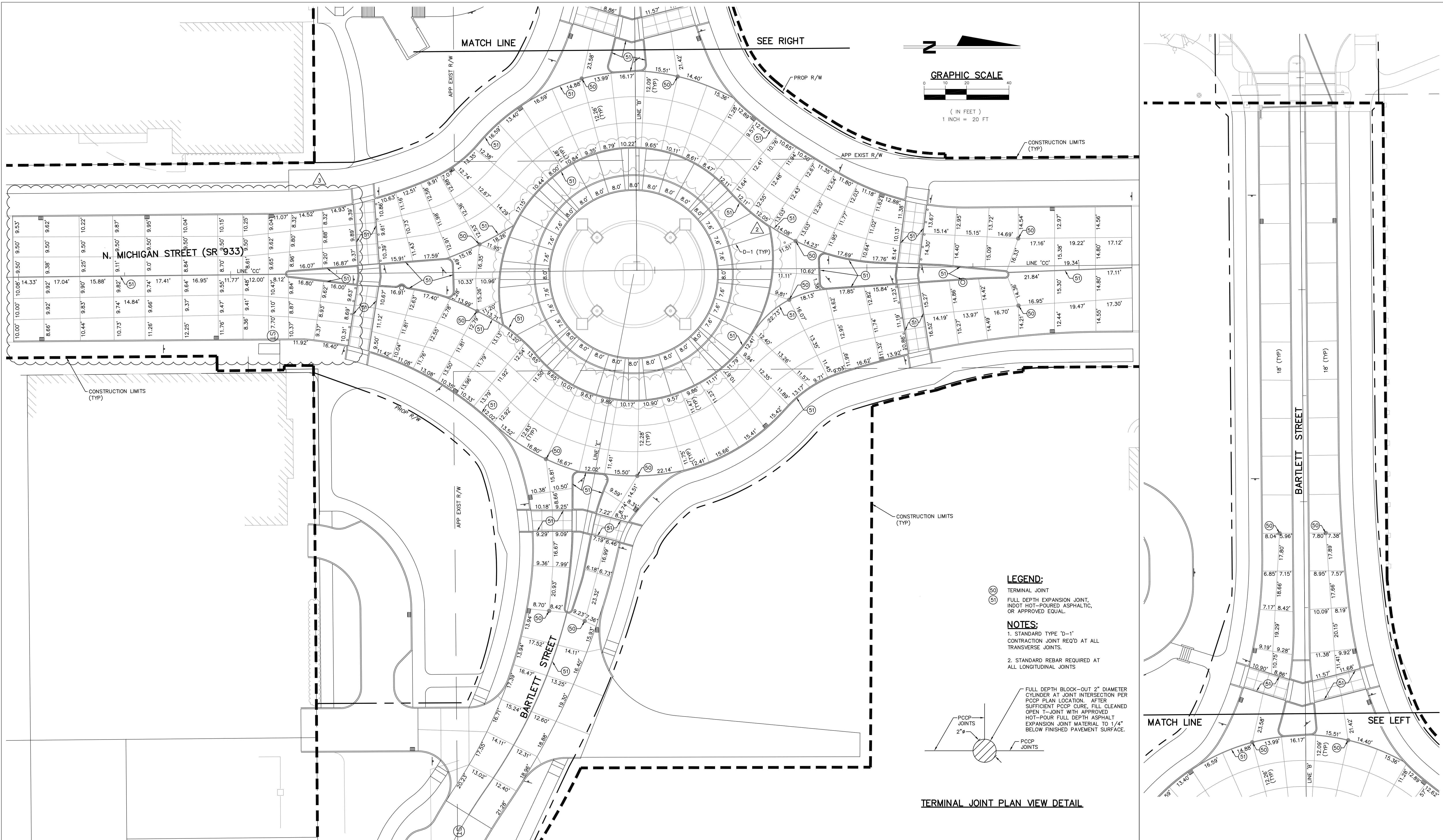


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DESIGNED:	C.R.C.	DATE
DRAWN:	R.J.H.	
CHECKED:	B.B.K.	
	M.E.W.	

CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

SPLITTER ISLANDS DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
SURVEY BOOK	SHEETS
	31 of 55
CONTRACT	PROJECT
	114-032B

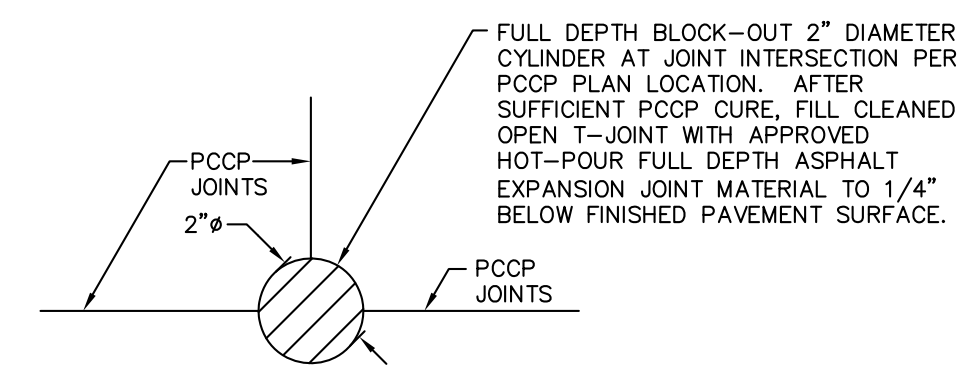


LEGEND:

- (50) TERMINAL JOINT
- (51) FULL DEPTH EXPANSION JOINT, INDOT HOT-POURED ASPHALTIC, OR APPROVED EQUAL

NOTES:

1. STANDARD TYPE 'D-1' CONTRACTION JOINT REQ'D AT ALL TRANSVERSE JOINTS.
2. STANDARD REBAR REQUIRED AT ALL LONGITUDINAL JOINTS



TERMINAL JOINT PLAN VIEW DETAIL

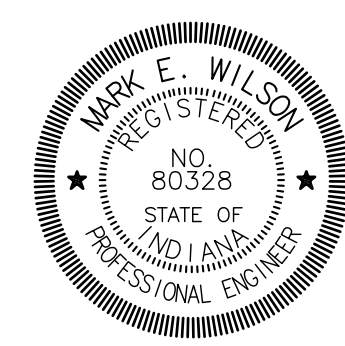
REV.	DESCRIPTION	BY	DATE
3	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT	MEW	2/12/2016
2	ADD EXPANSION JOINT AT INNER CIRCLE	MEW	1/21/2016

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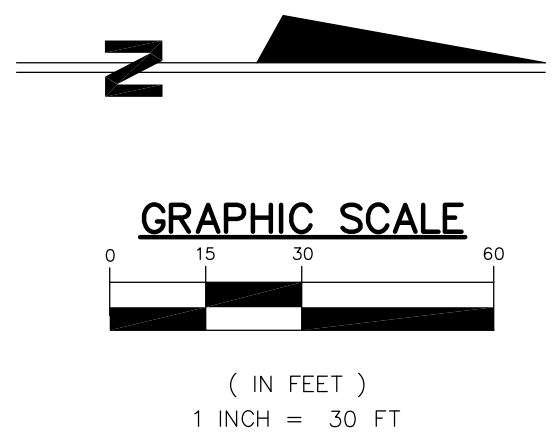
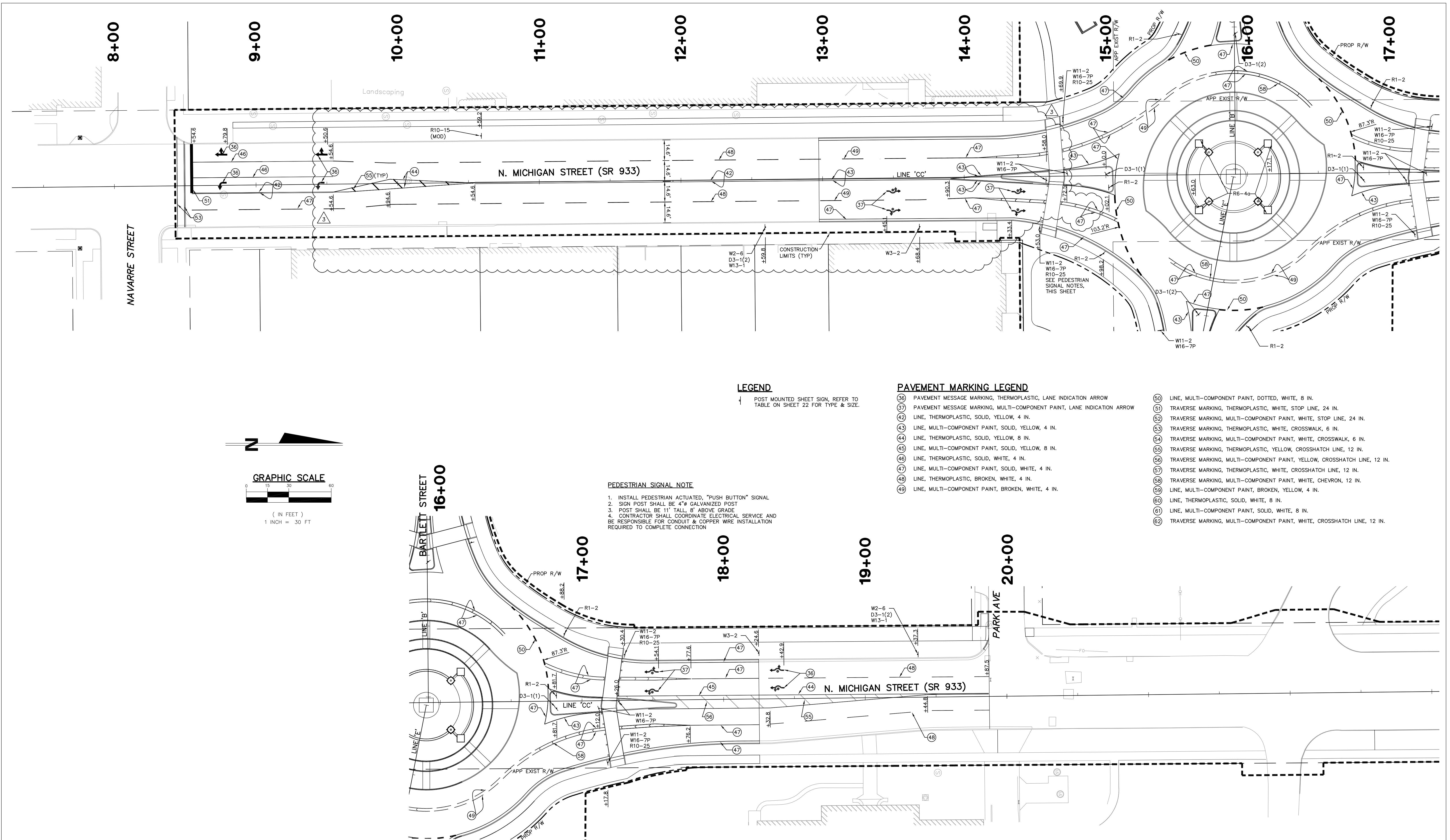


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CHECKED:	B.B.K.	
	M.E.W.	

CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

JOINT LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
SURVEY BOOK	SHEETS
	32 of 55
CONTRACT	PROJECT
	114-032B



LEGEND

↑ POST MOUNTED SHEET SIGN, REFER TO TABLE ON SHEET 22 FOR TYPE & SIZE.

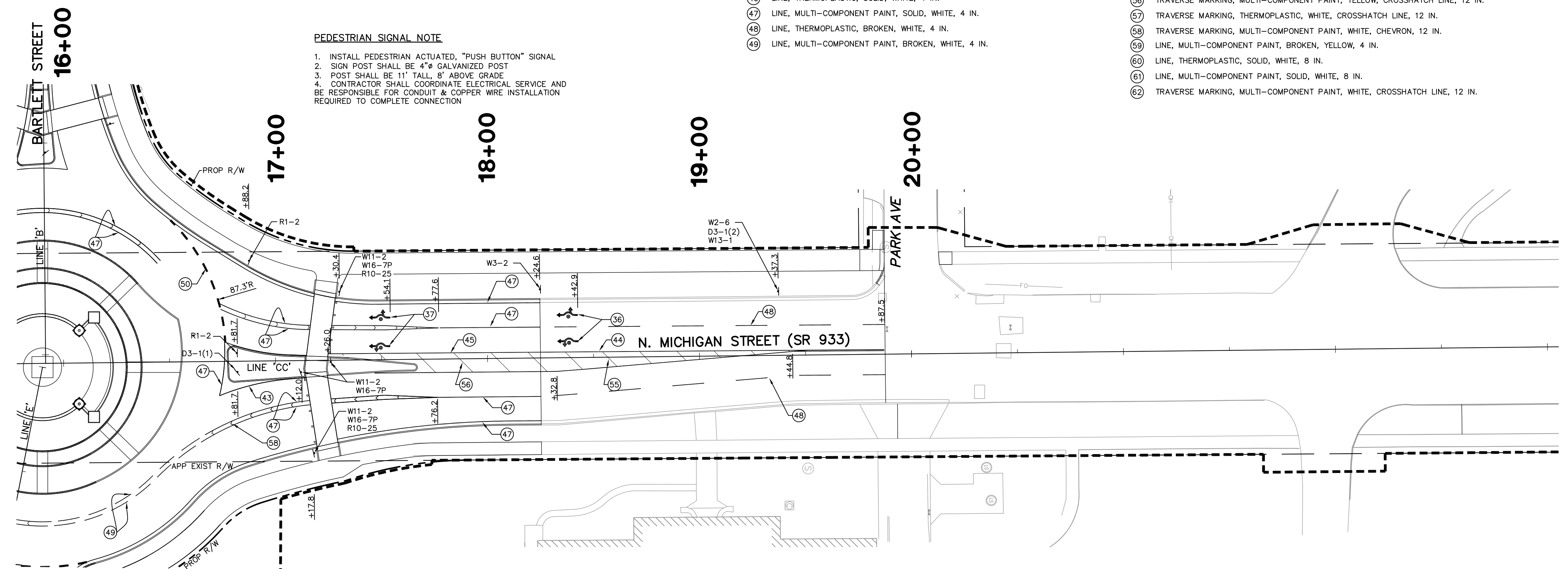
PAVEMENT MARKING LEGEND

- 36 PAVEMENT MESSAGE MARKING, THERMOPLASTIC, LANE INDICATION ARROW
- 37 PAVEMENT MESSAGE MARKING, MULTI-COMPONENT PAINT, LANE INDICATION ARROW
- 42 LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.
- 43 LINE, MULTI-COMPONENT PAINT, SOLID, YELLOW, 4 IN.
- 44 LINE, THERMOPLASTIC, SOLID, YELLOW, 8 IN.
- 45 LINE, MULTI-COMPONENT PAINT, SOLID, YELLOW, 8 IN.
- 46 LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.
- 47 LINE, MULTI-COMPONENT PAINT, SOLID, WHITE, 4 IN.
- 48 LINE, THERMOPLASTIC, BROKEN, WHITE, 4 IN.
- 49 LINE, MULTI-COMPONENT PAINT, BROKEN, WHITE, 4 IN.

- 50 LINE, MULTI-COMPONENT PAINT, DOTTED, WHITE, 8 IN.
- 51 TRAVERSE MARKING, THERMOPLASTIC, WHITE, STOP LINE, 24 IN.
- 52 TRAVERSE MARKING, MULTI-COMPONENT PAINT, WHITE, STOP LINE, 24 IN.
- 53 TRAVERSE MARKING, THERMOPLASTIC, WHITE, CROSSWALK, 6 IN.
- 54 TRAVERSE MARKING, MULTI-COMPONENT PAINT, WHITE, CROSSWALK, 6 IN.
- 55 TRAVERSE MARKING, THERMOPLASTIC, YELLOW, CROSSHATCH LINE, 12 IN.
- 56 TRAVERSE MARKING, MULTI-COMPONENT PAINT, YELLOW, CROSSHATCH LINE, 12 IN.
- 57 TRAVERSE MARKING, THERMOPLASTIC, WHITE, CROSSHATCH LINE, 12 IN.
- 58 TRAVERSE MARKING, THERMOPLASTIC, YELLOW, CHEVRON, 12 IN.
- 59 LINE, MULTI-COMPONENT PAINT, BROKEN, YELLOW, 4 IN.
- 60 LINE, THERMOPLASTIC, SOLID, WHITE, 8 IN.
- 61 LINE, MULTI-COMPONENT PAINT, SOLID, WHITE, 8 IN.
- 62 TRAVERSE MARKING, MULTI-COMPONENT PAINT, WHITE, CROSSHATCH LINE, 12 IN.

PEDESTRIAN SIGNAL NOTE

1. INSTALL PEDESTRIAN ACTUATED, "PUSH BUTTON" SIGNAL
2. SIGN POST SHALL BE 4" GALVANIZED POST
3. POST SHALL BE 11" TALL, 8" ABOVE GRADE
4. CONTRACTOR SHALL COORDINATE ELECTRICAL SERVICE AND BE RESPONSIBLE FOR CONDUIT & COPPER WIRE INSTALLATION REQUIRED TO COMPLETE CONNECTION



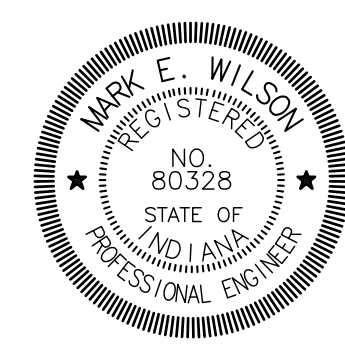
REV.	DESCRIPTION	MEW	DATE
	SHIFT BIKE LANES OFF OF MICHIGAN STREET, SOUTH OF ROUNDABOUT		

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RECOMMENDED FOR APPROVAL	<i>Mark E. Wilson</i>	2/12/2016
DESIGNED:	C.R.C.	DATE
DRAWN:	R.J.H.	
CHECKED:	B.B.K.	
CHECKED:	M.E.W.	

CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

PAVEMENT MARKING & SIGNAGE
MICHIGAN STREET

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	
VERTICAL SCALE	DESIGNATION
SURVEY BOOK	SHEETS
	36 of 55
CONTRACT	PROJECT
	114-032B

LEGEND

- EXISTING LIGHT FIXTURE - TO BE REMOVED
- NEW LIGHT FIXTURE
- NEW LIGHT FIXTURE - SEE SCHEDULE ON SHEET 34
- LIGHT FIXTURE DESIGNATION - SEE FIXTURE SCHEDULE ON SHEET 34
- EXIST IN GROUND VALVES TO REMAIN U.O.N.
- SEE SHEET 34 FOR KEYED NOTES
- STREET LIGHTING CIRCUIT NUMBER IN NEW TESCO BOX
- POST MOUNTED RECEPTACLE IN GROUND
- 1 = # 8 CONDUCTORS, FOR VOLTAGE DROP
2 = # 10 CONDUCTORS, FOR VOLTAGE DROP
3 = # 12 CONDUCTORS
- XXXX-XXX

ELECTRICAL KEYED NOTES DENOTED BY

1. DE-ENERGIZE, REMOVE LIGHT FIXTURE, CONCRETE BASE AND ANCHOR BOLTS TO BE REMOVED (18" BELOW GRADE) IF NOT IMPACTED BY NEW BASE, AND INFILL WITH GRANULAR FILL. TURN LIGHT FIXTURES OVER TO CITY. COORDINATE WITH CITY.
2. EXISTING STREET LIGHTS AND BASES TO BE REMOVED BY AEP.
3. DE-ENERGIZE, REMOVE EXISTING SIGNAGE, BASE AND ANCHOR BOLTS. VERIFY WITH HOSPITAL IF SIGNAGE IS TO BE TURNED OVER TO THEM OR DEMOLISHED AND HAULED AWAY. FOUNDATION TO BE REMOVED A MINIMUM OF 18" BELOW GRADE.
4. EXISTING HAND HOLD BOX AND POWER. EXTEND NEW CONDUIT AND CONDUCTORS FROM EXISTING PULL BOX TO NEW LIGHTS OR HAND HOLD BOXES. TIE INTO EXISTING CIRCUITS AS SHOWN.
5. PROVIDE NEW 24" x 24" x 18" INDOT HAND HOLD WITH BOLTED LID, CONDUIT, AND CONDUCTORS.
6. DE-ENERGIZE, REMOVE EXISTING TRAFFIC CONTROL CABINET. COORDINATE WITH CITY AND DATA COMPANY WITH REMOVAL FOUNDATION AND CONDUITS ARE TO BE REMOVED ALSO. INFILL WITH GRANULAR FILL.
7. DE-ENERGIZE, REMOVE EXISTING TRAFFIC LIGHTS, POLES, FOUNDATIONS, AND ANCHOR BOLTS. POLES, ARMS AND LIGHTS TO BE TURNED OVER TO THE CITY. VERIFY LOCATION OF STORAGE WITH THE CITY.
8. PROVIDE NEW CONCRETE BASE FOR NEW LIGHTS. SEE DETAIL 9 ON SHEET 40.
9. PROVIDE 2" CONDUIT FOR ELECTRICAL USAGE IN ISLAND.
10. DE-ENERGIZE EXISTING CONDUCTORS FOR EXISTING STREET LIGHTING TO BE REMOVED. REMOVE EXISTING CONDUCTORS WHEN NEW LIGHTS ARE INSTALLED AND READY FOR USE.
11. STREET LIGHTS ON NORTH SIDE OF BARTLETT STREET SHALL BE TIED INTO THE TWO EXISTING CIRCUITS, ALTERNATING LIGHT FIXTURES. STREET LIGHTS ON THE SOUTH SIDE OF BARTLETT STREET SHALL BE ALSO TIED INTO THE EXISTING CIRCUITS, ALTERNATING LIGHT FIXTURES. POWER FOR THE NEW LIGHTS SHALL BE FROM EXISTING PULL BOX AT EASTERN END OF CONSTRUCTION LIMITS ON BARTLETT STREET.
12. STREET LIGHTS ON WEST SIDE OF MICHIGAN STREET SHALL BE ON TWO SEPARATE CIRCUITS. ALTERNATING LIGHT FIXTURES. STREET LIGHTS ON THE EAST SIDE OF MICHIGAN STREET SHALL BE ON TWO SEPARATE CIRCUITS, ALTERNATING LIGHT FIXTURES. POWER TO COME FROM NEW TESCO BOX ON BARTLETT STREET.
13. CONTRACTOR TO PROTECT EXISTING RECEPTACLES OR LIGHTS.
14. FLASHING CROSSING WALK SIGN. PROVIDE POWER TO SIGNS. PROVIDE A MINIMUM 1" CONDUIT UNLESS OTHERWISE NOTED. SCHEDULE 80 UNDER ALL ROADWAYS, ALLEYS AND APPROACHES. SCHEDULE 40 UNDER SIDEWALKS AND LAWN AREAS.
15. NEW TESCO INDUSTRIAL CONTROL PANEL AS APPROVED BY CITY OF SOUTH BEND.
16. PROVIDE NEW 3 CONDUITS AND CONDUCTORS BETWEEN PULL BOXES.
17. PROVIDE A COMPLETE WORKING SYSTEM. CONDUCTORS (4) # 4, (1) # 4 GND. (4 COLOR) IN 2" CONDUIT. ALL CONDUIT SHALL BE PVC SCHEDULE 80.
18. REMOVE AND RELOCATE EXISTING TREE RECEPTACLES. RECEPTACLES ARE TO BE RELOCATED OUT OF THE NEW SIDEWALK LOCATION AND NEAR THE TREE. COORDINATE WITH HOSPITAL STAFF.

PROJECT COORDINATION NOTES:

1. CONTRACTOR SHALL COORDINATE REMOVAL AND DE-ENERGIZING OF ALL LIGHT FIXTURES WITH PHASING PLANS.
2. LIGHTS SHALL BE ACTIVE AT THE COMPLETION OF EACH PHASE OR PROVIDE TEMPORARY LIGHTING. AT NO TIME DURING THE PROJECT SHALL ALL OF THE STREET LIGHTS BE DE-ENERGIZED.
3. NEW STREET LIGHTS SHALL BE INSTALLED AND IN WORKING ORDER PRIOR TO REMOVAL OF EXISTING STREET LIGHTS IN EACH PHASE.
4. COORDINATE THE REMOVAL AND INSTALLATION OF PARKING LOT AND PEDESTRIAN LIGHTS PER PHASING PLANS TO ENSURE ADEQUATE LIGHTING IS PROVIDED AT ALL TIMES.
5. CONTRACTOR SHALL COORDINATE WITH HOSPITAL STAFF TO DE-ENERGIZE PANELS WORK INSIDE OF BUILDING.

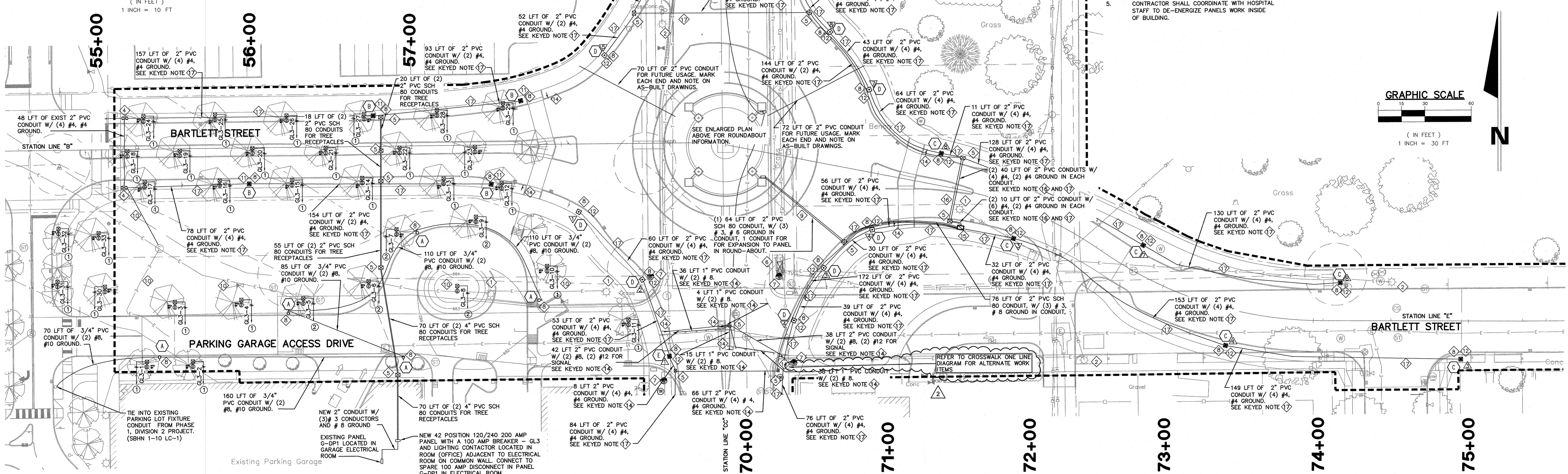
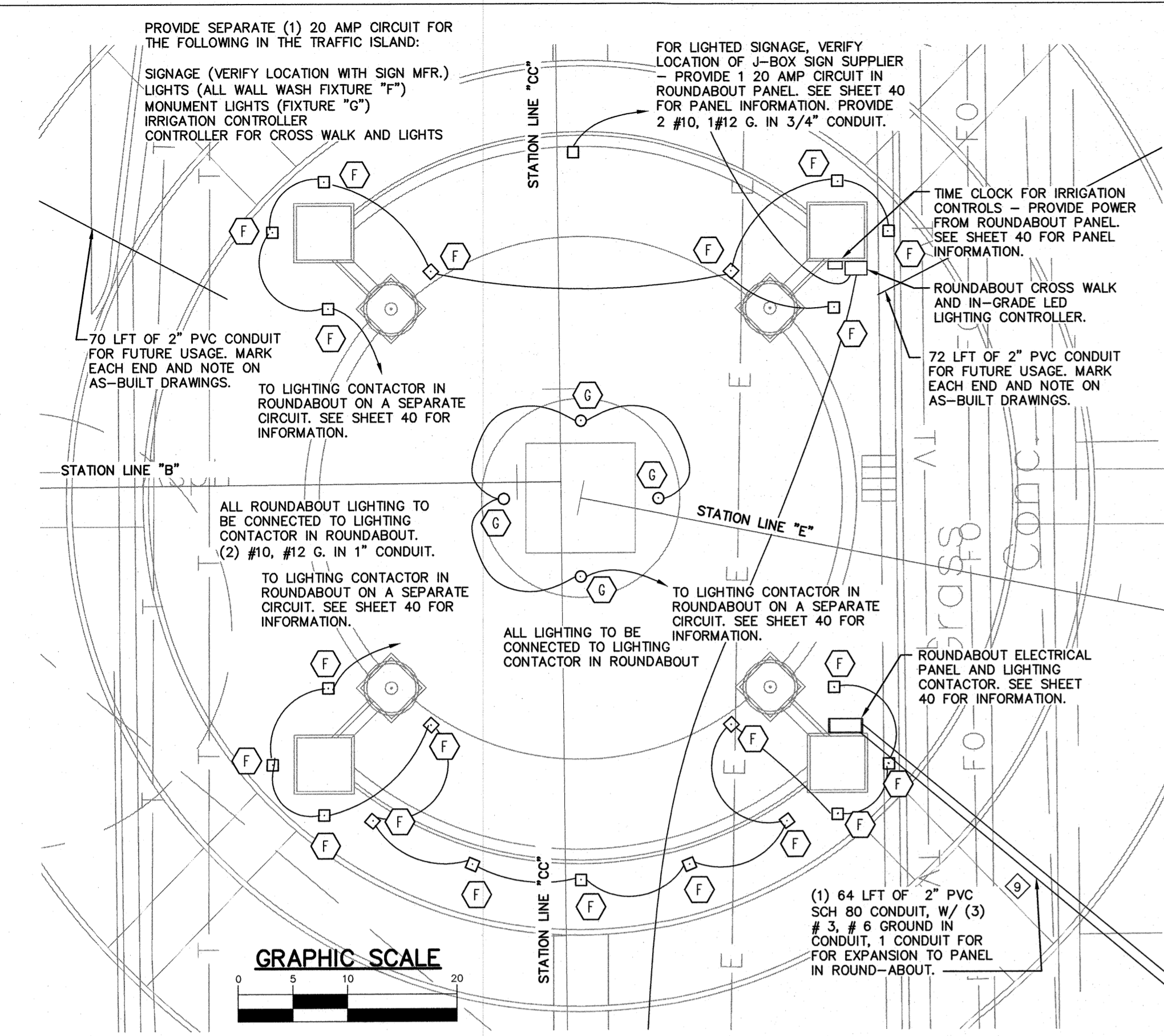
PLAN GENERAL NOTES:

1. PROVIDE POST MOUNTED RECEPTACLE IN GROUND. REFER TO DETAIL 10/40.
2. CONNECT TO CIRCUIT NOTED THROUGH LIGHTING CONTACTOR INDICATED.
3. EXISTING FIXTURE TO BE REMOVED, RELOCATED AND RE-LAMPED PER PLANS.
4. DISCONNECT AND REMOVE EXISTING POLE AND POLE BASE AS SHOWN. RELOCATE POLES BETWEEN WALK AND CURB TO AVOID NEW SIDEWALK. EXTEND EXISTING OR PROVIDE NEW CONDUIT/WIRING AS REQUIRED TO CIRCUITS SHOWN.
5. REFER TO SHEETS 39 AND 40 FOR ADDITIONAL POWER AND SYSTEM REQUIREMENTS AND DETAILS.
6. PROVIDE NEMA 3R JUNCTION BOX FOR EXTERIOR SIGNAGE. COORDINATE EXACT LOCATION OF BOX PRIOR TO INSTALLATION.
7. ALL SPLICES TO BE IN LIGHT BASES NOT IN HAND HOLDS. - NO SPLICES SHALL BE UNDERGROUND OR IN HAND HOLDS EXCEPT CROSS WALK CONDUCTORS.

LIGHTING SCHEDULE - DENOTED BY

MARK	QTY	MANUFACTURER*	CATALOG NO.	LAMP	NOTES
A	5	KIM LIGHTING	1A-CCS21A3E35-120LSK00X-WH-6" ARM WITH RTSP16-6.6-11-WHT-DM10-BC-PSAB	SINGLE HEAD LED 10258 LAMP LUMENS, 5,000K TYPE III DISTRIBUTION	SINGLE HEAD FIXTURE WITH 16 FT POLE MOUNTED, COLOR WHITE (MATCH EXISTING) (CONTRACTOR TO VERIFY VOLTAGE PRIOR TO ORDERING FIXTURE).
B	4	BEACON	WIN40/AF/60NB-136/3K/UNV/DIR5/PT/BBT (2) AA-0024/5MTC/BA/BBT CENB/F/16/5M/TN/GFI-U/BBT	LED 3,000K TYPE V DISTRIBUTION	WINDSOR SERIES SINGLE LED FIXTURE WITH 16 FT POLE, ALUMINUM FLUTED, SEMI RECESSED DUPLEX GFI RECEPT. WITH IN-USE WEATHERPROOF COVER WITH DOUBLE BANNER ARMS. COLOR BLACK
C	12	BEACON	WIN40/AF/60NB-136/3K/UNV/DIR5/PT/BBT (2) AA-0024/5MTC/BA/BBT CENB/F/16/5M/TN/GFI-U/BBT	LED 3,000K TYPE V DISTRIBUTION	WINDSOR SERIES SINGLE LED FIXTURE WITH 16 FT POLE, ALUMINUM FLUTED, SEMI RECESSED DUPLEX GFI RECEPT. WITH IN-USE WEATHERPROOF COVER WITH SINGLE BANNER ARMS. COLOR BLACK
D	12	BEACON	WIN40/AF/60NB-136/3K/UNV/DIR5/PT/BBT (2) AA-0024/5MTC/BA/BBT CENB/F/16/5M/TN/GFI-U/BBT	LED 3,000K TYPE III DISTRIBUTION	WINDSOR SERIES TWIN HEAD LED FIXTURE WITH 16 FT POLE, ALUMINUM FLUTED, SEMI RECESSED DUPLEX GFI RECEPT. WITH IN-USE WEATHERPROOF COVER WITH SINGLE BANNER ARMS. COLOR BLACK
E	29	BEACON	WIN40/AF/60NB-136/3K/UNV/DIR5/PT/BBT (2) AA-0024/5MTC/BA/BBT CENB/F/16/5M/TN/GFI-U/BBT	LED 3,000K TYPE V DISTRIBUTION	WINDSOR SERIES SINGLE LED FIXTURE WITH 16 FT POLE, ALUMINUM FLUTED, SEMI RECESSED DUPLEX GFI RECEPT. WITH IN-USE WEATHERPROOF COVER WITH SINGLE BANNER ARMS. COLOR BLACK
F	21	KIM LIGHTING	EL218F3-BL3KUV-BL SM18-BL-P	LED 3,000K MICRO FLOOD LIGHT	DIE-CAST ALUMINUM LED MICRO FLOOD 955 LUMENS. COLOR BLACK STANCHION MOUNT - CAST ALUMINUM WITH 1/2" NPSM FIXTURE MOUNT, COLOR BLACK. SEE DETAIL 5/40 FOR POST INSTALLATION.
G	4	BEACON (FIXTURE)	CDT/24NB/55/3K/5x3/UNV/BBT/HV	LED 3,000K CADET FLOOD LIGHT	BEACON DIE-CAST ALUMINUM LED NARROW SPOT 5,000 LUMENS. COLOR BLACK. KIM LIGHTING STANCHION MOUNT - CAST ALUMINUM WITH 1/2" NPSM FIXTURE MOUNT, COLOR BLACK. SEE DETAIL 5/40 FOR POST INSTALLATION.
H	4	TRAFFIC SAFETY CORPORATION	SM18/BL/P	LED	IN-ROADWAY WARNING LIGHT SYSTEM. SEE DETAILS ON SHEET 31 AND 40

*NOTE: LIGHTING MANUFACTURER SHALL BE PER PLANS, OR APPROVED EQUAL. CONTRACTOR TO NOTE LEAD TIMES FOR THESE FIXTURES MAY BE LONG. CONTRACTOR MAY HAVE TO START ORDERING PROCESS AS SOON AS CONTRACTS ARE SIGNED.
AT NO TIME CAN ALL OF THE STREET LIGHTS BE NOT WORKING. COORDINATE WITH AEP.



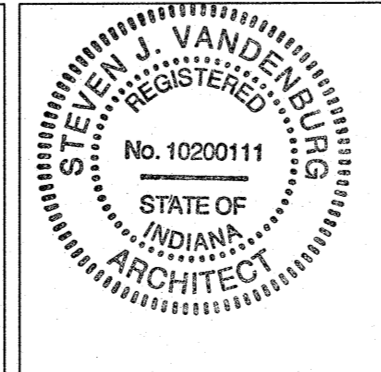
REV.	DESCRIPTION	BY	DATE
1	REVISED LIGHT FIXTURE HEADS - QUANTITY OF LIGHTS - SEE FIXTURE SCHEDULE	SV	2/11/2016
2	CROSSWALK SYSTEM AS ALTERNATE WORK ITEM	SV	2/03/2016

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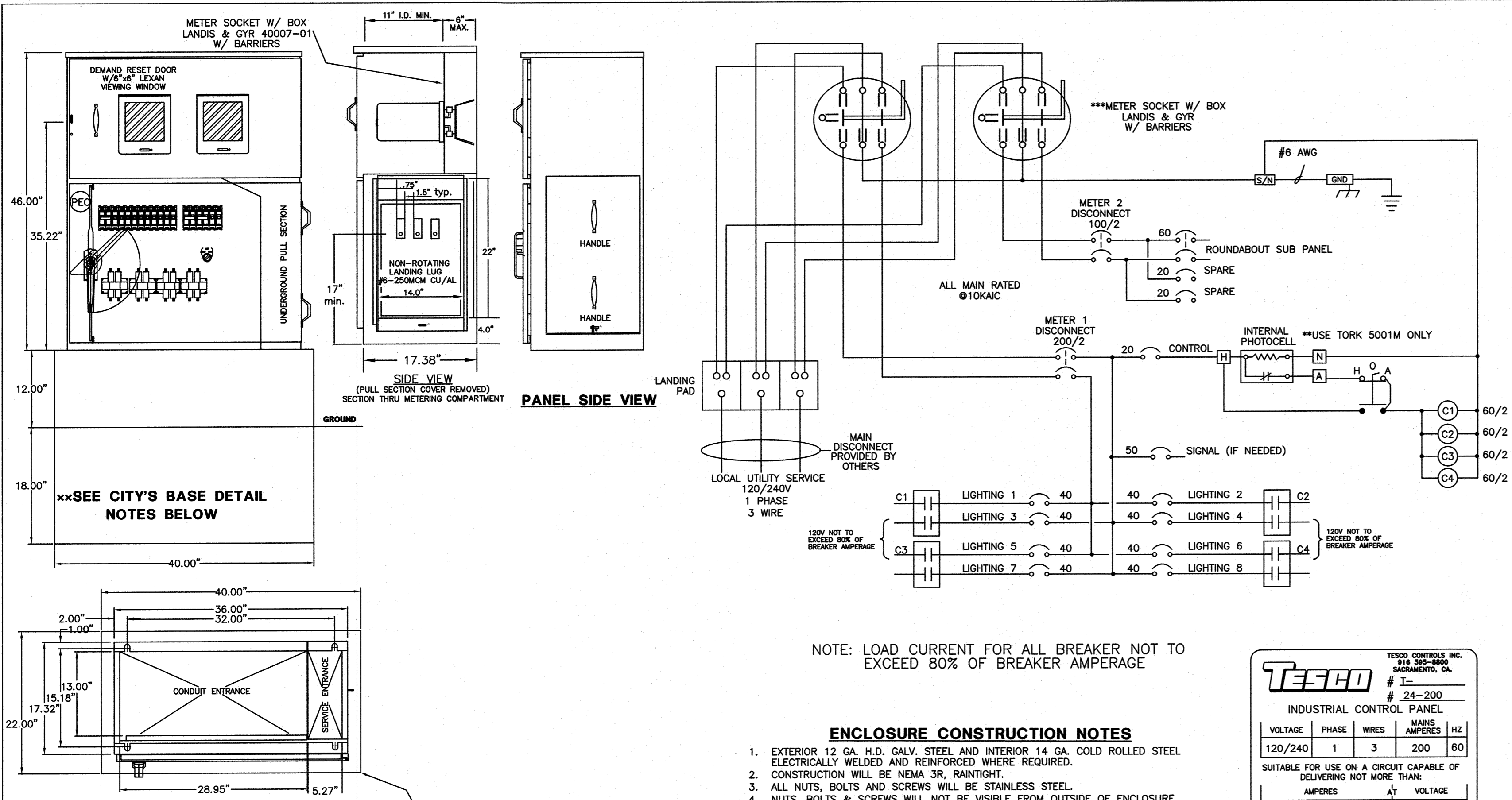
RECOMMENDED FOR APPROVAL *St. W. W. W. W. W.* 2-11-16
DESIGN ENGINEER DATE

DESIGNED: C.R.C. DRAWN: R.J.H.
CHECKED: B.B.K. CHECKED: M.E.W.

CITY OF SOUTH BEND
BARTLETT ST IMPROVEMENTS PHASE II

SITE LIGHTING PLAN

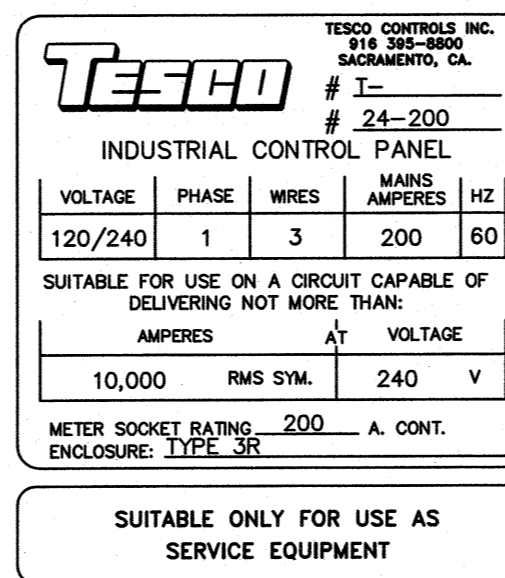
HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	DESIGNATION
VERTICAL SCALE	
SURVEY BOOK	SHEETS
CONTRACT	38 of PROJECT
	114-032B



NOTE: LOAD CURRENT FOR ALL BREAKER NOT TO EXCEED 80% OF BREAKER AMPERAGE

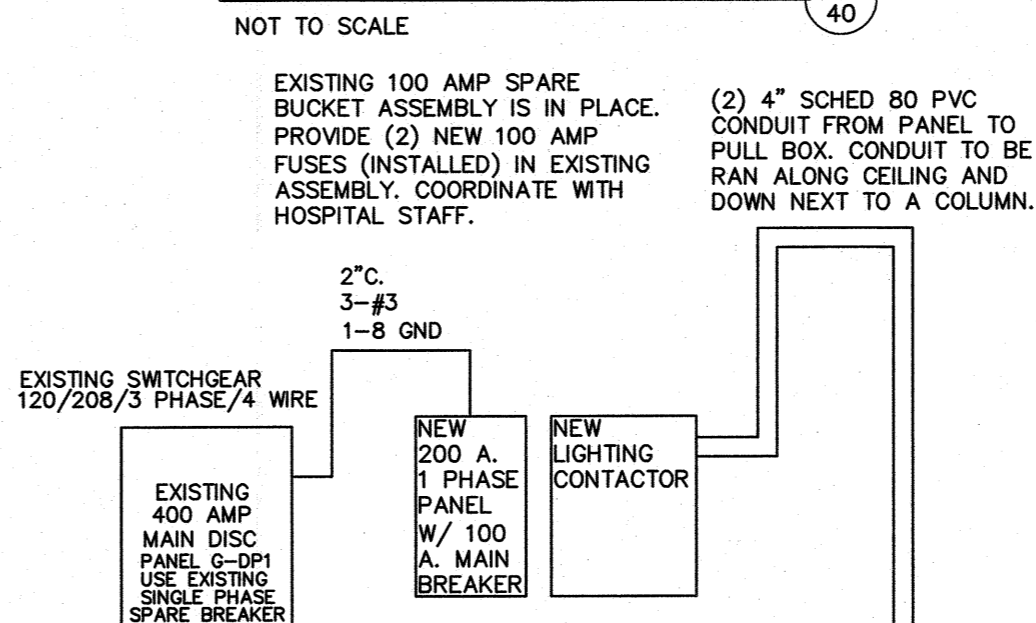
ENCLOSURE CONSTRUCTION NOTES

- 1. EXTERIOR 12 GA. H.D. GALV. STEEL AND INTERIOR 14 GA. COLD ROLLED STEEL ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
2. CONSTRUCTION WILL BE NEMA 3R, RAIN TIGHT.
3. ALL NUTS, BOLTS AND SCREWS WILL BE STAINLESS STEEL.
4. NUTS, BOLTS & SCREWS WILL NOT BE VISIBLE FROM OUTSIDE OF ENCLOSURE.
5. NAMEPLATES WILL BE PROVIDED AS REQUIRED.
6. CONTROL WIRING WILL BE MARKED AT BOTH ENDS BY PERMANENT WIRE MARKERS.
7. A PLASTIC COVERED WIRING DIAGRAM WILL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
8. ENCLOSURE WILL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA AND UL 508A STANDARDS.
9. COLOR TO BE: CHAR. BROWN

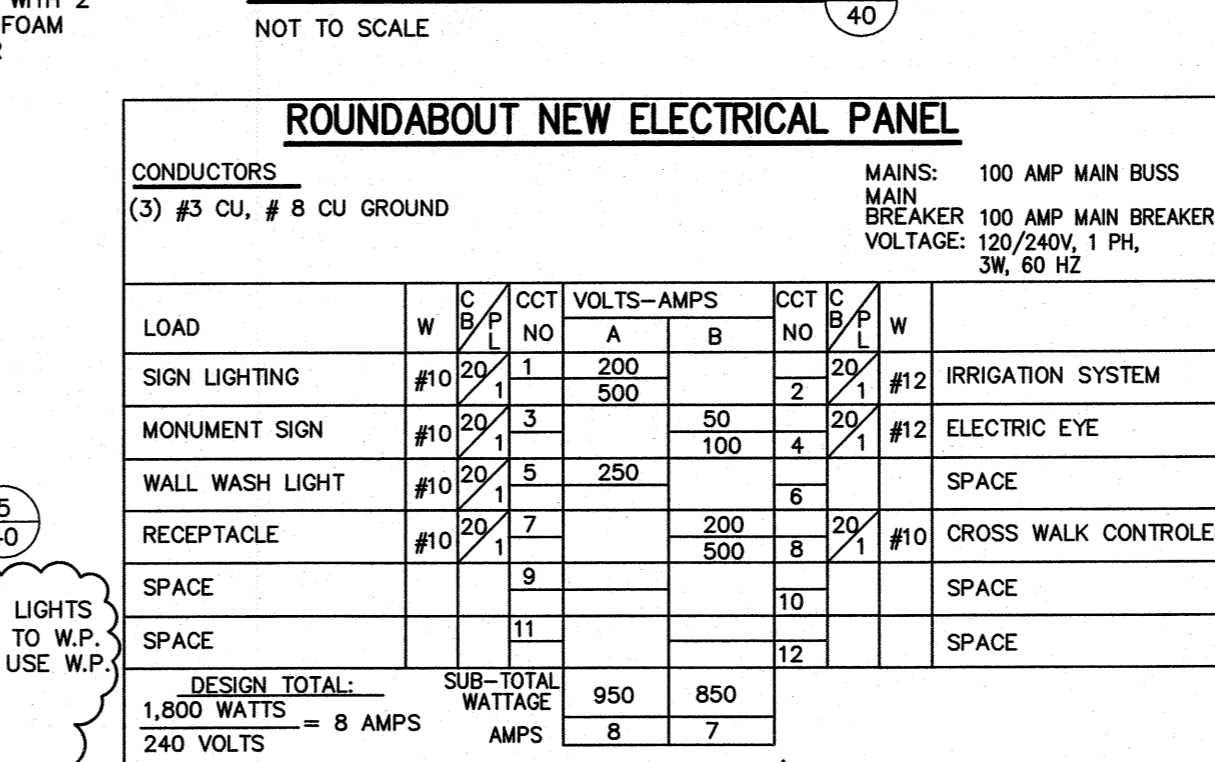


NEW ELECTRICAL PANEL GL-3 table with columns for LOAD, W, C, B, P, OCT, VOLTS-AMPS, C, C, C, W, and rows for various receptacles and lighting fixtures.

ELECTRICAL PANEL DIAGRAM 2



ELECTRICAL RISER DIAGRAM 3



ROUNDABOUT NEW ELECTRICAL PANEL

ROUNDABOUT NEW ELECTRICAL PANEL table with columns for LOAD, W, C, B, P, OCT, VOLTS-AMPS, C, C, C, W, and rows for sign lighting, monument sign, wall wash light, and receptacles.

ELECTRICAL FOUNDATION LOCATION TABLE

Large table listing electrical foundation locations for Bartlett Street West, Bartlett Street East, Michigan Street South of Bartlett, and Roundabout Electrical Panel, including station, station, off set, type, diameter or size, depth, and remarks.

Revision table with columns for REV, DATE, BY, DESCRIPTION and rows for various revisions.

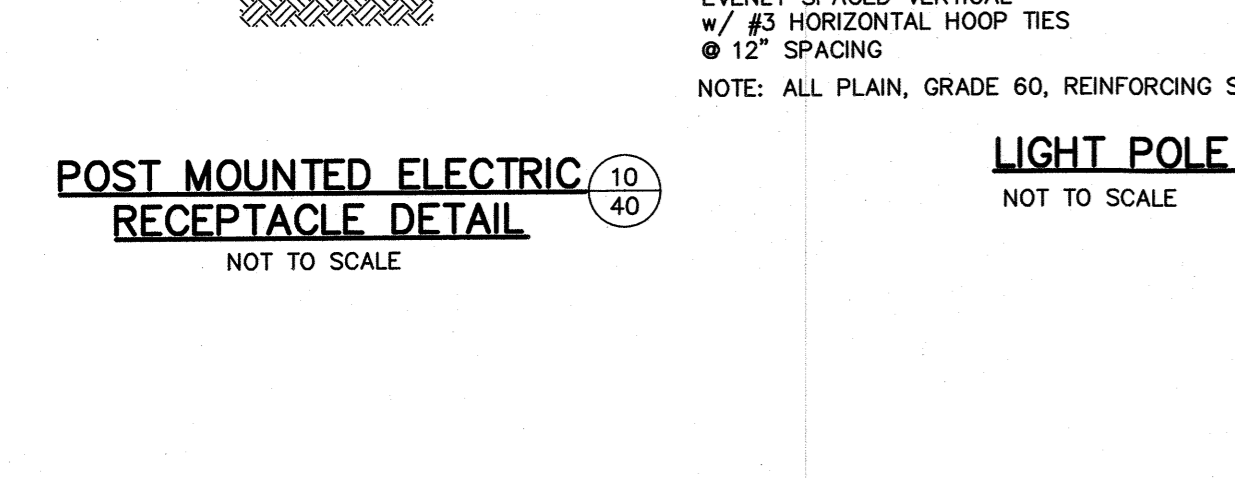
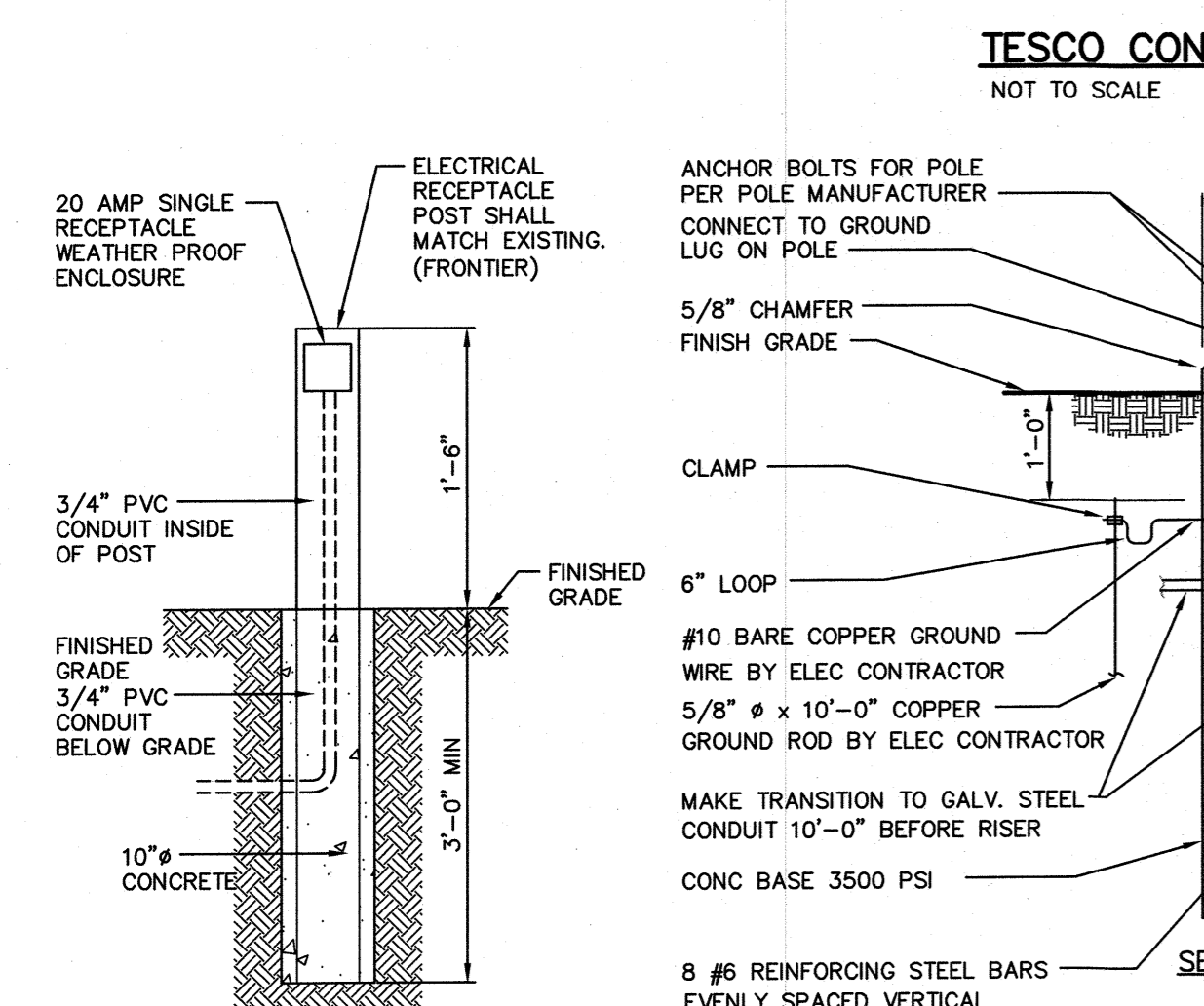


Table for Roundabout Electrical Riser Diagram 1 showing riser connections and conduit details.

Professional stamps and signatures for Jones Petrie Rafinski (Surveying, Engineering, Planning, Architecture, Utility Management) and City of South Bend (DESIGN ENGINEER, DATE 2-11-16).

Professional stamps and signatures for City of South Bend (DESIGNED: C.R.C., DRAWN: R.J.H., CHECKED: B.B.K., CHECKED: M.E.W.) and Jones Petrie Rafinski (No. 10200111, STATE OF INDIANA ARCHITECT).

Table for City of South Bend Bartlett St Improvements Phase II, including Horizontal Scale, Vertical Scale, Survey Book, Contract, and Bridge File information.