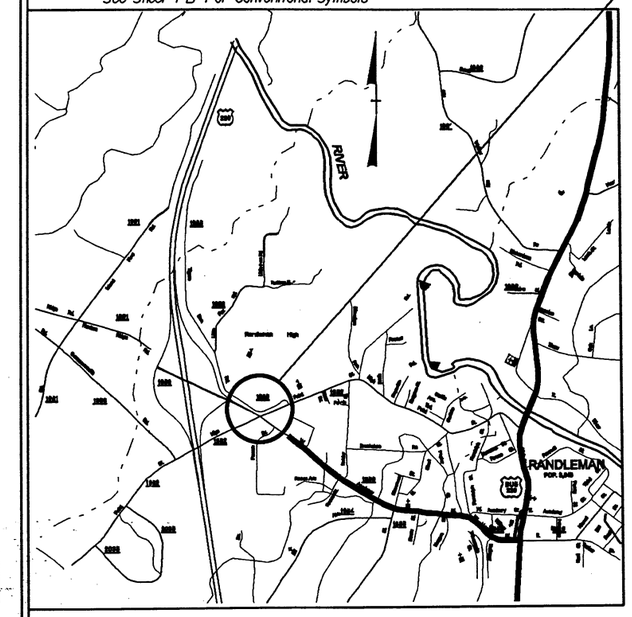
STATE	TIP PROJECT	SHEET NO.	TOTAL SHEETS
N.C.	W-5208I	1	

WBS ELEMENT	F.A. PROJ. NO.	DESCRIPTION
45338.1.9	HSIP-1952(3)	WBS PE
45338.3.FD9	HSIP-1952(3)	WBS CONST.

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



VICINITY MAP

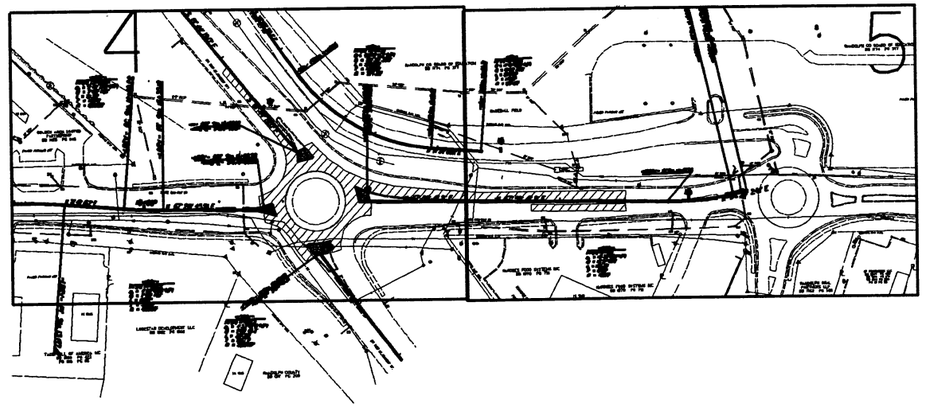
PROJECT LOCATION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

RANDOLPH COUNTY

LOCATION: ROUNDABOUTS ALONG SR 1952 (HIGHPOINT ST.) AT SR 1950 (W. ACADEMY ST) AND SR 1989 (TIGERS DEN RD.).

TYPE OF WORK: PAVING, CONCRETE ISLANDS, MILLED RUMBLE STRIPS OVERHEAD LIGHTING, AND PAVEMENT MARKINGS



TIP PROJECT: W-5208I WBS ELEMENT: 45338.3.FD9

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

LETTING DATE: OCTOBER 8, 2013

2012 STANDARD SPECIFICATIONS

DESIGN DATA

ADT 2011 = 6,700

V = 35 MPH

Prepared In the Office of:
DIVISION OF HIGHWAYS
DIVISION 8 DESIGN & CONSTRUCT UNIT
902 N. SANDHILLS BLVD.
ABERDEEN NC 28315
PLANS PREPARED BY: MRT, GSD

PROJECT LENGTH
ROADWAY: 0.23 MILES
STRUCTURE: ____ MILES
TOTAL: 0.23 MILES

DIVISION DESIGN & CONSTRUCT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

9-9-13

09-SEP-2013 09:05
rdy\Randolph\RandlemanLighting\psh\sr_1952_psh_title.dgn

PROJECT REFERENCE NO.	SHEET NO.
W-5208I	1-A

7-26-13

INDEX OF SHEETS

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS
1-B	CONVENTIONAL SYMBOLS
2 THRU 2-A	TYPICAL SECTIONS
2-B	RUMBLE STRIP DETAIL
3	SUMMARY OF QUANTITIES
4 THRU 8	PLAN SHEETS
PMP-1 THRU PMP-3	PAVEMENT MARKING PLANS
E-1 THRU E-3	LIGHTING & ELECTRICAL PLANS

ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in the "Roadway standard Drawings" highway Design Branch – N.C. Department of Transportation – Raleigh, N.C., dated January 17, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
225.04	Method of Obtaining Superelevation – Two Lane Pavement
665.01	Asphalt Shoulders Milled Rumble Strip
840.34	Traffic Bearing Junction Box – for Use with Pipes, 42" and Under
840.54	Manhole Frame and Cover
846.01	Concrete Curb, Gutter and Curb & Gutter
852.01	Concrete Islands

GENERAL NOTES

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE THE PROPER TIE-IN.

UTILITIES

UTILITY OWNERS ON THIS PROJECT ARE TOWN OF RANDLEMAN PUBLIC UTILITIES (WATER AND SEWER), DUKE POWER, NORTH STATE COMMUNICATIONS, TIME WARNER CABLE, & PIEDMOND NATURAL GAS.

8/17/99

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12/05/11

PROJECT REFERENCE NO.	SHEET NO.
W-5208I	1-B

Note: Not to Scale

**S.U.E. = Subsurface Utility Engineering*

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — EPM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Known Soil Contamination: Area or Site
- Potential Soil Contamination: Area or Site

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — PLD
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line
- Proposed Right of Way Line with Iron Pin and Cap Marker
- Proposed Right of Way Line with Concrete or Granite R/W Marker
- Proposed Control of Access Line with Concrete C/A Marker
- Existing Control of Access
- Proposed Control of Access
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage / Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — TUTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

PROJECT REFERENCE NO.	SHEET NO.
W-5208I	2
R/W SHEET NO.	

ROADWAY DESIGN AND HYDRAULICS ENGINEER

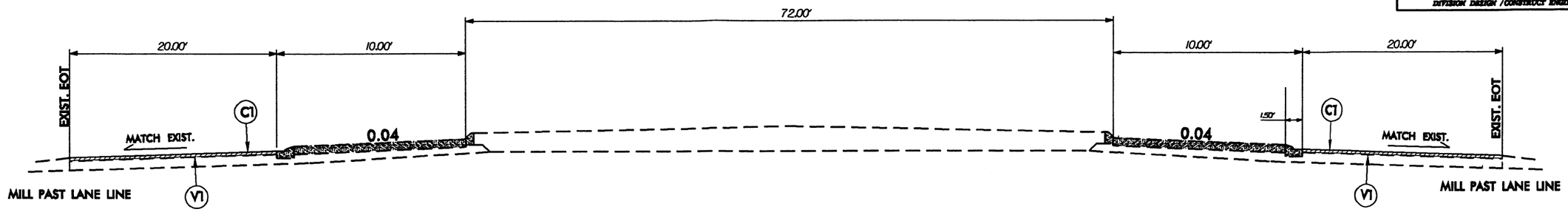
7-31-13

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG L. DAVIS

DIVISION DESIGN / CONSTRUCT ENGINEER

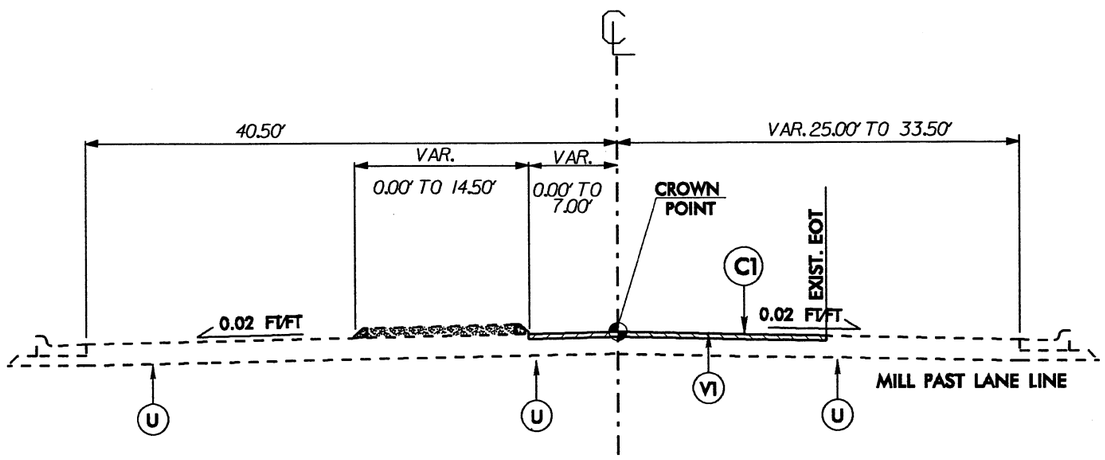
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1 FOR THE ROUNDABOUT AT RAB-2



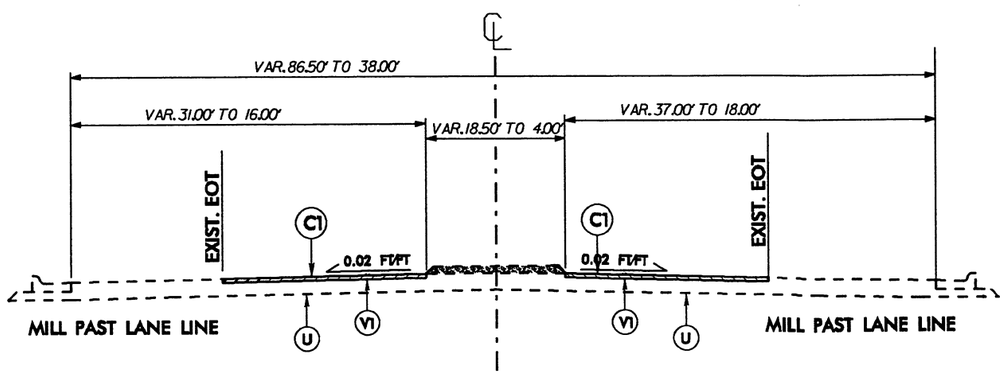
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2 FROM
-Y1- STA. 14+15 TO -Y1- STA. 15+88



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3 FROM
-Y2-REV- STA. 10+00 TO -L-REV-STA. 14+00. (LEFT)
-Y2-REV- STA. 12+55 TO -L-REV-STA. 14+00. (RIGHT)



PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
J	PROPOSED 10" OF AGGREGATE BASE COURSE
R1	6" MONOLITHIC CONCRETE ISLAND (KEYED-IN) REINFORCED WITH 4x4 W3-W3 WELDED WIRE MESH, CONTROL JOINTS 10' O.CO EACH WAY WITH BROOM FINISH.
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	7.00" TH. CLASS 'A' CONCRETE TRUCK APRON. REINFORCED WITH 6X6 W14-W14 WELDED WIRE MESH, CONTROL JOINTS 10' o.c. EACH WAY WITH BROOM FINISH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	1.5" MILLING
V2	12" MILLED RUMBLE STRIP
Z	TRENCHING FOR CONCRETE TRUCK APRON

REVISIONS

8/17/99

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PROJECT REFERENCE NO.	SHEET NO.
W-5208I	2-A
R/W SHEET NO.	

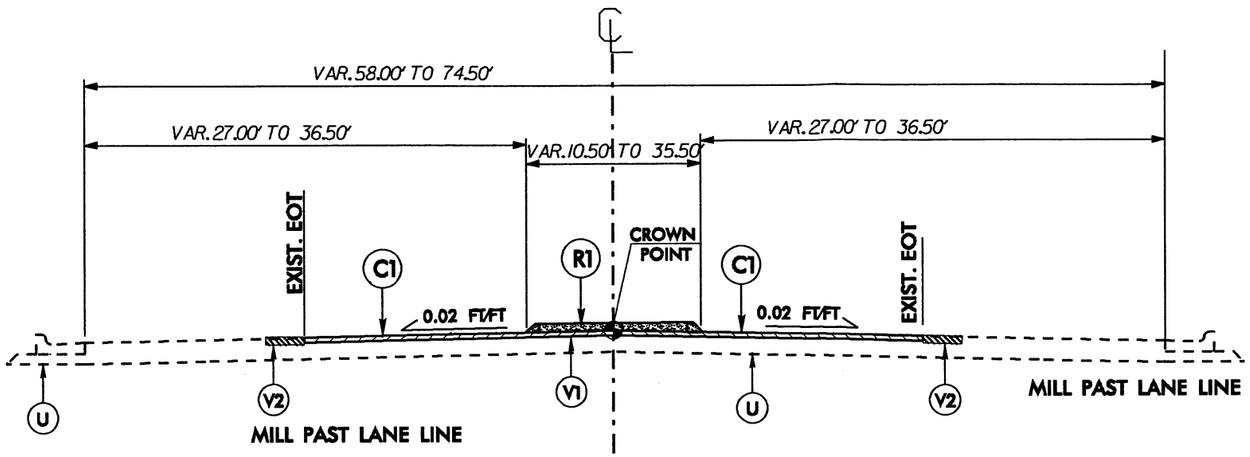
ROADWAY DESIGN AND HYDRAULICS ENGINEER

7-26-13

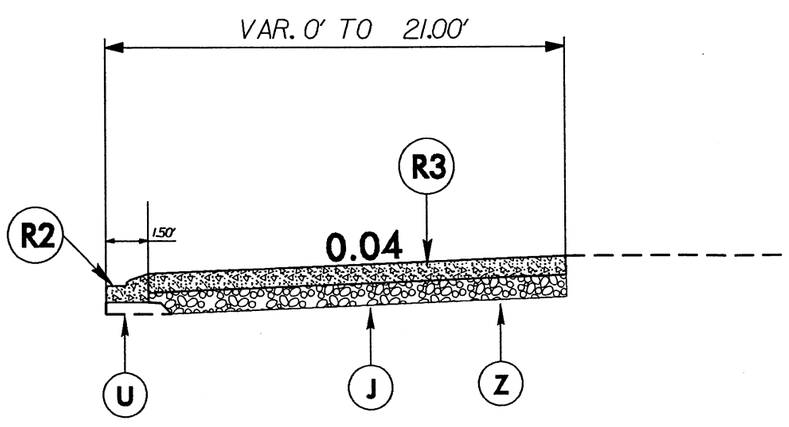
NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER GREG S. DAVIS

DIVISION DESIGN / CONSTRUCT ENGINEER

RESURFACING DETAIL AROUND NEW MONOLITHIC ISLANDS



TRUCK APRON DETAIL



PAVEMENT SCHEDULE

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 166 LBS. PER SQ. YD.
J	PROPOSED 10" OF AGGREGATE BASE COURSE
R1	6" MONOLITHIC CONCRETE ISLAND (KEYED-IN) REINFORCED WITH 4x4 W3-W3 WELDED WIRE MESH, CONTROL JOINTS 10' O.CO EACH WAY WITH BROOM FINISH.
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	7.00" TH. CLASS 'A' CONCRETE TRUCK APRON. REINFORCED WITH 6X6 W14-W14 WELDED WIRE MESH, CONTROL JOINTS 10' o.c. EACH WAY WITH BROOM FINISH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	1.5" MILLING
V2	12" MILLED RUMBLE STRIP
Z	TRENCHING FOR CONCRETE TRUCK APRON

8/17/99

REVISIONS

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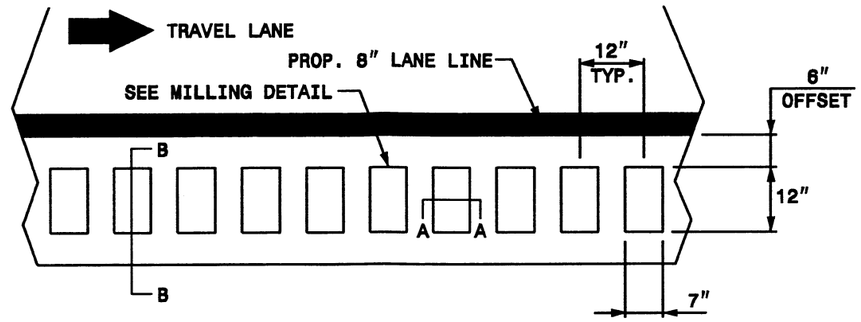
PROJ. REFERENCE NO.	SHEET NO.
W-5208I	2-B

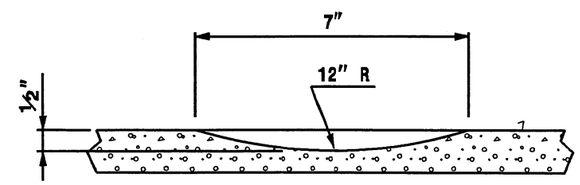


MILLED RUMBLE STRIP DETAIL
AT LANE LINES.

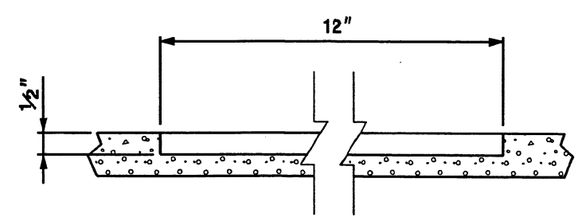
NOTES:

1. USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.

MILLING DETAIL



SECTION A-A'



SECTION B-B'

RUMBLE STRIPS

SCALE:	NONE	REVISIONS
DATE:	7-13	
DWG. BY:	DHB	
DESIGN BY:	GSD	
REVIEWED BY:	GSD	CADD FILE

31-JUL-2013 14:08
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gsdavis AT DBCAD-246463

PROJECT NO.	SHEET NO.	TOTAL NO.
45338.3.FD9	3	
(W-5208I)		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	1.5" MILLING SY	SURFACE COURSE, S9.5B TON	ASPHALT BINDER FOR PLANT MIX TON	MILLED RUMBLE STRIPS, 12" WIDE, EDGE LINES LF	MASONRY DRAINAGE STRUCTURE EA	FRAME WITH MH COVER, STD 840.54 EA	1'-6" CURB & GUTTER LF	GENERIC PAVING ITEM - 7" CONCRETE TRUCK APRON SY	GENERIC PAVING ITEM - 6" MONOLITHIC ISLAND (KEYED IN) SY	ADJUST MANHOLES EA
45338.3.FD9	Randolph	1	ROUNDABOUT	SR 1952 (HIGH POINT ST) AND SR 1950 (W. ACADEMY ST.)	1-3	2	MD	NO	NO	0.23	20-34	1,990	170	10	700	1	1	60	55	160	1
TOTAL FOR MAP NO. 1										0.23		1,990	170	10	700	1	1	60	55	160	1
TOTAL FOR PROJ NO. 45338.3.9										0.23		1,990	170	10	700	1	1	60	55	160	1
GRAND TOTAL										0.23		1,990	170	10	700	1	1	60	55	160	1

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	POST TOP STANDARD, TYPE AB (25' METAL DECORATIVE) EA	STANDARD FOUNDATION TYPE R1 EA	STANDARD FOUNDATION TYPE R2 EA	POST TOP LUMINAIRES, TYPE (DECORATIVE)(250 W) EA	ELECTRIC SERVICE POLE, (30' CLASS 4) EA	ELECTRIC SERVICE LATERAL (3, #1/0 USE) LF	ELECTRICAL DUCT, TYPE JA, SIZE (3") LF	#8 W/G FEEDER CIRCUIT IN SIZE (2,1 1/2") CONDUIT LF	ELECTRICAL JUNCTION BOXES (PC18) EA	PORTABLE LIGHTING LS	GENERIC LIGHTING ITEM - POWER SUPPLY TO ROADWAY LIGHT LS
45338.3.FD9	Randolph	1	ROUNDABOUT	SR 1952 (HIGH POINT ST) AND SR 1950 (W. ACADEMY ST.)	1-3	2	MD	NO	NO	0.23	20-34	11	6	5	11	1	150.00	240.00	1,590.00	6	1	1
TOTAL FOR MAP NO. 1										0.23		11	6	5	11	1	150.00	240.00	1,590.00	6	1	1
TOTAL FOR PROJ NO. 45338.3.9										0.23		11	6	5	11	1	150.00	240.00	1,590.00	6	1	1
GRAND TOTAL										0.23		11	6	5	11	1	150.00	240.00	1,590.00	6	1	1

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4399000000-N TEMPORARY TRAFFIC CONTROL LS	4685000000-E 4" X 90 M WHITE THERMO LF	4685000000-E 4" X 90 M YELLOW THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4695000000-E 8" X 90 M WHITE THERMO LF	4695000000-E 8" X 90 M YELLOW THERMO LF	4697000000-E 8" X 120 M WHITE THERMO LF	4725000000-E THERMO STR & LT ARROW 90 M EA	4725000000-E THERMO 24" YIELD TRIANGLE 90 M EA	4820000000-E PAINT PAVEMENT MARKING LINES (8") LF	4845000000-N PAINT PAVEMENT MARKING SYMBOL EA	4900000000-N CRYSTAL & RED MARKERS EA	4900000000-N YELLOW & YELLOW MARKERS EA
45338.3.FD9	Randolph	1	ROUNDABOUT	SR 1952 (HIGH POINT ST) AND SR 1950 (W. ACADEMY ST.)	1-3	2	MD	0.23	20-34	1.00	205	615	225	215	145	200	505	4	22	215	22	42	30
TOTAL FOR MAP NO. 1								0.23		1	205	615	225	215	145	200	505	4	22	215	22	42	30
TOTAL FOR PROJ NO. 45338.3.9								0.23		1	205	615	225	215	145	200	505	4	22	215	22	42	30
											820		440		345			26				72	
GRAND TOTAL								0.23		1	205	615	225	215	145	200	505	4	22	215	22	42	30
											820		440		345			26				72	

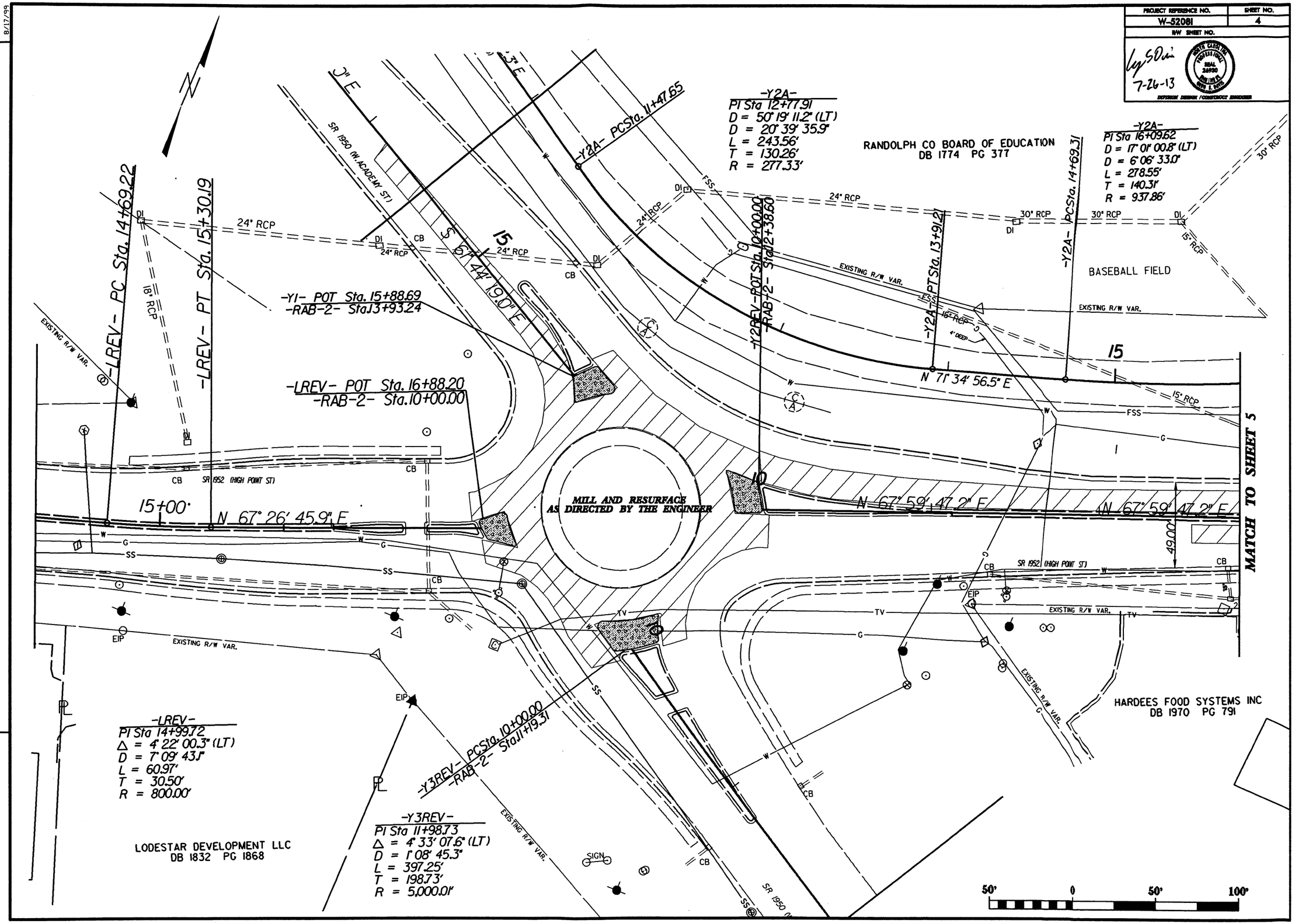
PROJECT REFERENCE NO.	SHEET NO.
W-5208I	4
R/W SHEET NO.	

7-26-13

DIVISION DESIGN / CONFERENCE ENGINEER

8/17/99

REVISIONS



PROJECT REFERENCE NO.	SHEET NO.
W-52081	5
R/W SHEET NO.	

7-26-13

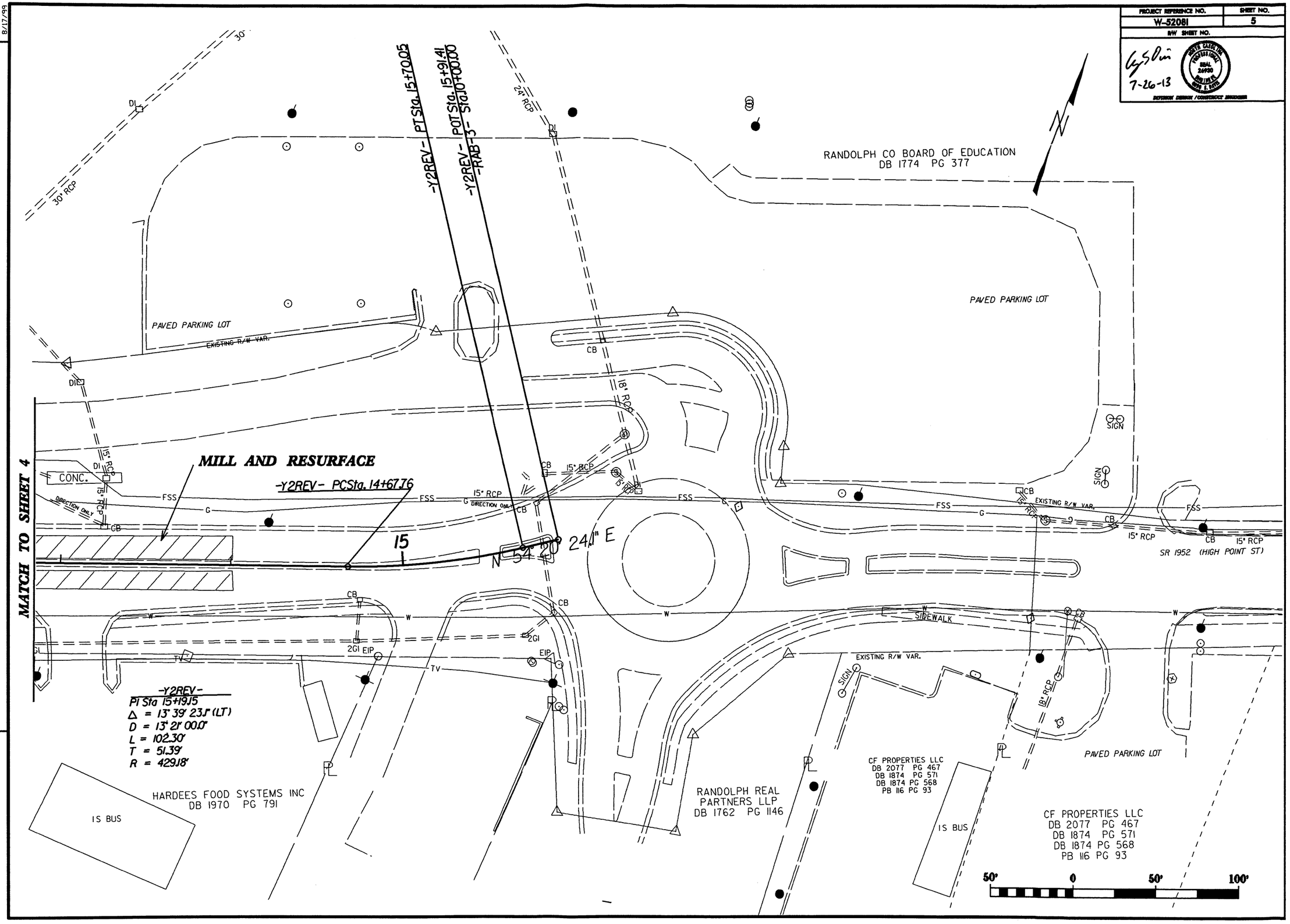
NORTH CAROLINA PROFESSIONAL SEAL 24930 ENGINEER

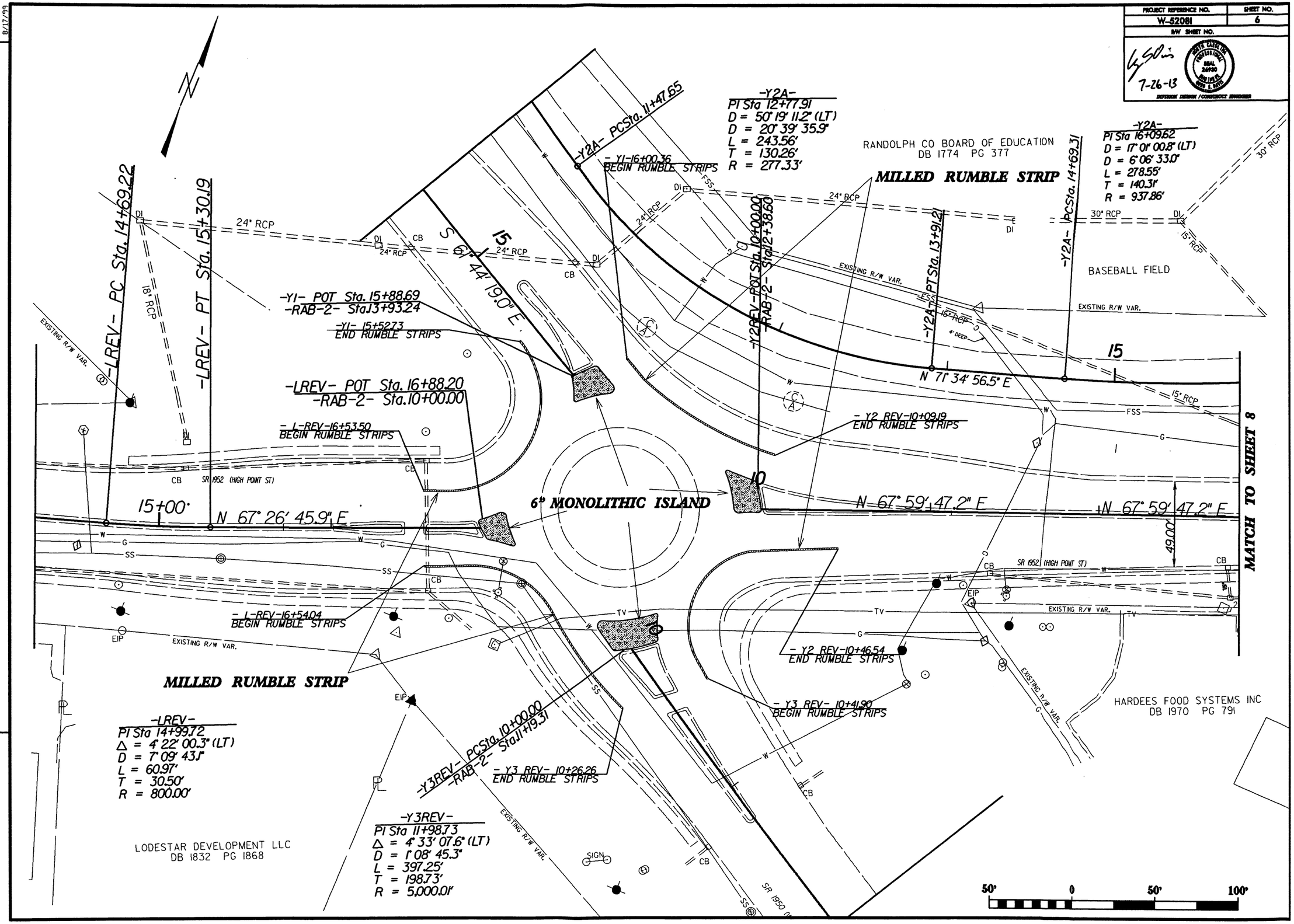
DIVISION ENGINEER / CONFERENCE ENGINEER

8/17/99

REVISIONS

MATCH TO SHEET 4





PROJECT REFERENCE NO.
W-52081
SHEET NO.
6
R/W SHEET NO.
7-26-13
DIVISION DESIGN / CONSTRUCT ENGINEER
8/17/99
REVISIONS
N
-Y2A-
PI Sta 12+77.91
D = 50° 19' 11.2" (LT)
D = 20° 39' 35.9"
L = 243.56'
T = 130.26'
R = 277.33'
-Y2A- PCSta. 11+47.65
- Y1-16+00.36
BEGIN RUMBLE STRIPS
RANDOLPH CO BOARD OF EDUCATION
DB 1774 PG 377
MILLED RUMBLE STRIP
-Y2A-
PI Sta 16+09.62
D = 17° 01' 00.8" (LT)
D = 6° 06' 33.0"
L = 278.55'
T = 140.31'
R = 937.86'
-Y2A- PCSta. 14+69.31
-Y2A- PT Sta. 13+91.21
-Y2REV- POT Sta. 10+00.00
-RAB-2- Sta.12+38.60
-LREV- PC Sta. 14+69.22
-LREV- PT Sta. 15+30.19
24" RCP
18" RCP
30" RCP
15" RCP
S 61° 44' 19.0" E
15
-Y1- POT Sta. 15+88.69
-RAB-2- Sta.13+93.24
-Y1- 15+52.73
END RUMBLE STRIPS
-LREV- POT Sta. 16+88.20
-RAB-2- Sta.10+00.00
- L-REV-16+53.50
BEGIN RUMBLE STRIPS
EXISTING R/W VAR.
BASEBALL FIELD
N 71° 34' 56.5" E
- Y2 REV-10+09.19
END RUMBLE STRIPS
MATCH TO SHEET 8
SR 1952 (HIGH POINT ST)
15+00
N 67° 26' 45.9" E
6" MONOLITHIC ISLAND
10
N 67° 59' 47.2" E
49.00'
- L-REV-16+54.04
BEGIN RUMBLE STRIPS
MILLED RUMBLE STRIP
- Y2 REV-10+46.54
END RUMBLE STRIPS
- Y3 REV- 10+41.90
BEGIN RUMBLE STRIPS
HARDEES FOOD SYSTEMS INC
DB 1970 PG 791
-LREV-
PI Sta 14+99.72
Δ = 4° 22' 00.3" (LT)
D = 7° 09' 43.1"
L = 60.97'
T = 30.50'
R = 800.00'
-Y3REV- PCSta. 10+00.00
-RAB-2- Sta.11+19.31
- Y3 REV- 10+26.26
END RUMBLE STRIPS
-Y3REV-
PI Sta 11+98.73
Δ = 4° 33' 07.6" (LT)
D = 1° 08' 45.3"
L = 397.25'
T = 198.73'
R = 5,000.01'
LODESTAR DEVELOPMENT LLC
DB 1832 PG 1868
SIGN
SR 1950
50' 0 50' 100'

PROJECT REFERENCE NO.	SHEET NO.
W-52081	7
R/W SHEET NO.	

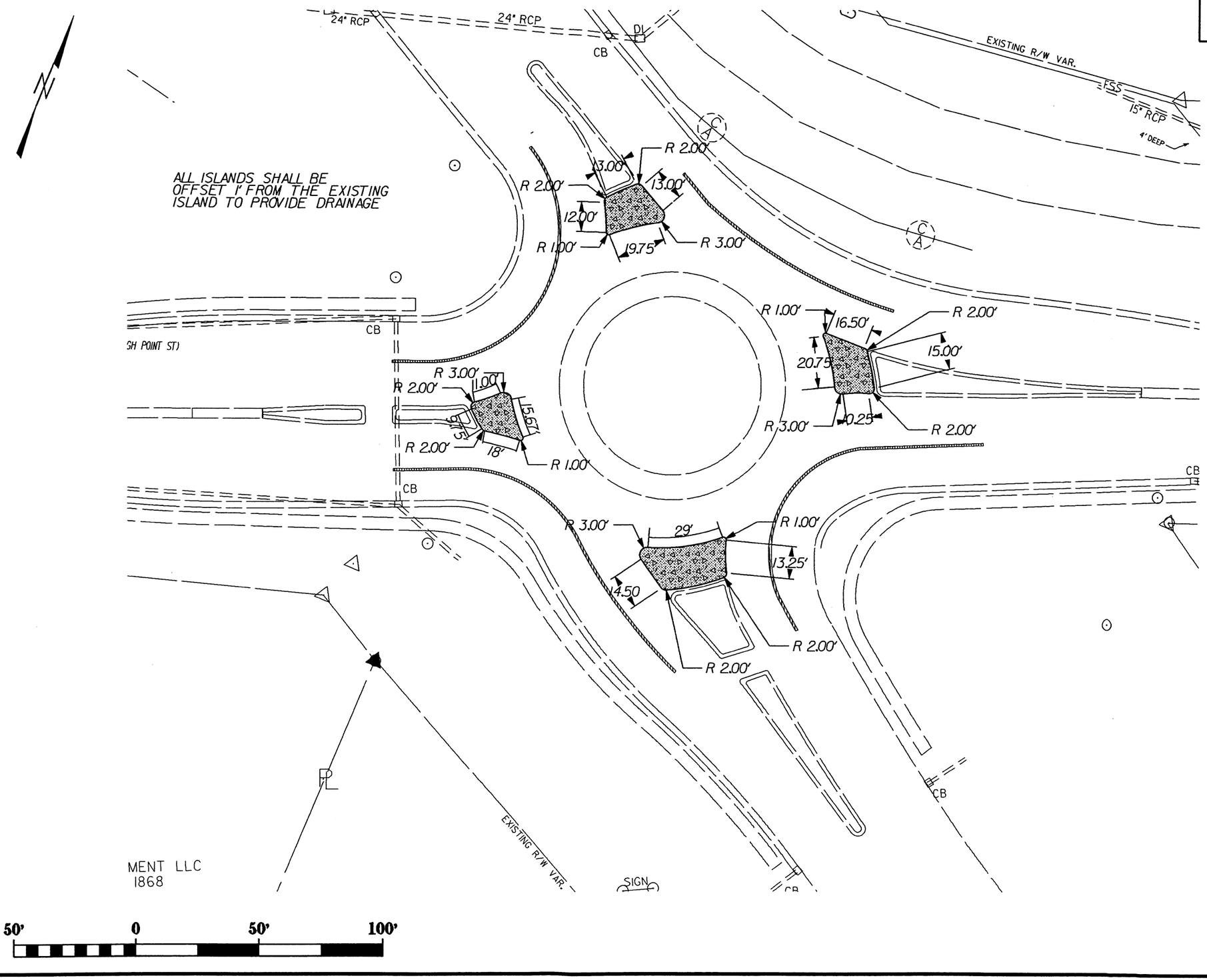
4-50-20
7-26-13

DIVISION DESIGN / CONSTRUCT ENGINEER

8/17/99

REVISIONS

REVISED 5-7-2010 REVISED ISLANDS FROM MONOLITHIC CONC. ISLANDS TO 1'-6" C&G PER TOWN OF RANDLEMAN



PROJECT REFERENCE NO.	SHEET NO.
W-5208I	8
R/W SHEET NO.	

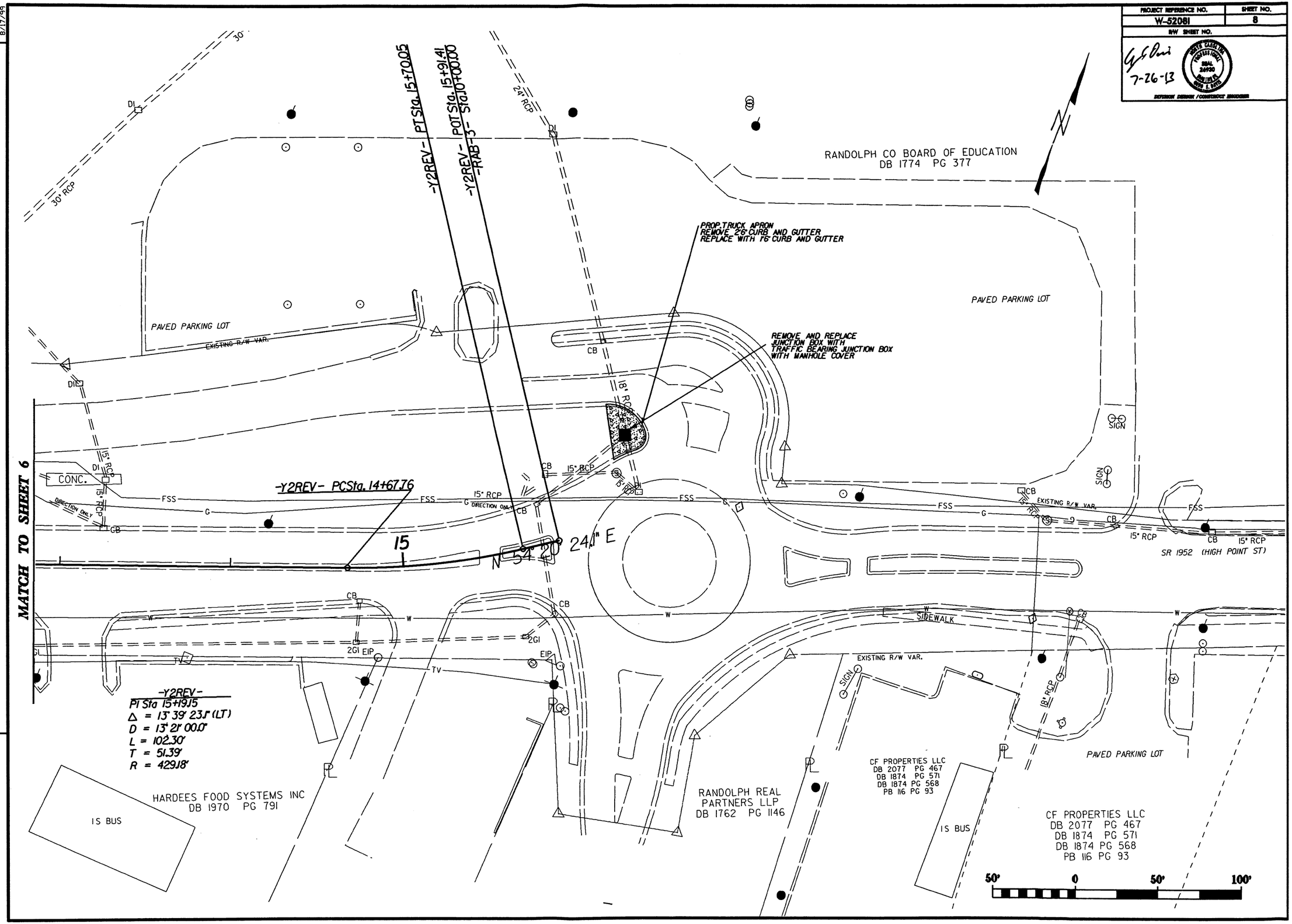
7-26-13

NORTH CAROLINA PROFESSIONAL SEAL 26930 ENGINEER

DIVISION ENGINEER / CONSTRUCTION ENGINEER

REVISIONS

8/17/99



PROJECT REFERENCE NO.	SHEET NO.
W-5208I	PMP-1
R/W SHEET NO.	

7-26-13

PAVEMENT MARKING LEGEND

- -CRYSTAL / RED PAVEMENT MARKER
- -YELLOW / YELLOW PAVEMENT MARKER
- -CRYSTAL / CRYSTAL PAVEMENT MARKER

PAVEMENT MARKING LINES

TA -	THERMOPLASTIC (4"	WHITE, 90 MILS)	EDGE LINE
TB -	THERMOPLASTIC (4"	YELLOW, 90 MILS)	EDGE LINE
TD -	THERMOPLASTIC (4"	WHITE, 120 MILS)	3' X 9' SP MINISKIP
TE -	THERMOPLASTIC (4"	WHITE, 120 MILS)	LANE LINE
TI -	THERMOPLASTIC (4"	YELLOW, 120 MILS)	DOUBLE CENTER LINE
TN -	THERMOPLASTIC (8"	WHITE, 90 MILS)	GORELINE
TR -	THERMOPLASTIC (8"	WHITE, 120 MILS)	WIDE SOLID LANE LINE
T7 -	THERMOPLASTIC (8"	YELLOW, 90 MILS)	EDGE LINE
T10 -	THERMOPLASTIC (8"	WHITE, 120 MILS)	3' X 3' SP MINISKIP

PAVEMENT MARKING SYMBOLS

UD -	THERMOPLASTIC	(STRAIGHT-LEFT ARROW, 90 MILS)
UN -	THERMOPLASTIC	(24" YIELD LINE TRIANGLE, 90 MILS)

SPECIAL PAVEMENT MARKING NOTES

THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL CONFLICTING PAVEMENT MARKINGS BY THE END OF THE WORKDAY.

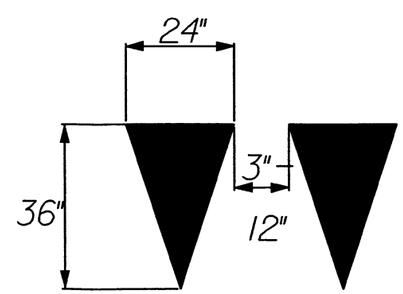
THE CONTRACTOR SHALL INSTALL ALL PAVEMENT LINES AND SYMBOLS AS REQUIRED (SEE ROADWAY STANDARD DRAWINGS 1205.01 THRU 1205.12.

THE CONTRACTOR SHALL BE REQUIRED TO REPLACE ANY PAVEMENT MARKINGS, WHICH HAVE BEEN OBLITERATED BY CONSTRUCTION PROCEDURES, BY THE END OF THE WORKDAY.

THE CONTRACTOR SHALL BE REQUIRED TO COVER ALL CONFLICTING STATIONARY CONSTRUCTION SIGNING WHEN A LANE CLOSURE UTILIZING PORTABLE CONSTRUCTION SIGNS IS IN EFFECT. THE CONTRACTOR SHALL NOT HAVE AN OVERLAP IN THE SEQUENCE OF CONSTRUCTION SIGNING.

THE CONTRACTOR SHALL PLACE ALL FINAL PAVEMENT MARKING LINES AND SYMBOLS (THERMOPLASTIC ALKYD-MALEIC) USING THE EXTRUSION METHOD.

CHANGES TO PAVEMENT MARKINGS MAY AND SHALL BE MADE AT THE DIRECTION OF THE ENGINEER.



YIELD LINE LAYOUT DETAIL

NOTE:
1. TRIANGLES SHALL BE PAID FOR BY THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MIL)

SPECIAL PAVEMENT MARKER NOTES

PAVEMENT MARKERS SHOULD NOT BE PLACED CLOSER THAN 2 INCHES TO A PAVEMENT CONSTRUCTION JOINT (AS FEASIBLE), EXCEPT WHEN PLACED BETWEEN DOUBLE YELLOW CENTER LINES, AND ALONG YELLOW SKIP LINES AND TWO-LANE, TWO-WAY ROADWAYS WHERE PASSING IS ALLOWED IN BOTH DIRECTIONS.

PAVEMENT MARKERS SHALL NOT BE PLACED DIRECTLY ON PAVEMENT MARKING LINES.

PAVEMENT MARKERS USED IN CONJUNCTION WITH DOUBLE YELLOW CENTER LINES SHALL BE PLACED MID-WAY BETWEEN THE LINES, PROVIDED WITH A GAP BETWEEN THE LINES AND THE MARKER TO REDUCE OVERSPRAYING THE MARKER DURING THE REPAINTING OPERATIONS.

MARKERS ARE NOT REQUIRED ALONG MINI-SKIP LINES IN TAPERS.

CHANGES TO PAVEMENT MARKERS MAY AND SHALL BE MADE AT THE DIRECTION OF THE ENGINEER.

REVISIONS

8/17/99

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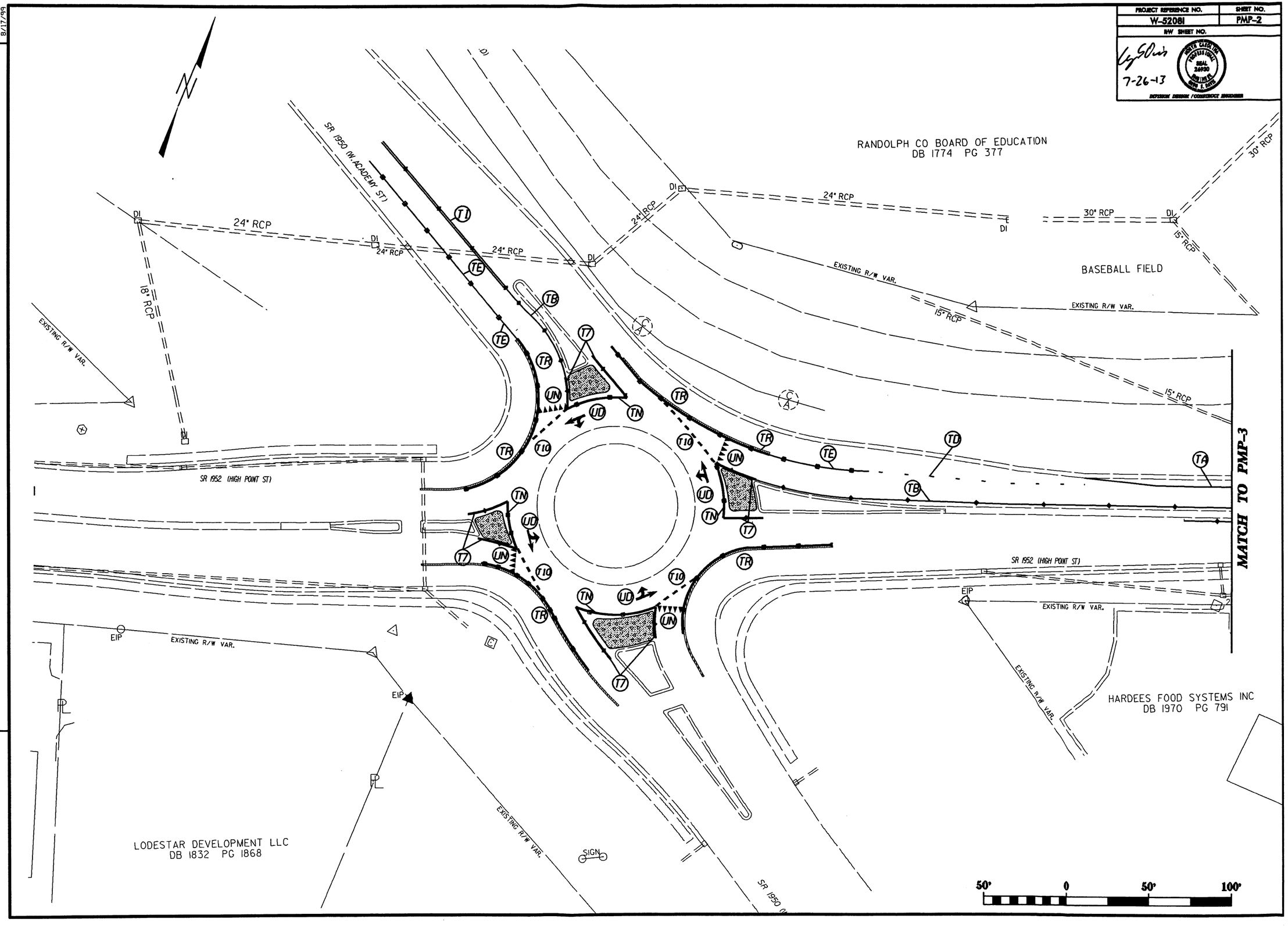
pedowitz, ryan (ryan.pedowitz@aecom.com)



PROJECT REFERENCE NO.
W-52081
SHEET NO.
PMP-2
R/W SHEET NO.
7-26-13
NORTH CAROLINA PROFESSIONAL SEAL 24930 ENGINEER
DIVISION DESIGN / CONSTRUCT ENGINEER
8/17/99
REVISIONS
RANDOLPH CO BOARD OF EDUCATION
DB 1774 PG 377
BASEBALL FIELD
SR 1950 (W. ACADEMY ST)
SR 1952 (HIGH POINT ST)
24" RCP
30" RCP
15" RCP
18" RCP
EXISTING R/W VAR.
MATCH TO PMP-3
HARDEES FOOD SYSTEMS INC
DB 1970 PG 791
LODESTAR DEVELOPMENT LLC
DB 1832 PG 1868
SIGN
50' 0 50' 100'

PROJECT REFERENCE NO.	SHEET NO.
W-52081	PMP-3
R/W SHEET NO.	

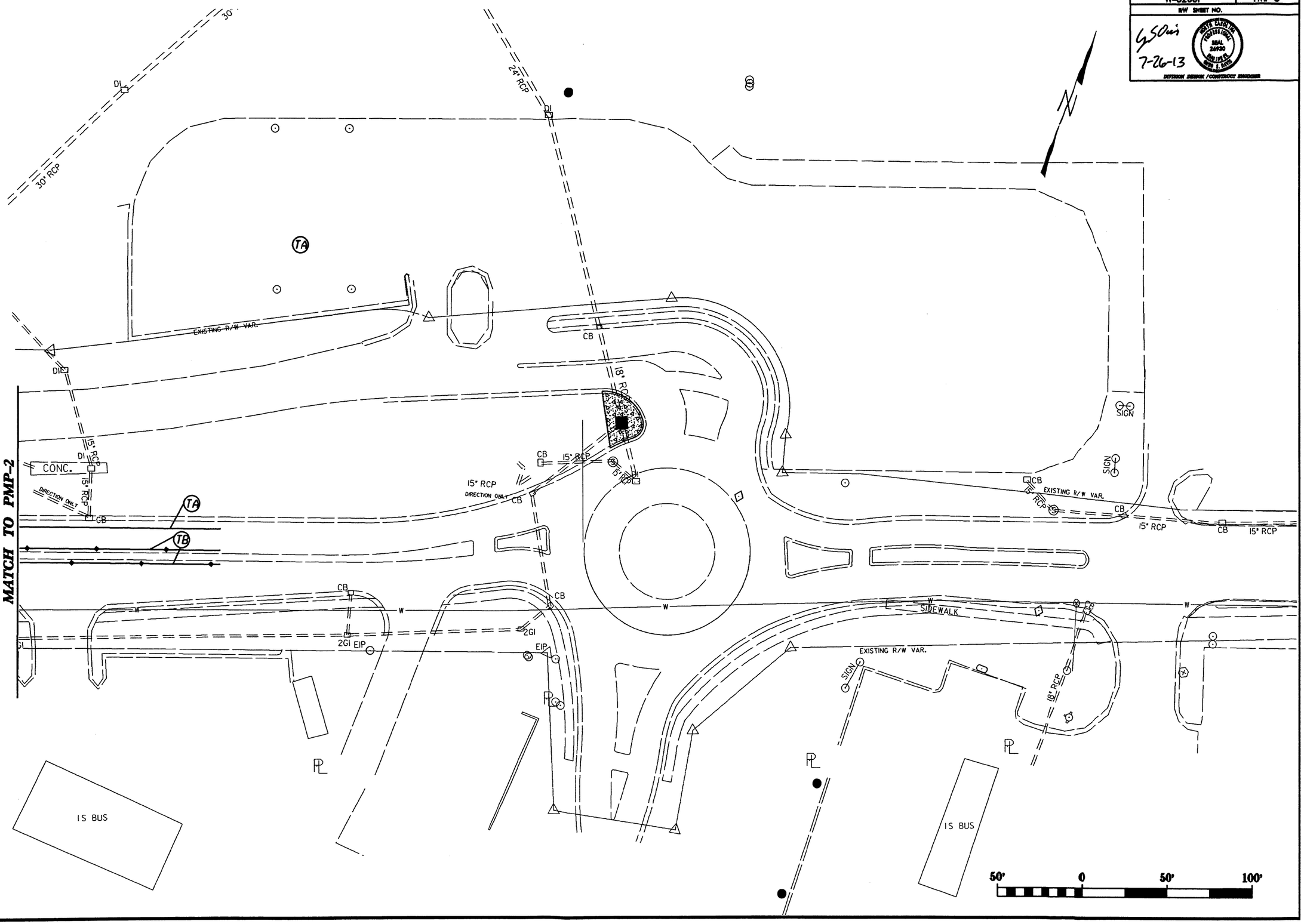
7-26-13

DIVISION DESIGN / CONSTRUCT ENGINEER

8/17/99

REVISIONS

MATCH TO PMP-2



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PROJECT REFERENCE NO.	SHEET NO.
W-5208I	E1

NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER JAE KI-BUM CHAN
7-29-13

PLANS AND DETAILS FOR PROPOSED LIGHTING /ELECTRICAL CONSTRUCTION

△ NOTES

1. INSTALL ALL BORE PITS OUTSIDE THE CLEAR ZONE, AS DEFINED BY THE 2009 AASHTO ROADSIDE DESIGN GUIDE OR AS DIRECTED BY THE ENGINEER.
2. LOCATE ALL JUNCTION BOXES OUTSIDE CLEAR ZONE AND IN AN AREA UNLIKELY TO BE USED BY TRAFFIC.
3. LOCATE PROPOSED CONTROL SYSTEM IN AN AREA ACCESSIBLE FOR MAINTENANCE VEHICLES AND OUTSIDE OF CLEAR ZONE AS DEFINED BY THE 2009 AASHTO ROADSIDE DESIGN GUIDE.
4. TYPE PC18 JUNCTION BOXES ARE 18" L X 11" W X 18" H.
5. LOCATE ALL 25' DECORATIVE POST TOP LIGHT STANDARDS BEHIND SIDEWALK WHERE APPLICABLE.
6. LOCATE ALL 25' DECORATIVE POST TOP LIGHT STANDARDS 10' BEHIND GUTTERLINE OF THE CURB AND GUTTER WHERE APPLICABLE.
7. COORDINATE WITH DUKE ENERGY FOR METER SERVICE AT THE ROUNDABOUT.

SCOPE OF WORK

PLACE ROADWAY LIGHTING SYSTEM INTO SERVICE BY PROVIDING AND INSTALLING 25' POST TOP DECORATIVE LIGHT STANDARDS WITH HIGH PRESSURE SODIUM LUMINAIRES, UNDERGROUND CIRCUITRY, CONTROL SYSTEM AND JUNCTION BOXES.

DESIGN CRITERIA

2005 AASHTO ROADWAY LIGHTING DESIGN GUIDE

2009 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 5TH EDITION AND LATEST INTERIM SPECIFICATIONS VALID AT THE TIME OF LETTING

2011 NATIONAL ELECTRICAL CODE

2002 AASHTO ROADSIDE DESIGN GUIDE

ROADWAY STANDARDS

THE FOLLOWING ROADWAY ENGLISH STANDARDS AS APPEAR IN "NCDOT ROADWAY STANDARD DRAWINGS", ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD NO.	TITLE
1404.01	LIGHT STANDARDS
1405.01	STANDARD FOUNDATION
1406.01	LIGHT STANDARD LUMINAIRES
1407.01	ELECTRIC SERVICE POLE AND LATERAL
1409.01	ELECTRICAL DUCT
1410.01	FEEDER CIRCUITS
1411.01	ELECTRICAL JUNCTION BOXES

ALL WORK SHALL BE IN CONFORMANCE WITH DIVISION 14 OF THE STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DATED JANUARY 2012.

LEGEND

PROPOSED LIGHT STANDARD TYPE 25' DECORATIVE METAL POLE. INCLUDES STANDARD FOUNDATION TYPE R1 OR R2 & 250W HPS TEARDROP LUMINAIRES. IES DISTRIBUTION: MEDIUM, CUTOFF, TYPE V

PROPOSED CONTROL SYSTEM, SEE DETAIL SHEET E3. BREAKER SIZE SHOWN IN LOAD SCHEDULE, SHEET E2

JB1 PROPOSED ELECTRICAL JUNCTION BOX SEE DETAILS & TABLE B, THIS SHEET

1 REFERENCE TO CORRESPONDING NOTE AS NUMBERED

A1 6 PROPOSED FEEDER CIRCUIT CONTROL SYSTEM(A), CIRCUIT(1) PLAN SYMBOL (6) SEE TABLE A, THIS SHEET

3#1/0 USE TS2 PROPOSED SERVICE POLE AND LATERAL 9.1M CLASS 4
3#1/0 USE CONDUCTORS
TS2 CONDUIT

TS2, TS3 OR TS4 ELEC. DUCT JA & BD PROPOSED ELECTRICAL DUCT SIZE TS2, TS3 OR TS4 TYPE (JA) OR (BD) LOCATION: SEE TABLE C, THIS SHEET

TABLE "A"
CIRCUITRY CONDUCTOR CONDUIT TYPE & SIZE

PLAN SYMBOL	DESCRIPTION		CONTRACT ITEM
8	2#8 Ø 1 #10G 1.5" P	2 AWG SIZE 8 CONDUCTOR (BK & RD) 1 AWG SIZE 10 GROUNDING CONDUCTOR 1.5" PVC CONDUIT	2 - 8 W/G FEEDER CIRCUIT IN 1.5" CONDUIT
*8	2#8 Ø 1 #10G	2 AWG SIZE 8 CONDUCTOR (BK & RD) 1 AWG SIZE 10 GROUNDING CONDUCTOR	2 - 8 W/G FEEDER CIRCUIT

TABLE "B"
JUNCTION BOX SUMMARY

NUMBER	LOCATION	TYPE		SHEET
JB1	16+16 -LREV- 50' LT	PC18		E2
JB2	16+16 -LREV- 50' RT	PC18		E2
JB3	10+76 -Y3REV- 45' RT	PC18		E2
JB4	10+76 -Y3REV- 45' LT	PC18		E2
JB5	15+50 -Y1- 45' RT	PC18		E2
JB6	15+50 -Y1- 55' LT	PC18		E2
TOTALS		6		

TABLE "C"
ELECTRICAL DUCT SUMMARY
(ESTIMATED LENGTH IN FEET)

		TYPE					
		JACKED (JA) FEET			BURIED (BD) FEET		
LOCATION	SHEET	SIZE 2"	SIZE 3"	SIZE 4"	SIZE 2"	SIZE 3"	SIZE 4"
16+16 -LREV-	E2		80				
10+76 -Y3REV-	E2		80				
15+50 -Y1-	E2		80				
TOTALS			240				

ABBREVIATIONS

BD	BURIED	PVC	PVC SCHEDULE 40 CONDUIT
LT	LIGHT	RGC	RIGID GALVANIZED STEEL CONDUIT
JA	JACKED	C	CONDUIT
MH	MOUNTING HEIGHT	CKT	CIRCUIT
Ø	PHASE	N	NEUTRAL
SER LAT	SERVICE LATERAL	G	GROUND
		HM	HIGH MAST

COMPUTED BY: AB DATE: 7-29-13
CHECKED BY: PKC DATE: 7-29-13

PROJECT REFERENCE NO.	SHEET NO.
W-5208I	E2

USE FOR LIGHTING CONSTRUCTION ONLY

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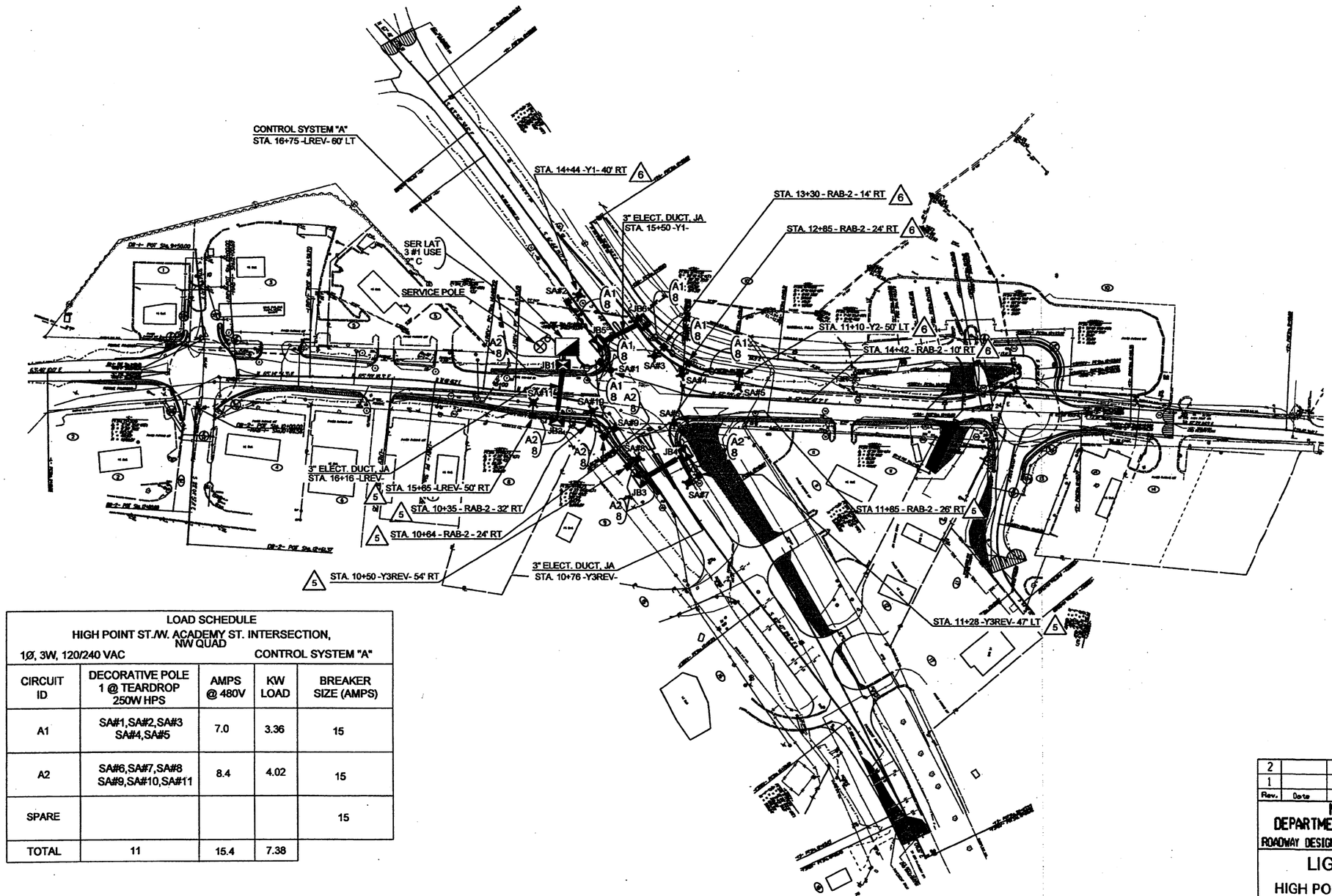

LOAD SCHEDULE HIGH POINT ST./W. ACADEMY ST. INTERSECTION, NW QUAD 1Ø, 3W, 120/240 VAC — CONTROL SYSTEM "A"				
CIRCUIT ID	DECORATIVE POLE 1 @ TEARDROP 250W HPS	AMPS @ 480V	KW LOAD	BREAKER SIZE (AMPS)
A1	SA#1,SA#2,SA#3 SA#4,SA#5	7.0	3.36	15
A2	SA#6,SA#7,SA#8 SA#9,SA#10,SA#11	8.4	4.02	15
SPARE				15
TOTAL	11	15.4	7.38	

NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER PAUL KI-HUN CHAN
7-29-13

Rev.	Date	Description	Approved
2			
1			

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN — LIGHTING/ELECTRICAL SECTION

LIGHTING LAYOUT

HIGH POINT ST / W ACADEMY ST
ROUNDABOUT INTERSECTION

RANDOLPH COUNTY

Drawn By	Approved By	Dwg No.
AB	PKC	

02/03/98

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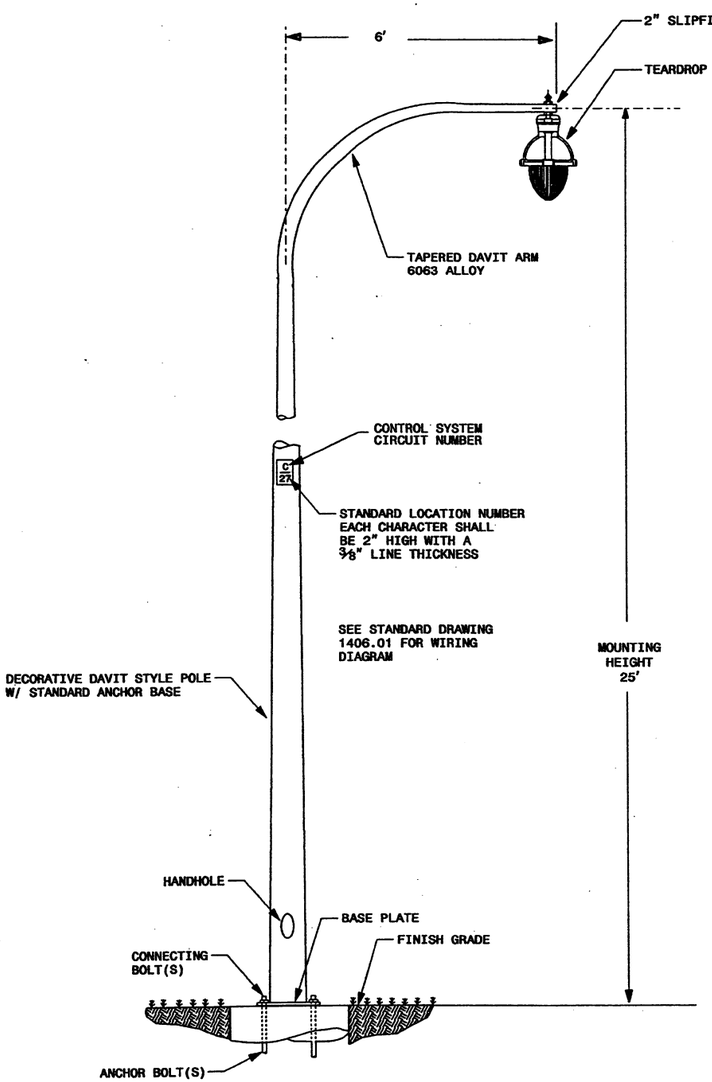
PROJECT REFERENCE NO.	SHEET NO.
W-5208I	E3

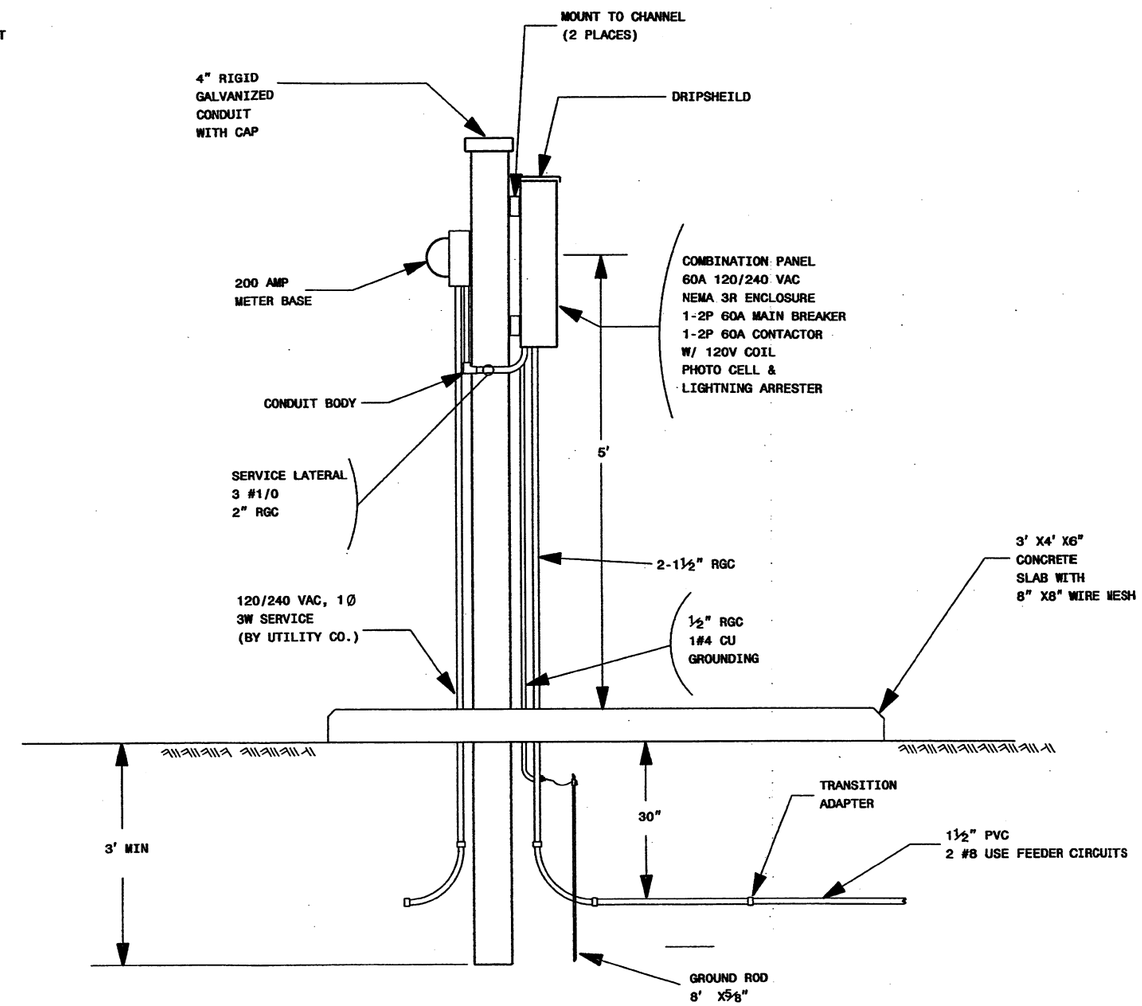
NORTH CAROLINA PROFESSIONAL SEAL 022582 ENGINEER PAUL KI-RUN CHAN 7-29-13

USE FOR LIGHTING CONSTRUCTION ONLY



LIGHT STANDARD DAVIT STYLE MH 25' SA 6'

NOT TO SCALE



LIGHTING CONTROLLER/SERVICE ENTRANCE EQUIPMENT

SQUARE D NIGHT-MASTER CLASS 8903 OR APPROVED EQUAL

Rev.	Date	Description	Approved
2			
1			

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN LIGHTING/ELECTRICAL SECTION

ELECTRICAL LIGHTING
DECORATIVE LIGHT STANDARD
& CONTROL SYSTEM DETAILS

Drawn By: AB	Approved By: PKC	Dwg No.:

02/03/98

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