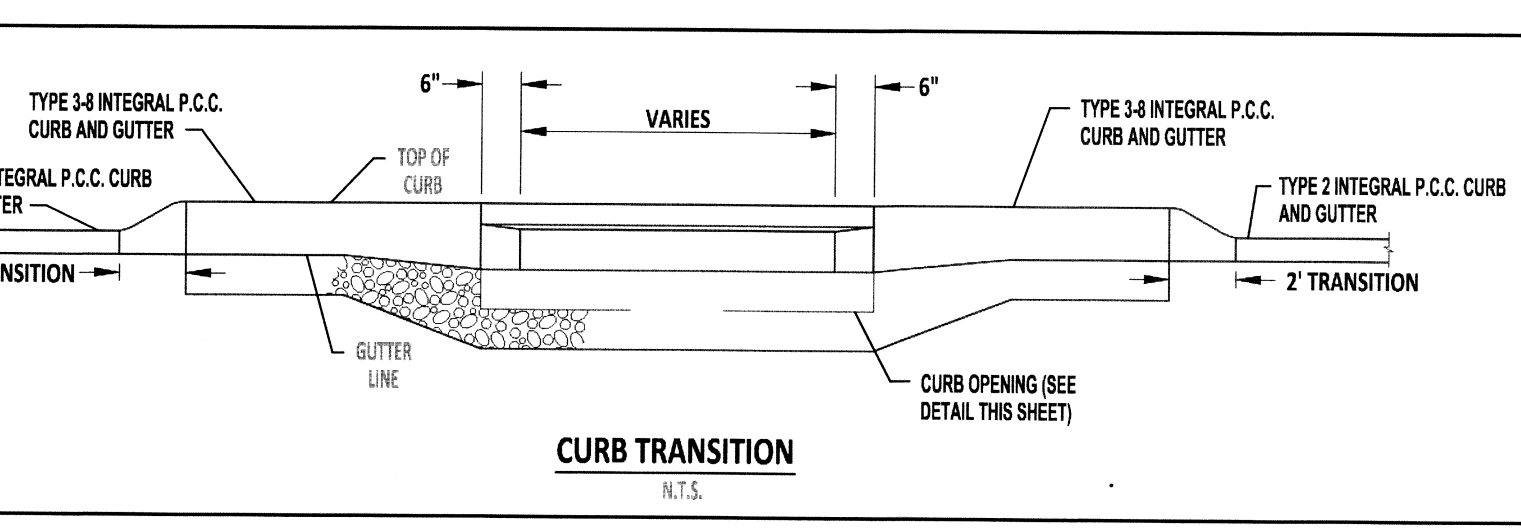


REINFORCED CONCRETE PIPE - STANDARD FLARED END SECTIONS

TABLE OF DIMENSIONS

DIAMETER	WALL	SLOPE	A	B	C	D	E	R1	R2
12"	2"	3:1	4"	2'-0"	4'-0 1/2"	6'-0 1/2"	2'-0"	10 1/2"	9"
15"	2 1/4"	3:1	6"	2'-3"	3'-10"	6'-1"	2'-6"	12 1/2"	11"
18"	2 1/2"	3:1	9"	2'-3"	3'-10"	6'-1"	3'-0"	15 1/2"	12"
21"	2 3/4"	3:1	9"	2'-11"	3'-2"	6'-1"	3'-6"	18 1/2"	13"
24"	3"	3:1	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	16 1/2"	14"
27"	3 1/4"	3:1	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	18 1/2"	14 1/2"
30"	3 1/2"	3:1	1'-0"	4'-6"	1'-7 1/2"	6'-1 1/2"	5'-0"	18 1/2"	15"
33"	3 3/4"	3:1	1'-1 1/2"	4'-10 1/2"	3'-3 1/2"	6'-1 1/2"	5'-6"	23 1/2"	17 1/2"
36"	4"	3:1	1'-3"	5'-3"	2'-10 3/4"	6'-1 1/2"	6'-0"	24 1/2"	20"
42"	4 1/2"	3:1	1'-9"	5'-3"	2'-11"	6'-2"	6'-6"	27 1/2"	22"
48"	5"	3:1	2'-0"	6'-0"	2'-2"	6'-2"	7'-0"	28 1/2"	22"
54"	5 1/2"	24:1	2'-3"	5'-5"	2'-11"	6'-4"	7'-6"	33 1/2"	24"



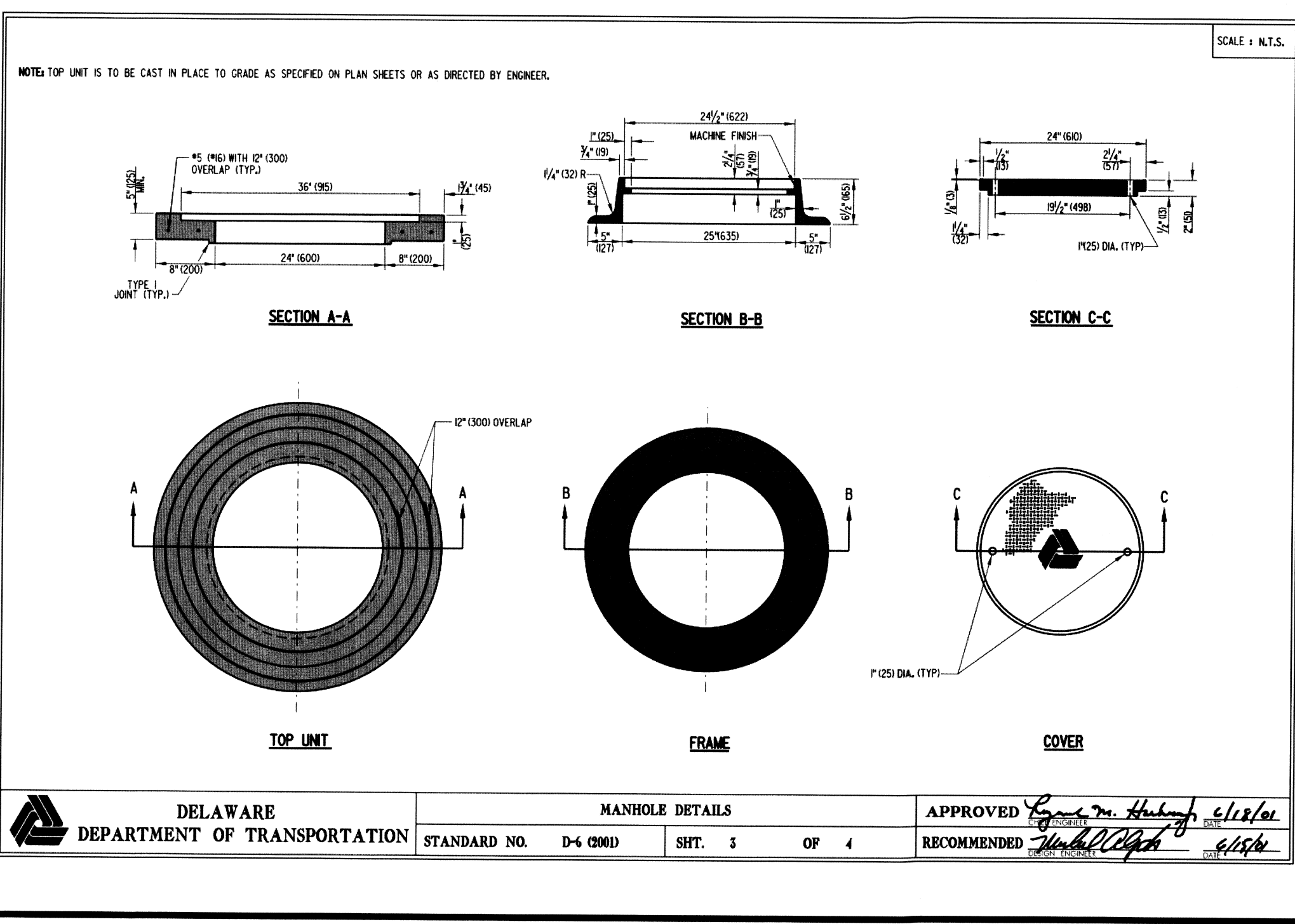
FLARED END SECTIONS

PE THREADED ROD W/WING NUTS AND SPACERS
SEE NOTE

PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 in (300 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1510NP	15 in (375 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1810NP	18 in (450 mm)	7.50 in (191 mm)	15.00 in (381 mm)	6.50 in (165 mm)	32.00 in (813 mm)	35.00 in (889 mm)
2410NP	24 in (600 mm)	7.50 in (191 mm)	18.00 in (457 mm)	6.50 in (165 mm)	36.00 in (914 mm)	45.00 in (1143 mm)
3015NP	30 in (750 mm)	7.50 in (191 mm)	12.00 in (305 mm)	8.60 in (218 mm)	58.00 in (1473 mm)	63.00 in (1600 mm)
3615NP	36 in (900 mm)	7.50 in (191 mm)	25.00 in (635 mm)	8.60 in (218 mm)	58.00 in (1473 mm)	63.00 in (1600 mm)

NOTE: PE THREADED ROD W/WING NUTS PROVIDED FOR END SECTIONS 12"-24". 30" & 36" END SECTIONS REQUIRE TWO (2) THREADED RODS FOR ASSEMBLY.

NOTE: ALL DIMENSIONS ARE NOMINAL.



HK Cobra Style
Tyler® Mechanically Installed Boot Connector

Tylox Boot Connectors ... flexible enough to meet your most rigid standards.

For over half a century, pre-casters have put their trust in Hamilton Kent's flexible rubber gaskets to provide permanent, water-tight joints in their concrete pipes and structures. Now you can get that same "peace-of-mind" for your pipe-to-structure connections - with Hamilton Kent's premier line of flexible, rubber, boot connectors.

Designed to provide a water-tight seal between a pre-formed hole (cove or cast-in) in a concrete structure and a connecting pipe, all Tylox® Cobra style, flexible, rubber, boot connectors:

- are designed to meet, or exceed, the requirements of ASTM C923 - 13 pig water-tight sealing in straight alignment and 10deg water-tight sealing at ± 7° deflection.
- accommodate variation in hole sizes, through the use of an adjustable hoop.
- allow for repeated installation and removal, without damaging the connector.
- are quick and easy to install, using an adjustable torque wrench.
- are easily installed, and/or removed, from either the interior or exterior of the concrete structure.
- are manufactured in a variety of hole-size / pipe-size combinations to fit most conventional hole sizes 7" thru 20", and connecting pipe O.D.'s from 1.80" thru 18.50". (Please refer to Chart on rear of sheet for exact details)
- are supplied, as standard, with high-grade, 304 Series, Stainless Steel Shroud, Hoop and Clamp, for maximum corrosion resistance.
- are manufactured with high-strength, fibre-glass reinforced, nylon wedges, for enhanced durability.

Hamilton Kent's policy of carrying large inventories of finished product, in multiple locations, means that you'll find ordering and receiving Tylox® flexible, rubber, boot connectors can be the same simple, worry-free experience that you've come to expect on your Hamilton Kent gasket requirements.

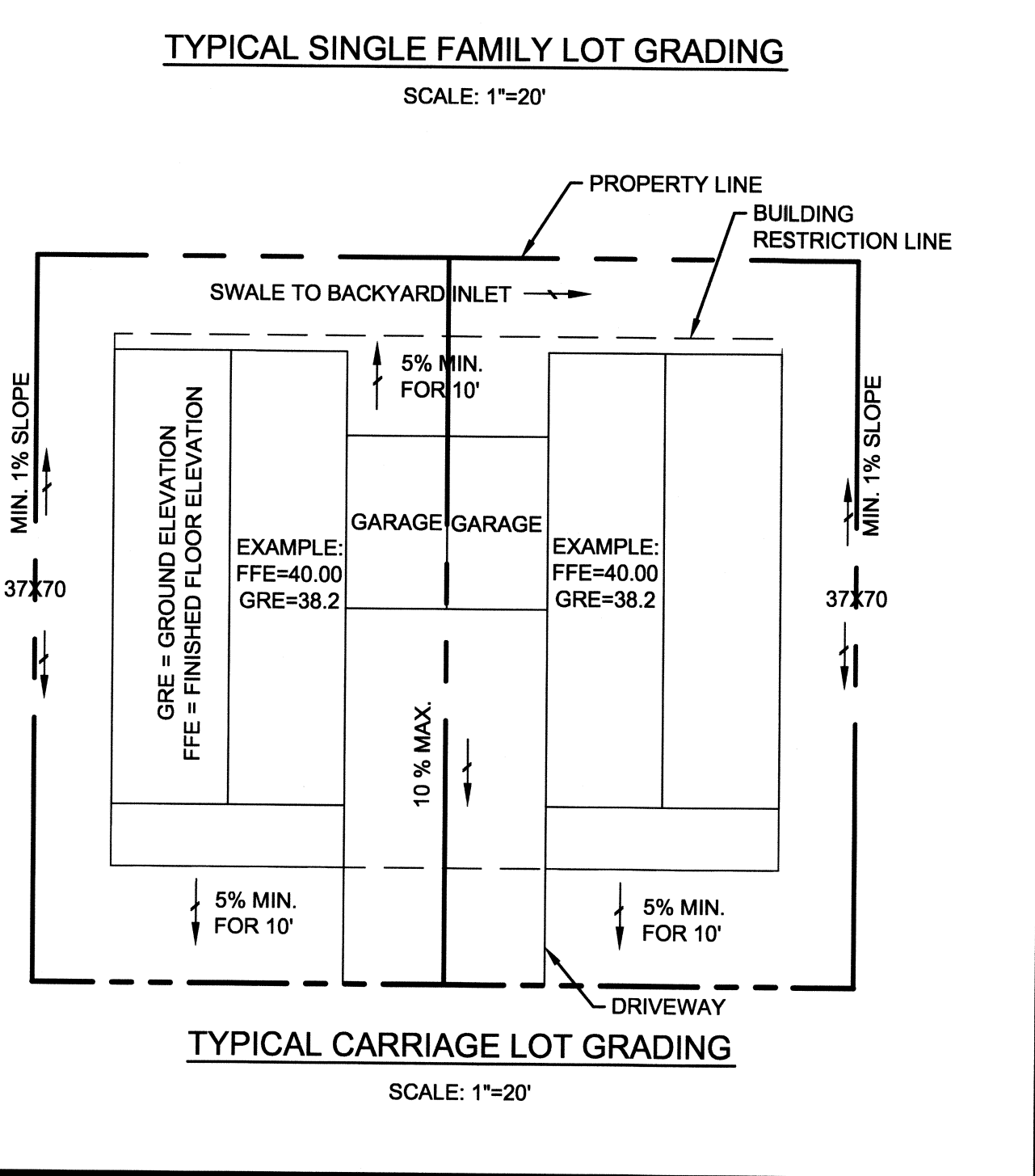
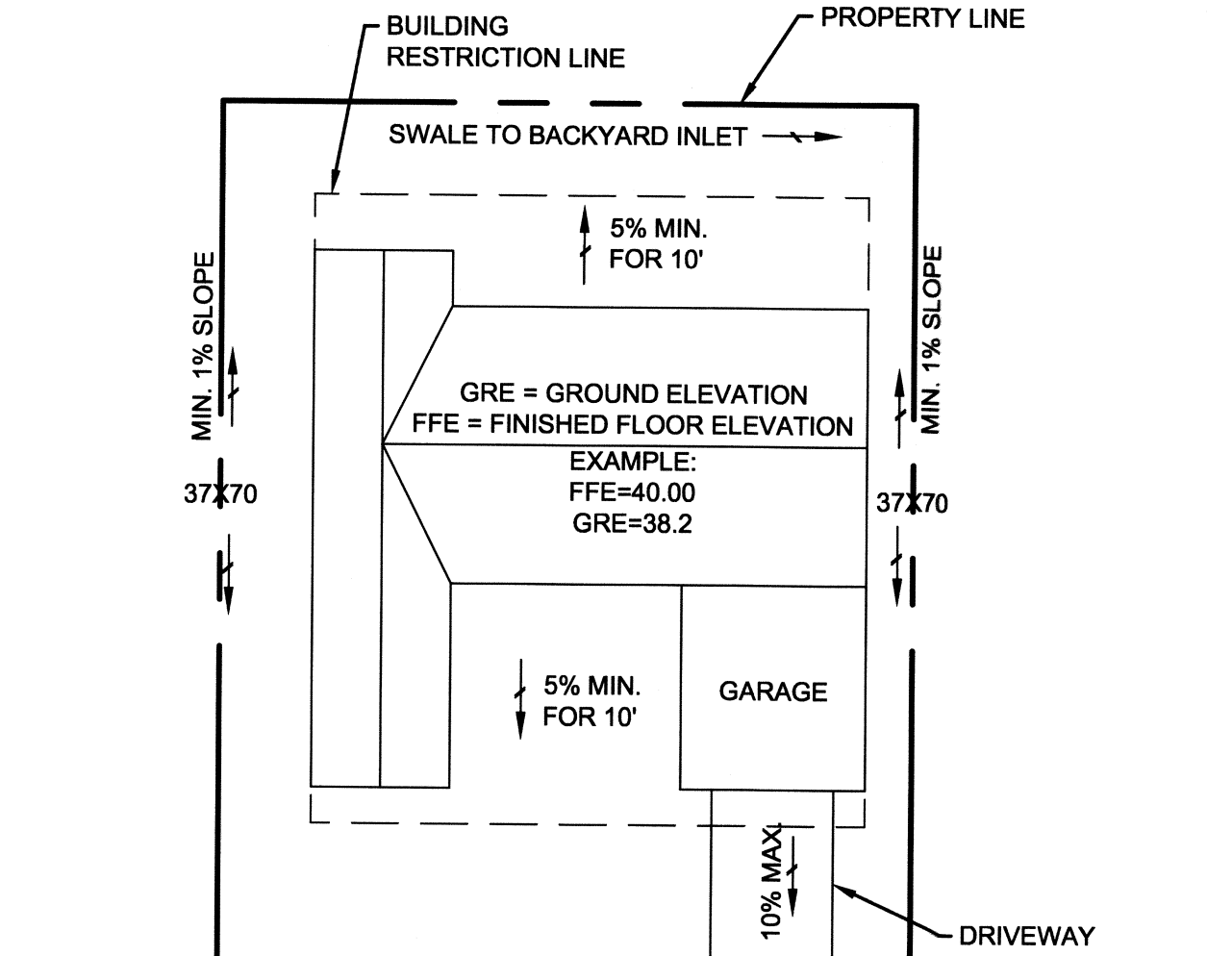
A variety of the standard shroud, the top shroud is designed for field selection to suit either a 2", 3" or 4" connecting pipe.

Hamilton Kent
make the connection

Hamilton Kent
TEL: (800) 268 8479
FAX: (800) 674 6960
WEB: www.hamiltonkent.com
E-MAIL: sales@hamiltonkent.com

Hamilton Kent
make the connection

LA_Spec_Cobra_0708_032



REVISIONS

REV. #	DATE	DESCRIPTION

DATE 10/13/02

SEAL [Signature]

DATE 10/13/02

McCRONE
Celebrating 75 Years of Quality Service and Innovation

McCRONE
ENGINEERS • SURVEYORS • PLANNERS
ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY

106 EAST MAIN STREET, SUITE 101
ELKTON, MARYLAND 21921
(410) 396-1550
www.mccrone-inc.com

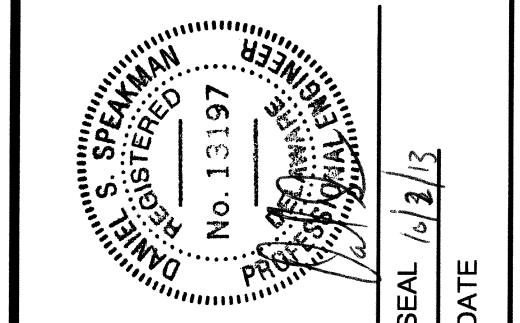
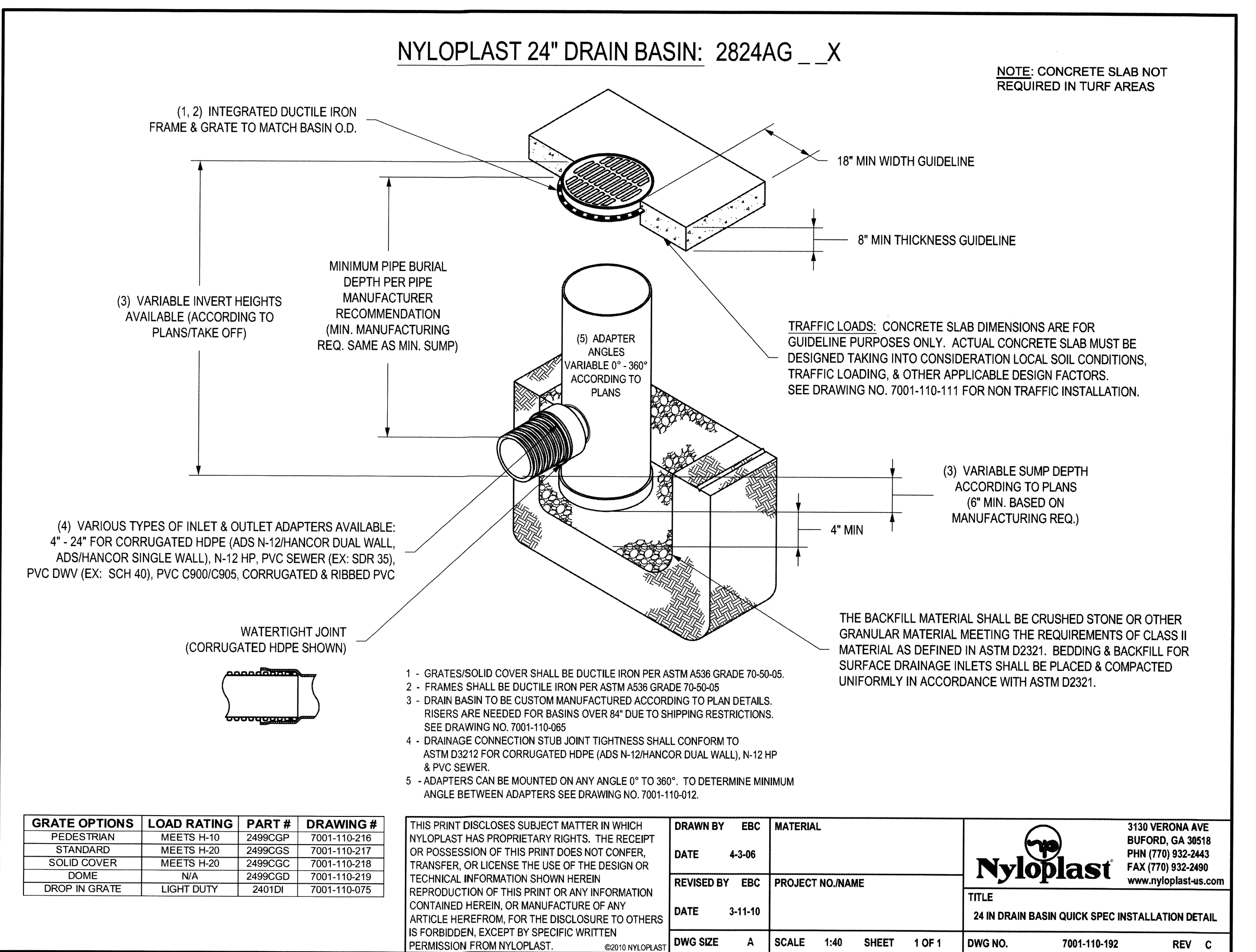
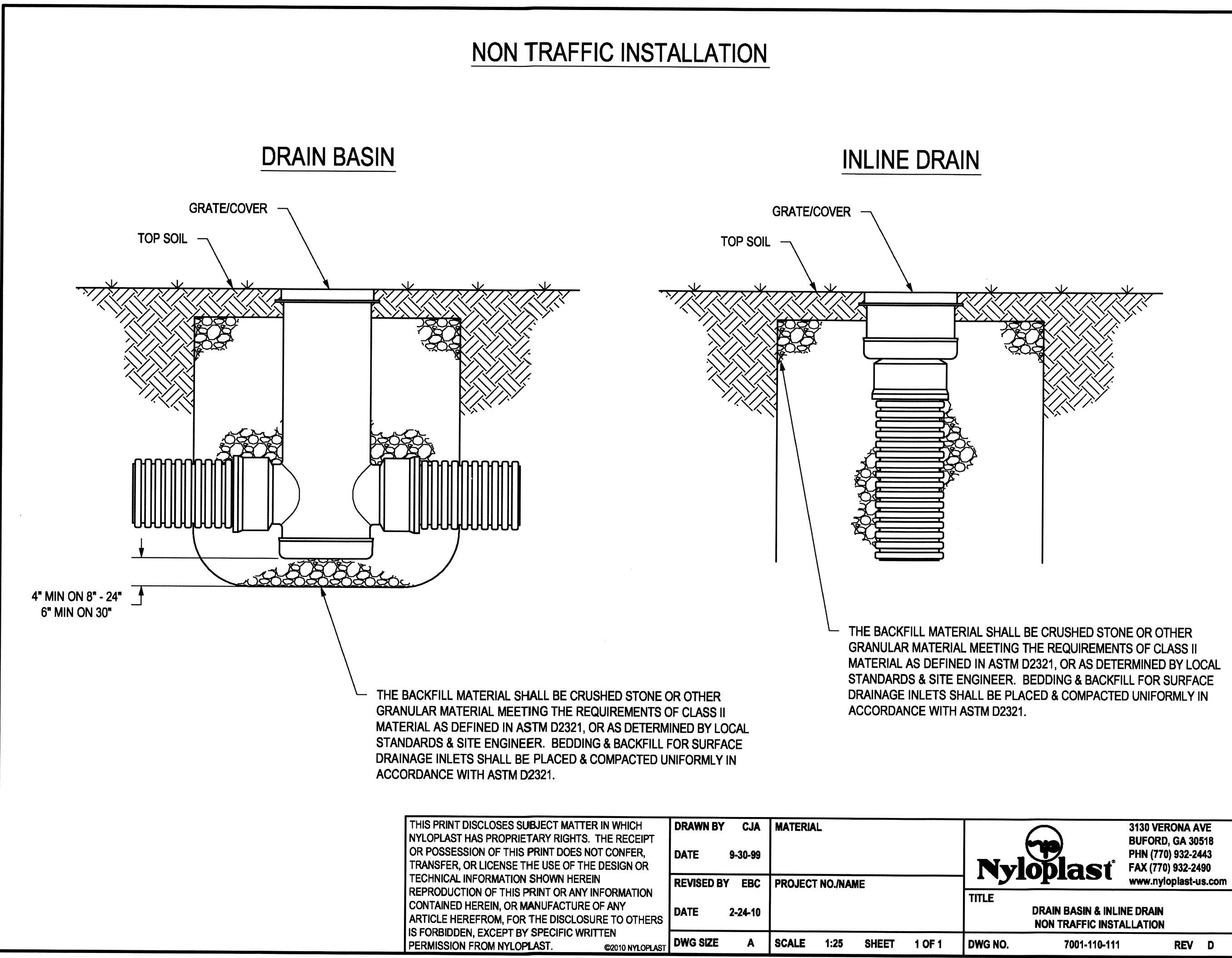
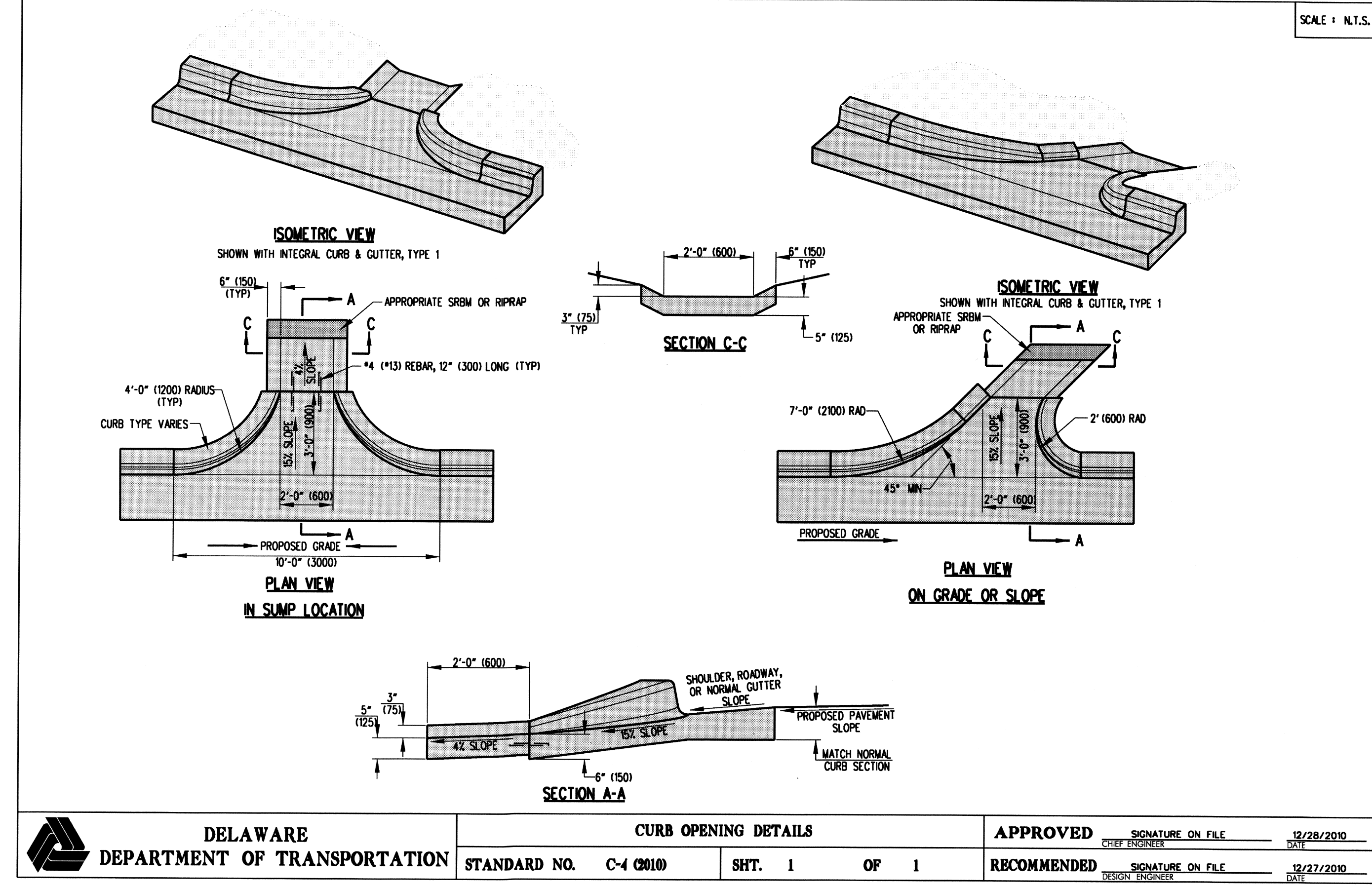
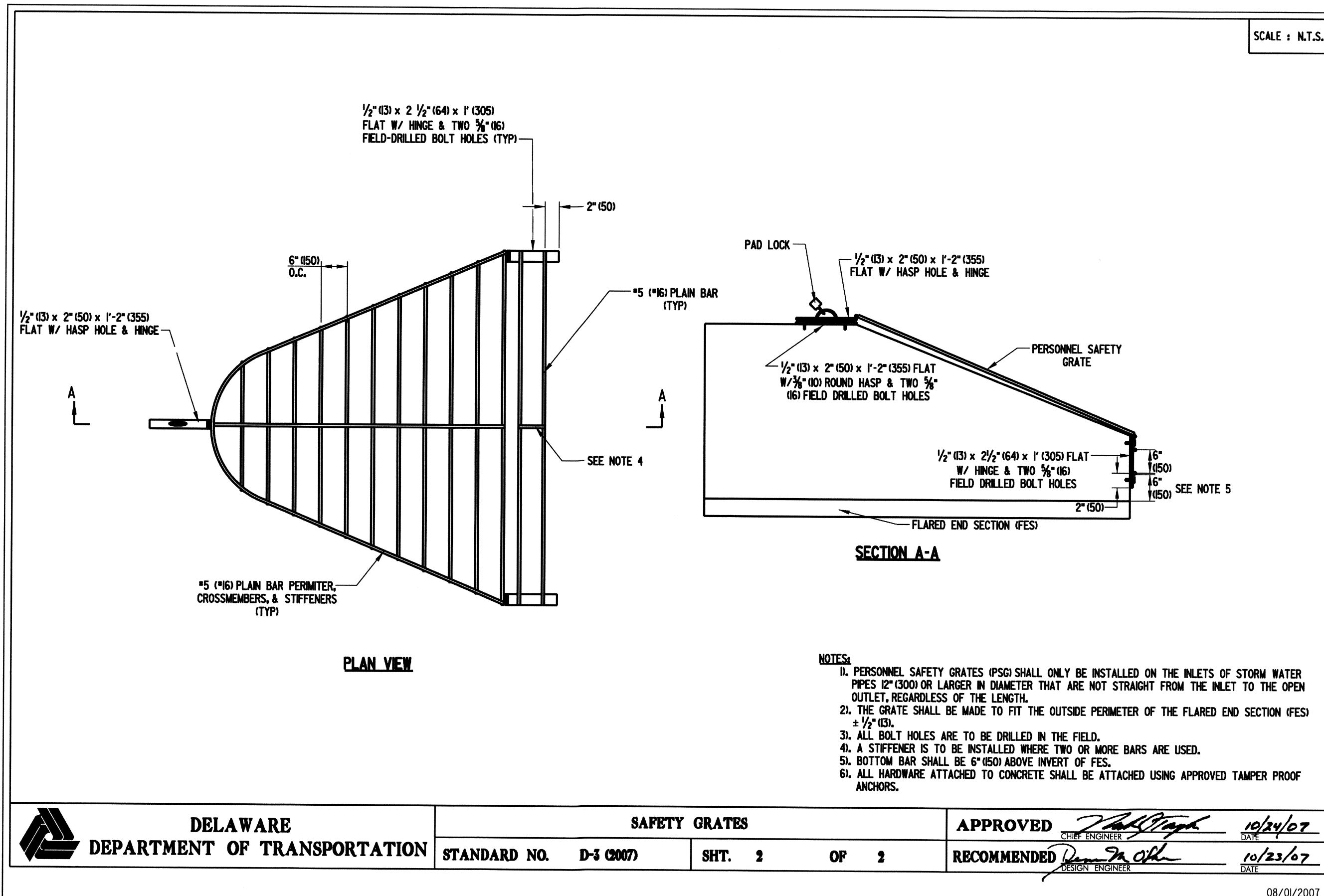
CONSTRUCTION DETAILS

FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR: EDDIE EVANS FARMS, LLC

SHEET NO.: D-10

FILE NO.: 1446-B

September 13, 2013 - 7:17am User: mkratt C:\3090182\DWG\Detail Sheets\3090182\Detail and Notes\PH-3 (download)1a, compiled copy 2013.07.16.dwg



REV. #	DATE	DESCRIPTION

McCORMICK
ENGINEERS • SURVEYORS • PLANNERS
ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY
106 EAST MAIN STREET, SUITE 101
ELKTON, MARYLAND 21921
(410) 398-1550
www.mccormick-inc.com

DATE:	FEBRUARY 2013
JOB NUMBER:	D0900182
SCALE:	N/A
DRAWN BY:	JDC
DESIGNED BY:	JDC
APPROVED BY:	DSE
FOLDER REFERENCE:	P-20080182

CONSTRUCTION DETAILS

FILE NO. SL-11-01

VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR: EDDIE EVANIS FARMS, LLC

October 01, 2013, 9:38am User: merrill C:\3088181\DWG\Detail Sheet\03081812-X\Detail and Notes-Pl-3 (download)11a, compiled copy, 2013-07-16 (16).dwg

2489CGS
APPROX. DRAIN AREA = 191.00 SQ IN
APPROX. WEIGHT WITH FRAME = 124.00 LBS

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FINISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-024

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

DATE	3-4-06	EDG	DUCTILE IRON
APPROVED BY	CJA	PROJECT NO.	NAME
DATE	3-4-06		
DWG SIZE	A	SCALE	1:1
SHEET	1 OF 1	DWG NO.	7001-110-027
REV	B		

WATER TIGHT JOINT

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

DATE	3-28-06	CJA	ADD R-12 & BANCOR DUAL WALL WATER TIGHT JOINT DETAIL
APPROVED BY	CJA	PROJECT NO.	NAME
DATE	3-28-06		
DWG SIZE	A	SCALE	1/8" = 1'-0"
SHEET	1 OF 1	DWG NO.	7001-110-116
REV	B		

CATCHBASIN 13-13 (MODIFIED 34"x24" INLET) DETAIL
NOT TO SCALE

TRASH RACK SHALL BE HDPE PEAKED ROOF STYLE, CUSTOM FABRICATED TO FIT OUTFALL STRUCTURE, AS MANUFACTURED BY PLASTIC SOLUTIONS, INC., OR APPROVED EQUIVALENT.

CATCHBASIN 12-31 (MODIFIED 48"x30" INLET) DETAIL
NOT TO SCALE

TRASH RACK SHALL BE HDPE PEAKED ROOF STYLE, CUSTOM FABRICATED TO FIT OUTFALL STRUCTURE, AS MANUFACTURED BY PLASTIC SOLUTIONS, INC., OR APPROVED EQUIVALENT.

Section 2721 Engineered Surface Drainage Products

GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast, a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermo-molding process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24", and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting H-20 wheel loading for traffic areas or H-10 loading for pedestrian areas. 12" and 15" square grates will be hinged to the frame using pins. Metal used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05 for ductile iron. Grate shall be provided painted black.

INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 2 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For H-20 load rated installations, a concrete ring will be poured under and around the grate and frame. The concrete slab must be designed taking into the consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

DATE	3-19-06	CJA	8 IN - 30 IN SPECIFICATIONS
APPROVED BY	CJA	PROJECT NO.	NAME
DATE	3-19-06		
DWG SIZE	A	SCALE	1:1
SHEET	1 OF 1	DWG NO.	7001-110-011
REV	E		

RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (7.5T AXLE LOAD)**
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 7.5T MAY REQUIRE ADDITIONAL COVER

MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COVER
UP TO 24"	24"
30" - 36"	36"
42" - 60"	48"

** COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE.
*** E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE: 4" (100mm) FOR 4"-24" (100mm-600mm), 6" (150mm) FOR 30"-60" (750mm-600mm).
- INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

© 2007 ADS, INC.

ADVANCED DRAINAGE SYSTEMS, INC. (ADS) HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT. FOR HAS ASSUMES RESPONSIBILITY FOR THE INFORMATION SUPPLIED. THE INSTALLATION SHALL BE AS PROVIDED HEREIN IN THE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN OBSERVE OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

2	ADDED E-80 INFORMATION	JLR	08/20/07	
REV	DESCRIPTION	BY	DATE	CHKD

TYPICAL TRENCH DETAIL

DWG NO. STD-101

4540 TRUEAMEN BLVD
HILLIARD, OHIO 43026

CKS
10/19/06
NTS
1 OF 1

TRASH RACK SHALL BE HDPE PEAKED ROOF STYLE, CUSTOM FABRICATED TO FIT OUTFALL STRUCTURE, AS MANUFACTURED BY PLASTIC SOLUTIONS, INC., OR APPROVED EQUIVALENT.

SOUTH FACE
PROP. GRADE TO SLOPE TO WEIR OPENING
P 7-18 18" HDPE INV. OUT = 41.9
EL. = 45.19
EL. = 43.94

NORTH FACE
EL. = 45.19
EL. = 43.94

CATCH BASIN IS A MODIFIED DELDOT PRECAST 48"x30" INLET BOX
CATCH BASIN CB 7-23
SCALE: 1"=2'

COMPACTED SUBGRADE MINIMUM BEARING CAPACITY SHALL BE 1500 PSF

REGISTERED PROFESSIONAL ENGINEER
No. 13197
PLASTIC SOLUTIONS, INC.

SEAL [] DATE []

REV #	DATE	DESCRIPTION

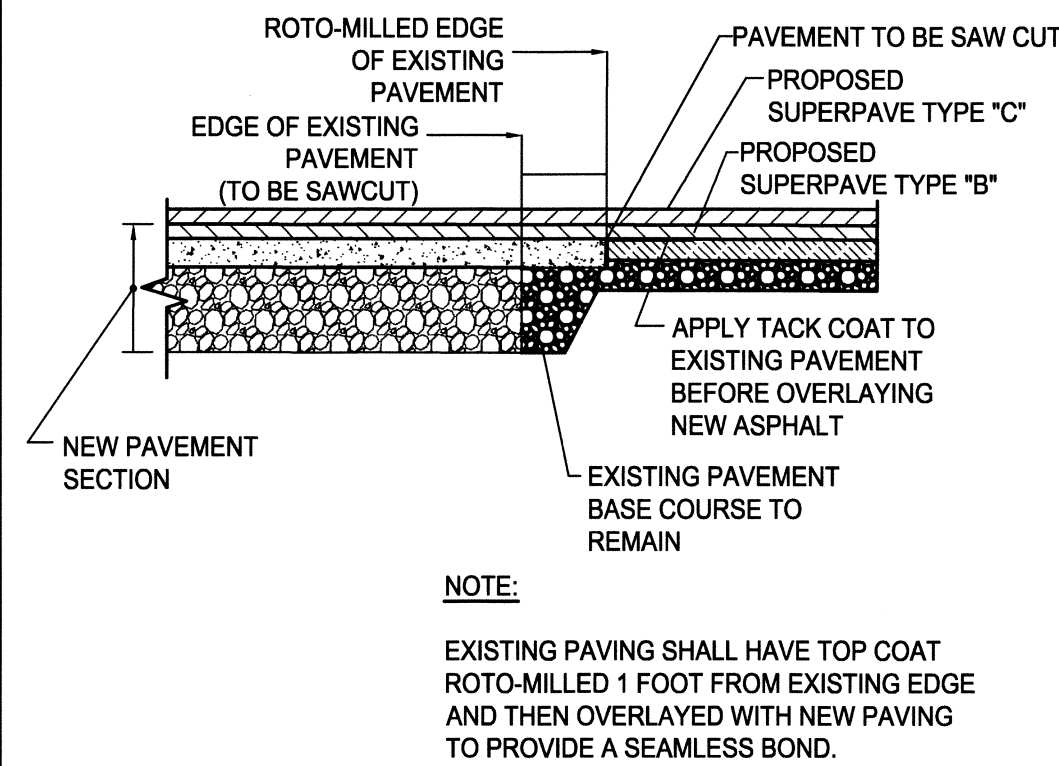
REVISIONS

DATE: FEBRUARY 2013
JOB NUMBER: D300182
SCALE: N/A
DRAWN BY: JDC
DESIGNED BY: JDC
APPROVED BY: DSS
FOLDER REFERENCE: F-D300182

CONSTRUCTION DETAILS

FILE NO. SL-11-01
VILLAGES OF NOBLES POND PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR: EDDIE EVANS FARMIS, LLC

SHEET NO.: **D-12**
FILE NO.: 1446-B

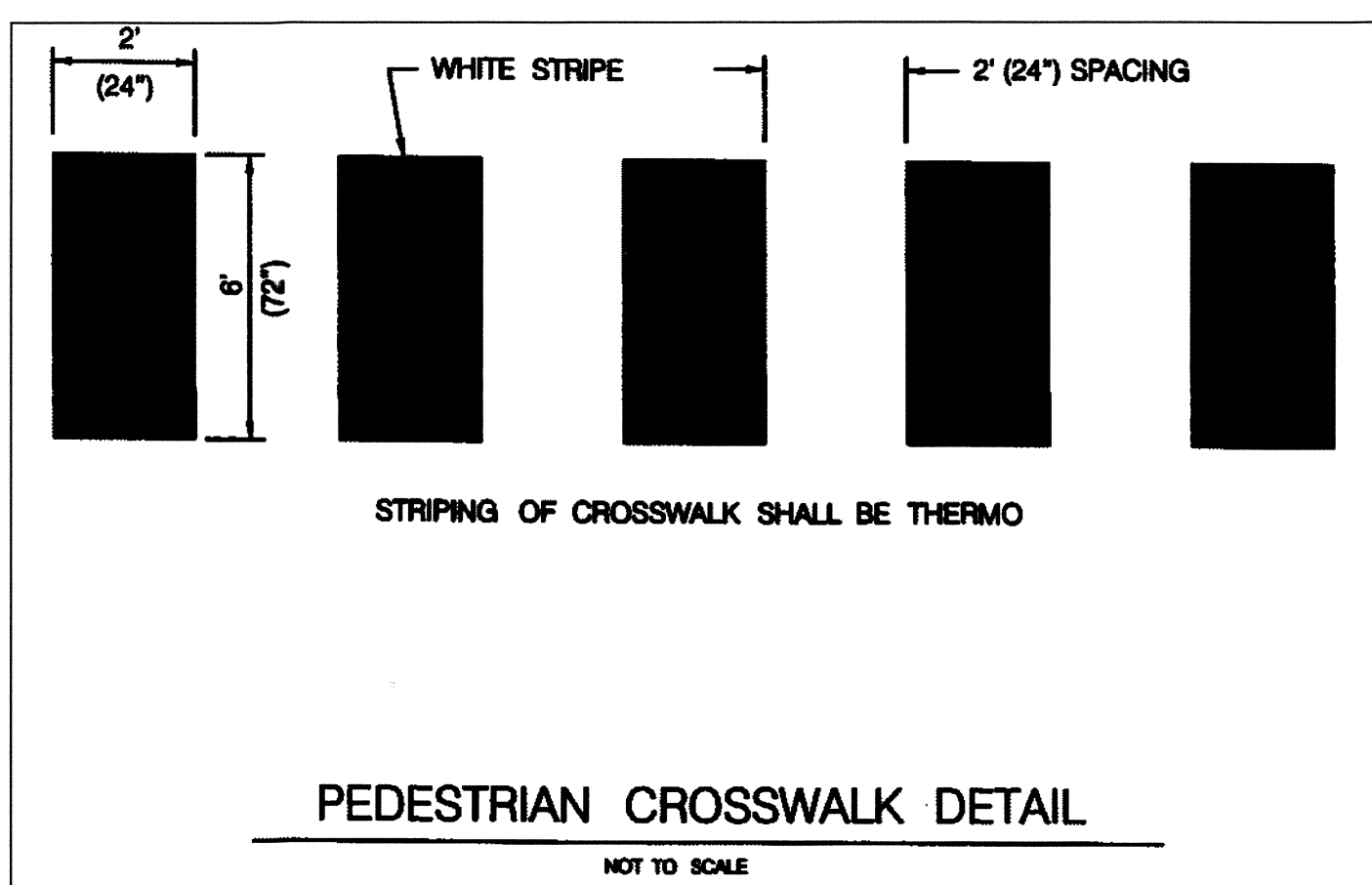


NOTE:

EXISTING PAVING SHALL HAVE TOP COAT ROTO-MILLED 1 FOOT FROM EXISTING EDGE AND THEN OVERLAYED WITH NEW PAVING TO PROVIDE A SEAMLESS BOND.

TYPICAL PAVEMENT TIE-IN DETAIL

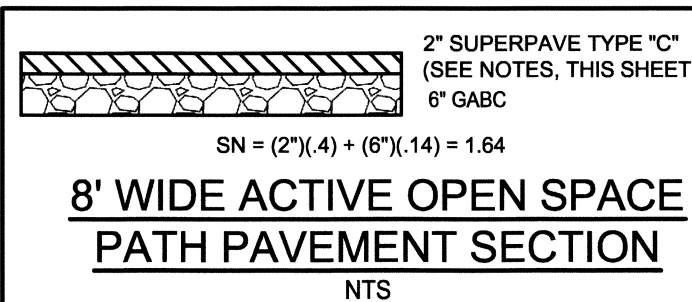
N.T.S.



STRIPING OF CROSSWALK SHALL BE THERMO

PEDESTRIAN CROSSWALK DETAIL

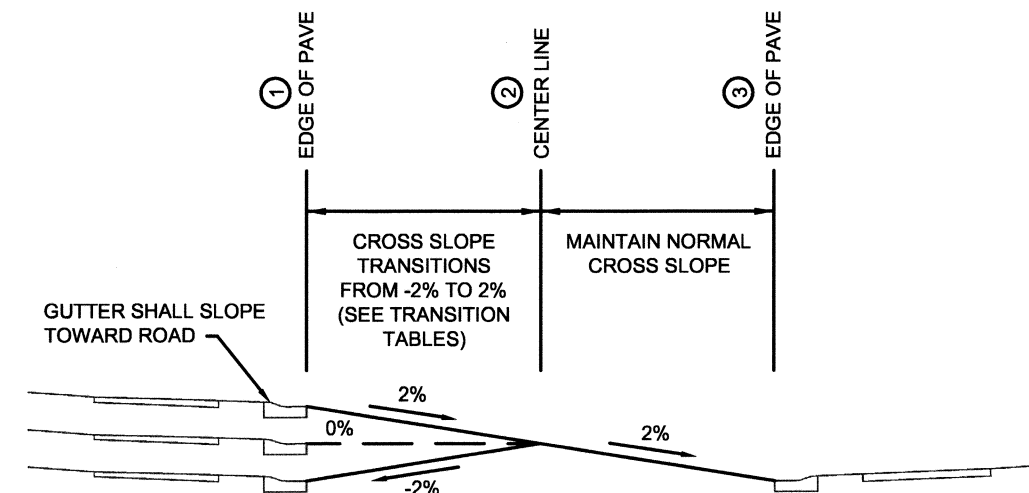
NOT TO SCALE



8' WIDE ACTIVE OPEN SPACE PATH PAVEMENT SECTION

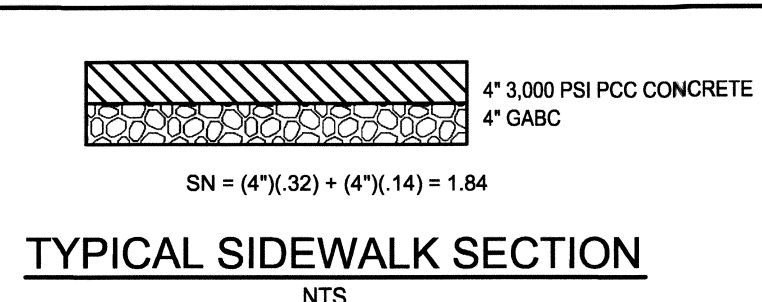
NTS

- NOTES:
1. TYPE C HOT MIX IS TO BE SUPERPAVE TYPE C, PG 64-22, 160 GYRATIONS (CARBONATE STONE) (401645).
 2. TYPE B HOT MIX IS TO BE SUPERPAVE TYPE B, PG 64-22, 160 GYRATIONS (401648).
 3. GABC (302005)
 4. TYPE C HOT MIX FOR MULTIMODAL PATH IS TO BE SUPERPAVE TYPE C, PG 64-22, 115 GYRATIONS (CARBONATE STONE) (401645).



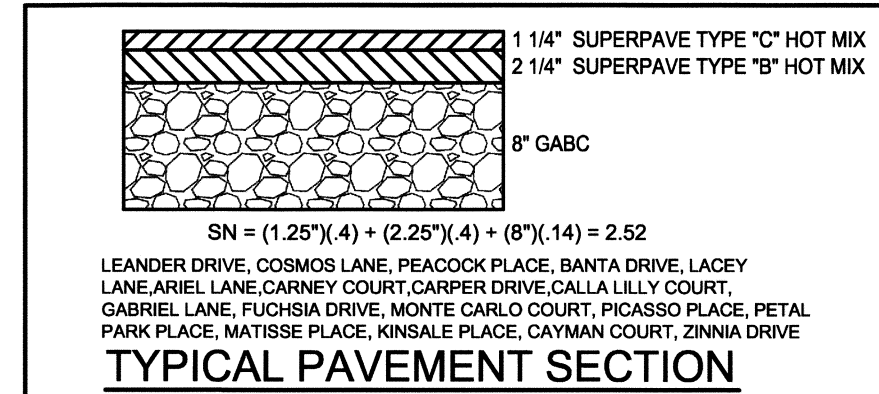
TYPICAL TRANSITION FROM NORMAL CROSS SECTION TO SUPER ELEVATED CROSS SECTION

N.T.S.



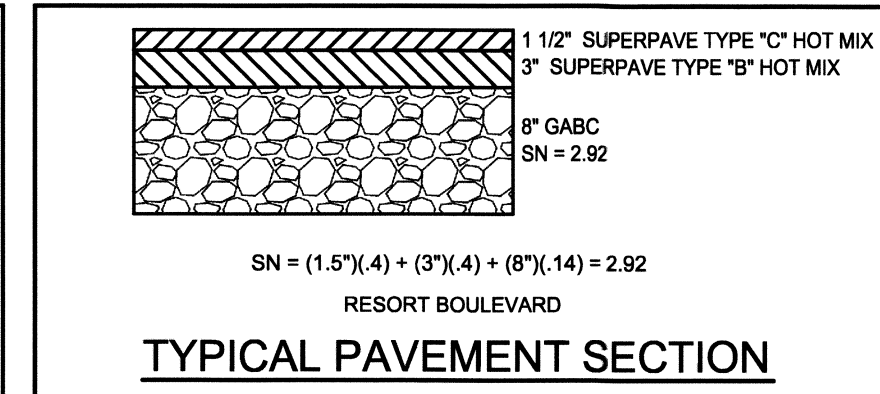
TYPICAL SIDEWALK SECTION

NTS



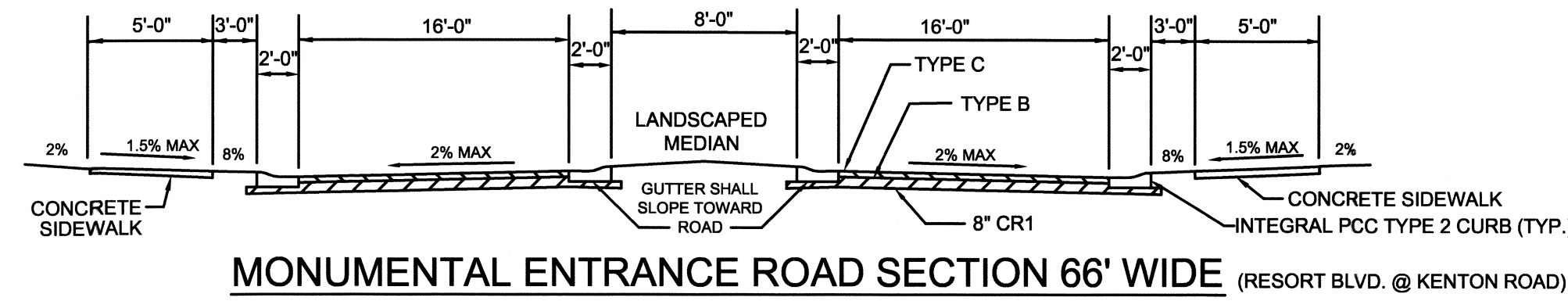
TYPICAL PAVEMENT SECTION

NTS



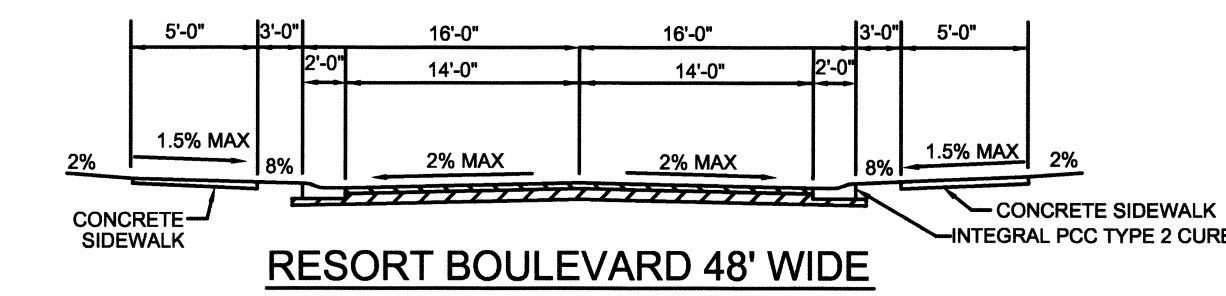
TYPICAL PAVEMENT SECTION

NTS



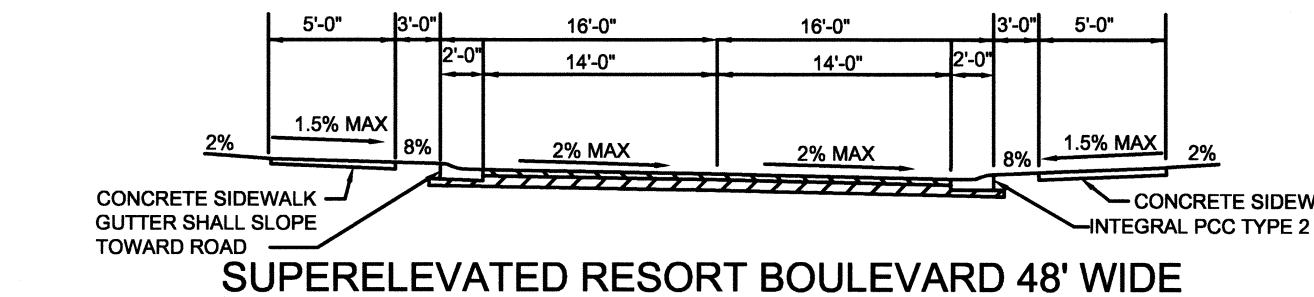
MONUMENTAL ENTRANCE ROAD SECTION 66' WIDE (RESORT BLVD. @ KENTON ROAD)

N.T.S.



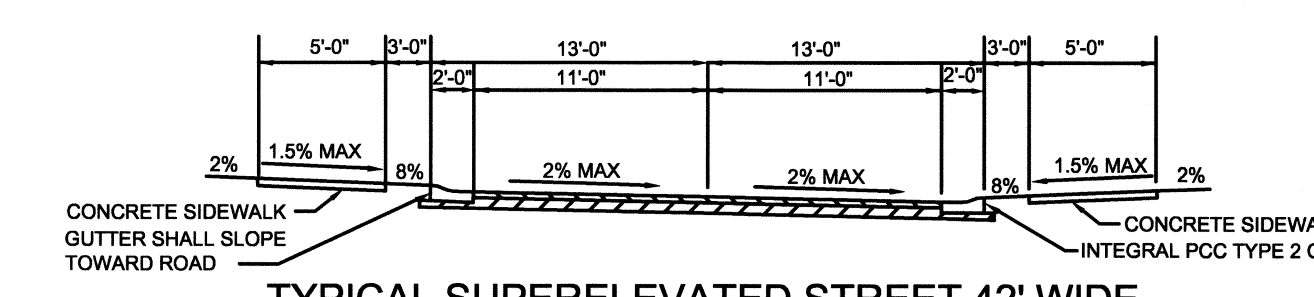
RESORT BOULEVARD 48' WIDE

N.T.S.



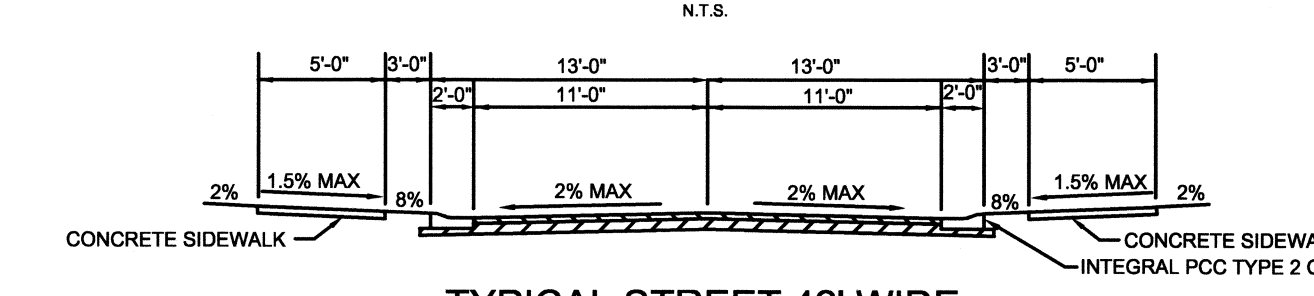
SUPERELEVATED RESORT BOULEVARD 48' WIDE

N.T.S.



TYPICAL SUPERELEVATED STREET 42' WIDE

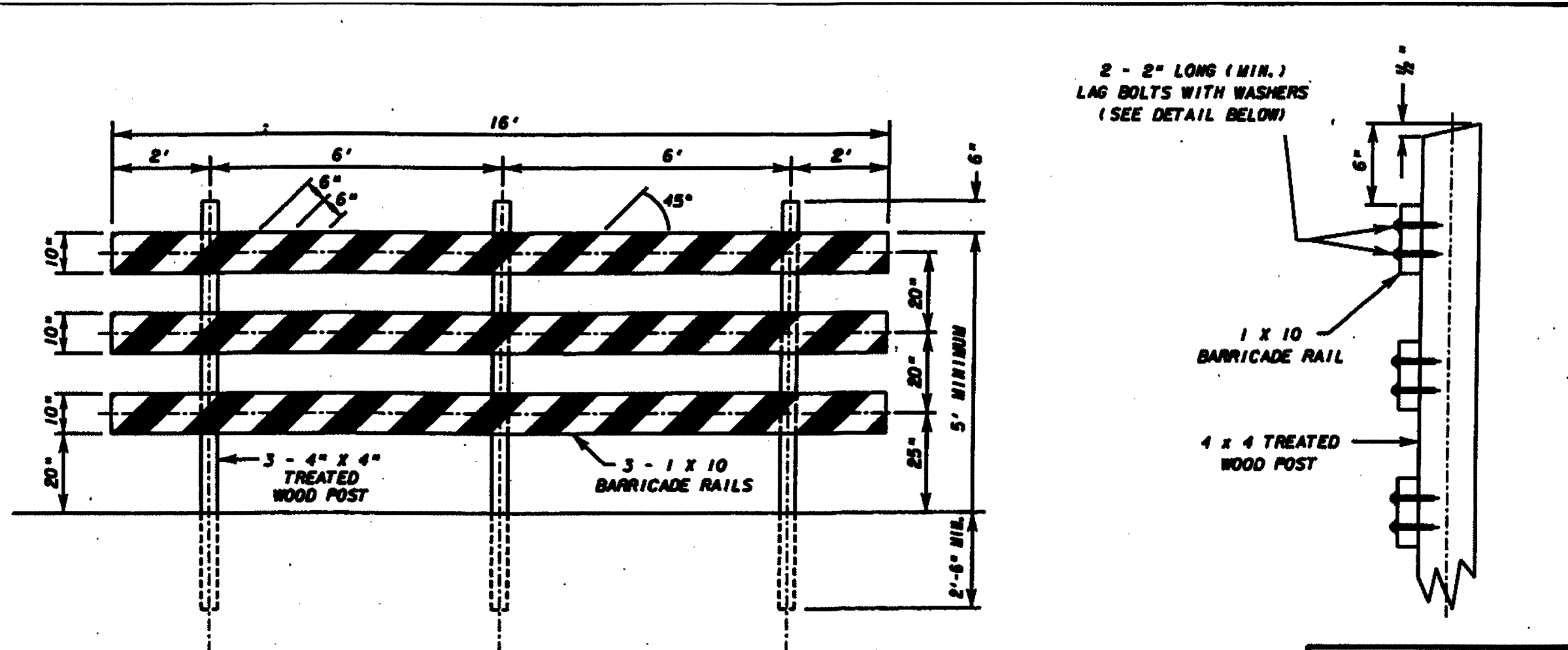
N.T.S.



TYPICAL STREET 42' WIDE

N.T.S.

- 42' WIDE STREETS
- COSMOS LANE
 - PEACOCK PLACE
 - LEANDER DRIVE
 - BANTA DRIVE
 - LACEY LANE
 - ARIEL LANE
 - CARNEY COURT
 - CARPER DRIVE
 - CALLA LILLY COURT
 - GABRIEL LANE
 - FUCHSIA DRIVE
 - MONTE CARLO COURT
 - PICASSO PLACE
 - PETAL PARK PLACE
 - MATISSE PLACE
 - KINSALE COURT
 - ZINNA DRIVE



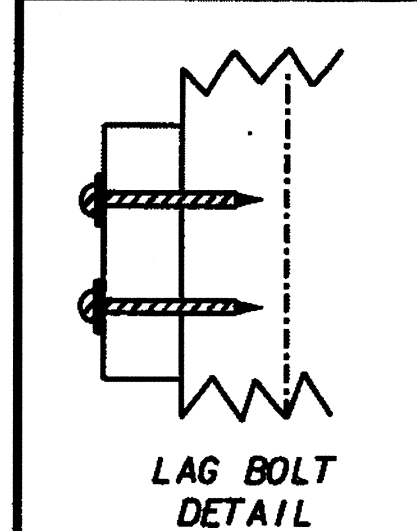
MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE STRIPES, SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES.

ATTACH BARRICADE RAIL TO THE 4 X 4 POST BY USING LAG BOLTS (2" LONG, MINIMUM WITH WASHERS). TWO BOLTS PER RAIL PER POST SHALL BE REQUIRED.

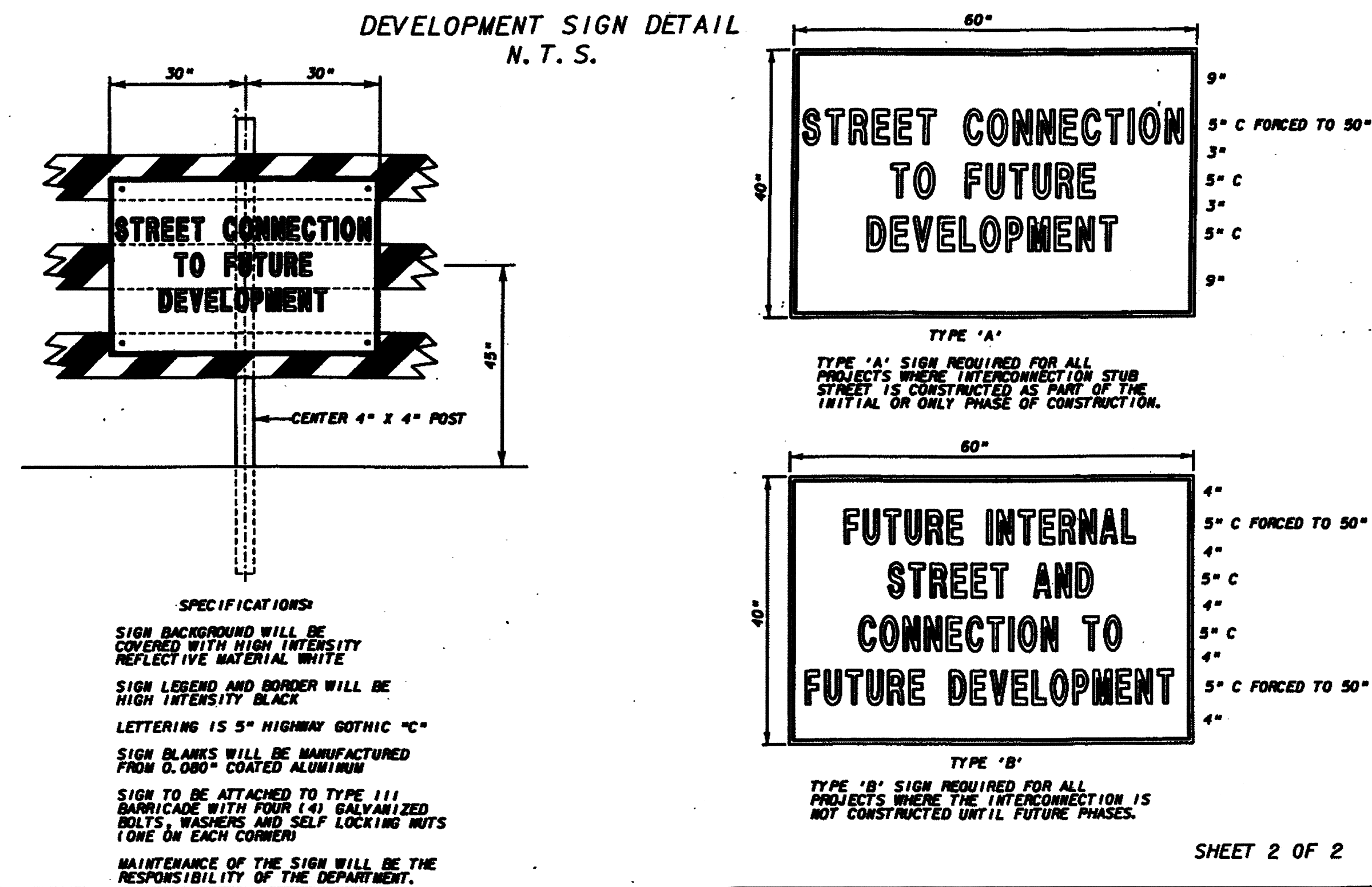
SEE SHEET NO. 2 FOR DEVELOPMENT SIGN DETAIL.

FRONT VIEW
N.T.S.

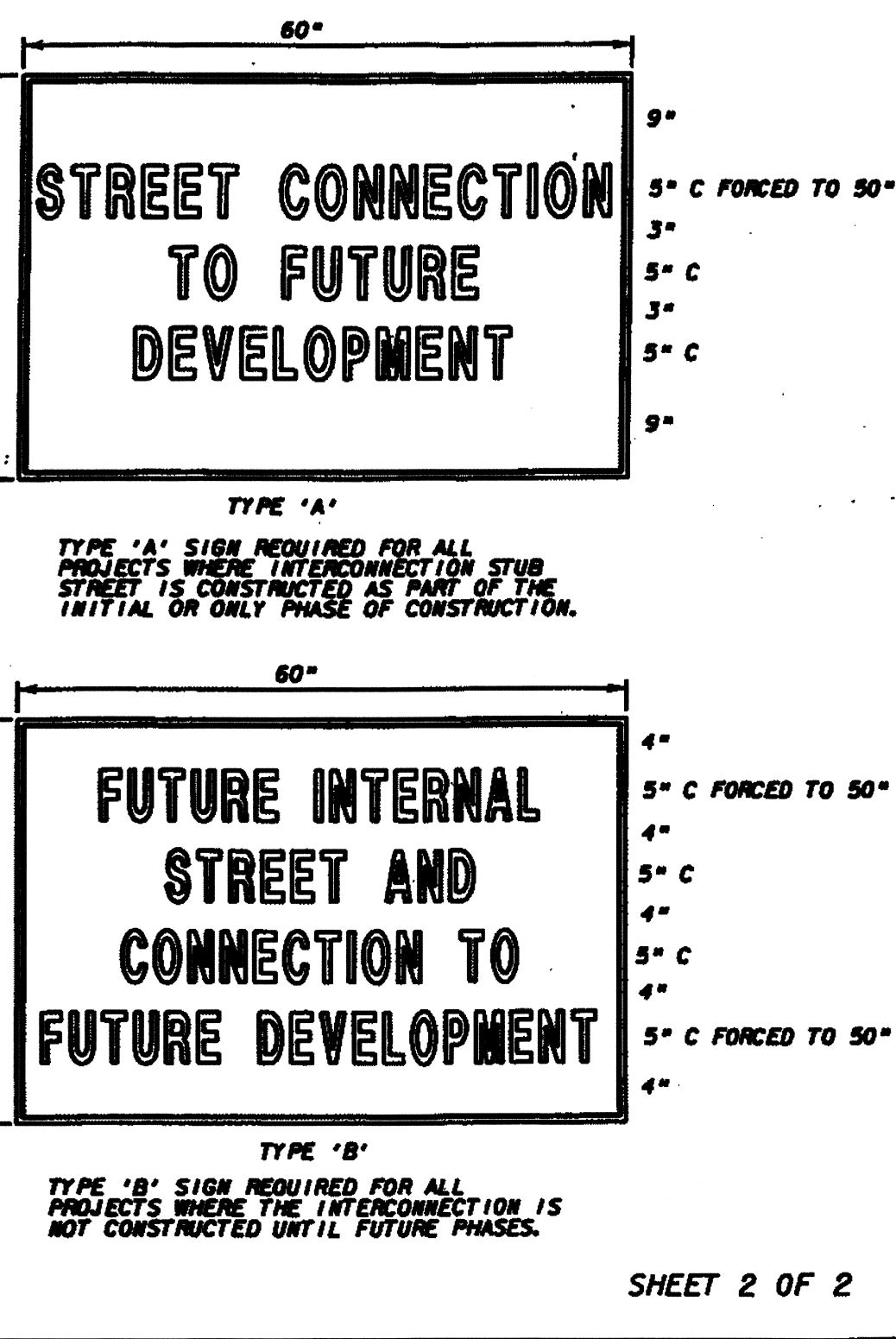
SHEET 1 OF 2



LAG BOLT
DETAIL



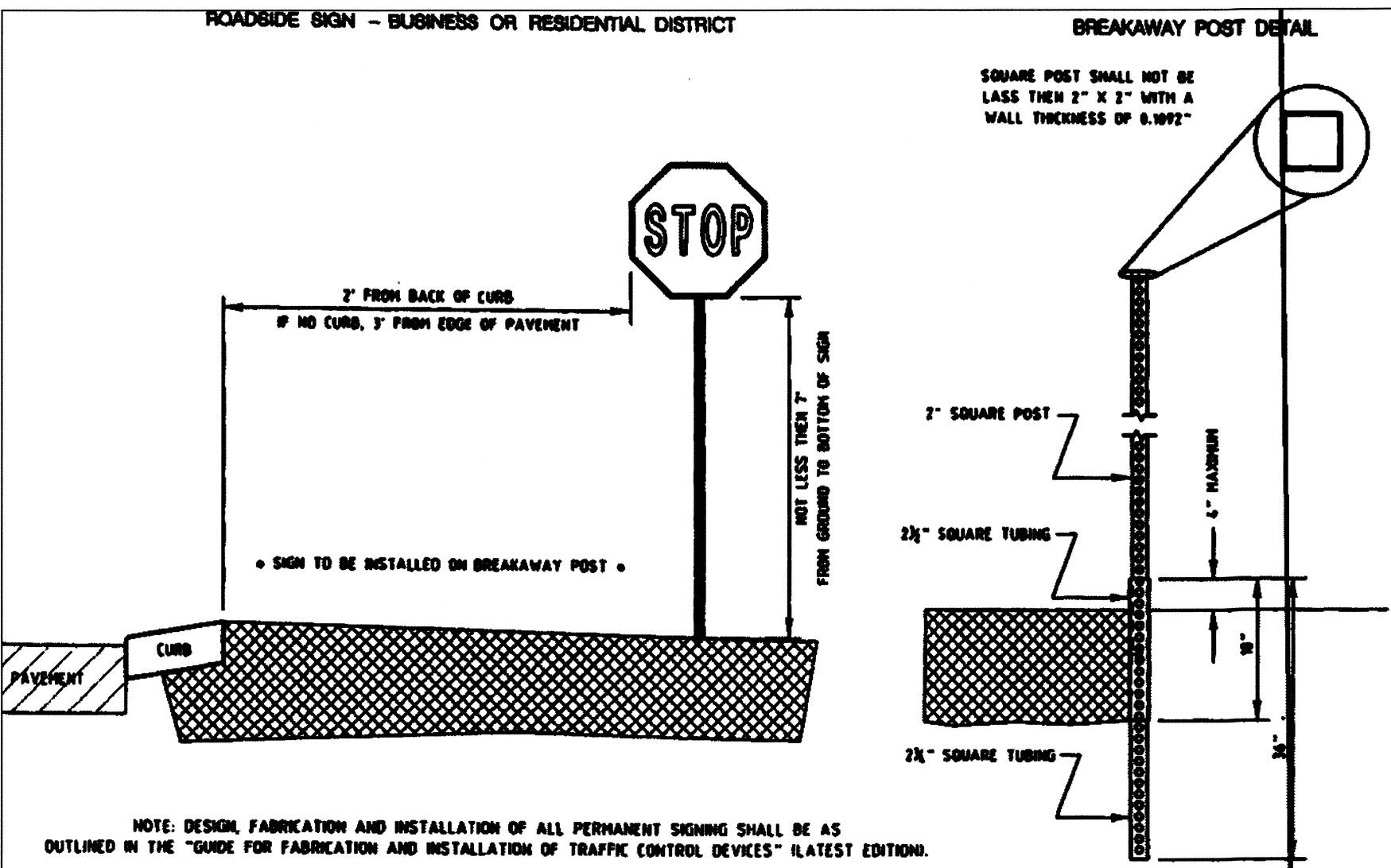
DEVELOPMENT SIGN DETAIL
N.T.S.



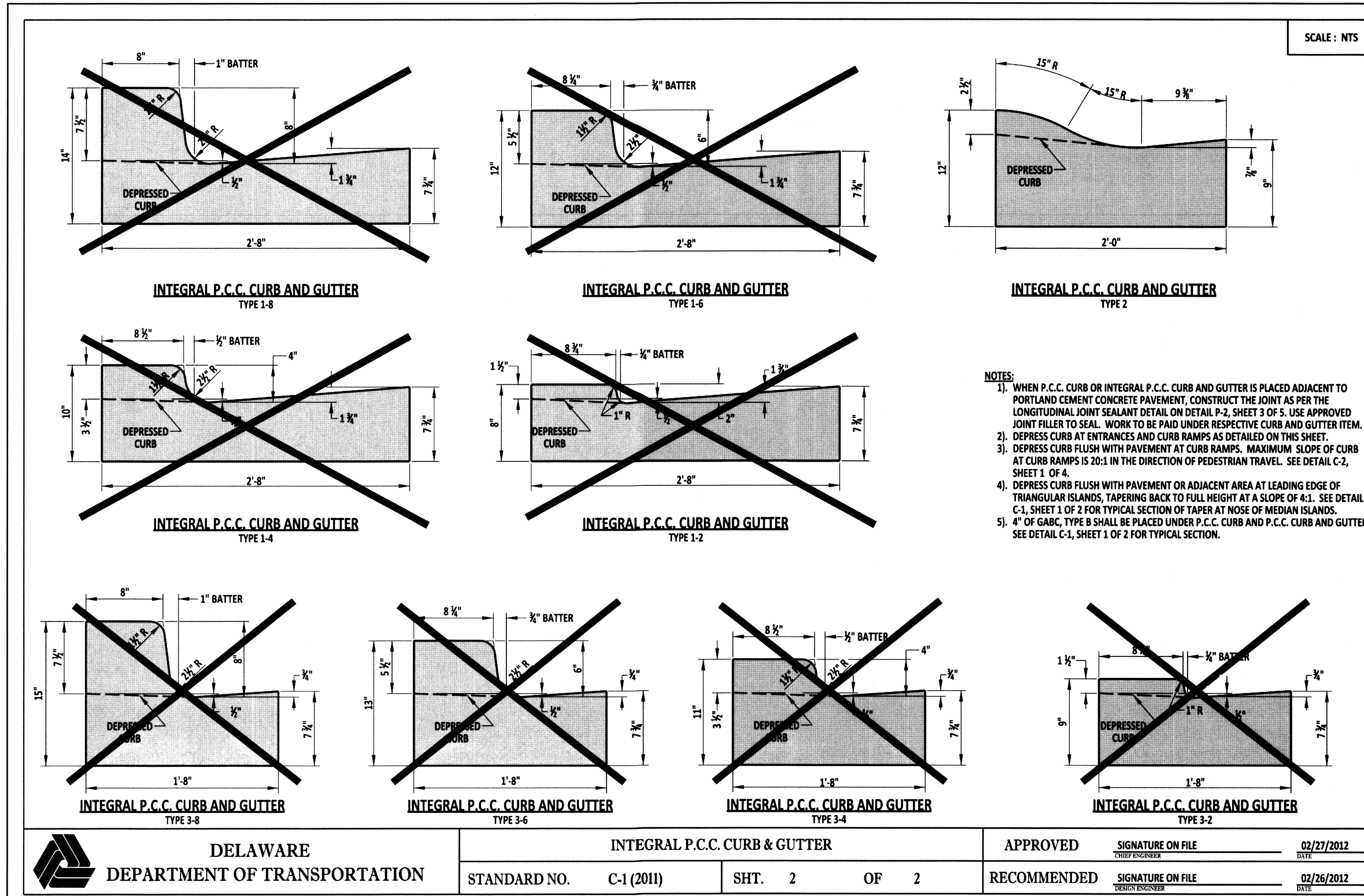
TYPE 'A' SIGN REQUIRED FOR ALL PROJECTS WHERE INTERCONNECTION STUB STREET IS CONSTRUCTED AS PART OF THE INITIAL OR ONLY PHASE OF CONSTRUCTION.

TYPE 'B' SIGN REQUIRED FOR ALL PROJECTS WHERE THE INTERCONNECTION IS NOT CONSTRUCTED UNTIL FUTURE PHASES.

SHEET 2 OF 2



NOTE: DESIGN, FABRICATION AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE "GUIDE FOR FABRICATION AND INSTALLATION OF TRAFFIC CONTROL DEVICES" LATEST EDITION.

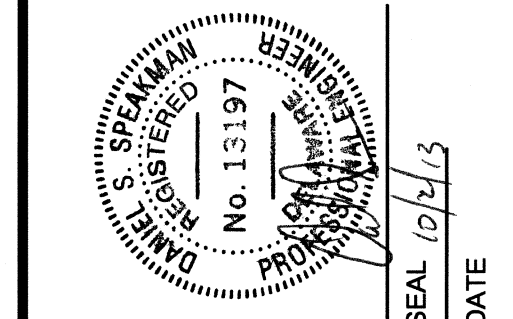


- NOTES:
1. WHEN P.C.C. CURB OR INTEGRAL P.C.C. CURB AND GUTTER IS PLACED ADJACENT TO PORTLAND CEMENT CONCRETE PAVEMENT, CONSTRUCT THE JOINT AS PER THE LONGITUDINAL JOINT SEALANT DETAIL ON DETAIL P-2, SHEET 3 OF 5. USE APPROVED JOINT FILLER TO SEAL. WORK TO BE PAID UNDER RESPECTIVE CURB AND GUTTER ITEM.
 2. DEPRESS CURB AT ENTRANCES AND CURB RAMPS AS DETAILED ON THIS SHEET.
 3. DEPRESS CURB FLUSH WITH PAVEMENT AT CURB RAMPS. MAXIMUM SLOPE OF CURB AT CURB RAMPS IS 3:01 IN THE DIRECTION OF PEDESTRIAN TRAVEL. SEE DETAIL C-2, SHEET 1 OF 4.
 4. DEPRESS CURB FLUSH WITH PAVEMENT OR ADJACENT AREA AT LEADING EDGE OF TRIANGULAR ISLANDS, TAPERING BACK TO FALL HEIGHT AT A SLOPE OF 4:1. SEE DETAIL C-1, SHEET 1 OF 2 FOR TYPICAL SECTION OF TAPER AT NOSE OF MEDIAN ISLANDS.
 5. 4" OF GABC, TYPE B SHALL BE PLACED UNDER P.C.C. CURB AND P.C.C. CURB AND GUTTER. SEE DETAIL C-1, SHEET 1 OF 2 FOR TYPICAL SECTION.

DELAWARE DEPARTMENT OF TRANSPORTATION

INTEGRAL P.C.C. CURB & GUTTER
STANDARD NO. C-1 (2011) SHT. 2 OF 2

APPROVED SIGNATURE ON FILE 02/27/2012
RECOMMENDED SIGNATURE ON FILE 02/26/2012



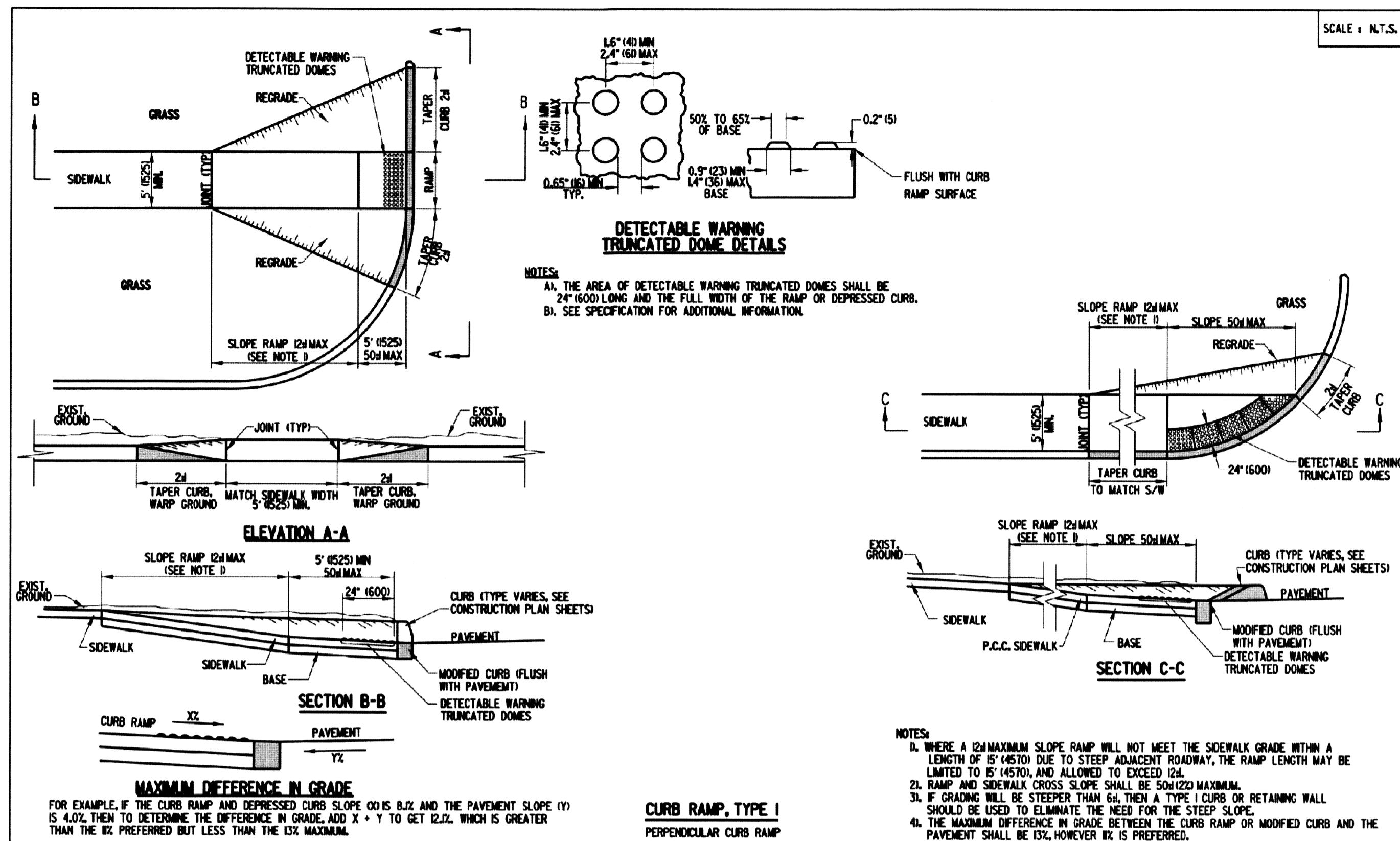
REV. #	DATE	DESCRIPTION

McCRORNE ENGINEERS • SURVEYORS • PLANNERS
ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY
106 EAST MAIN STREET, SUITE 101
ELKTON, MARYLAND 21921
(410) 396-1550
www.mccrone-inc.com

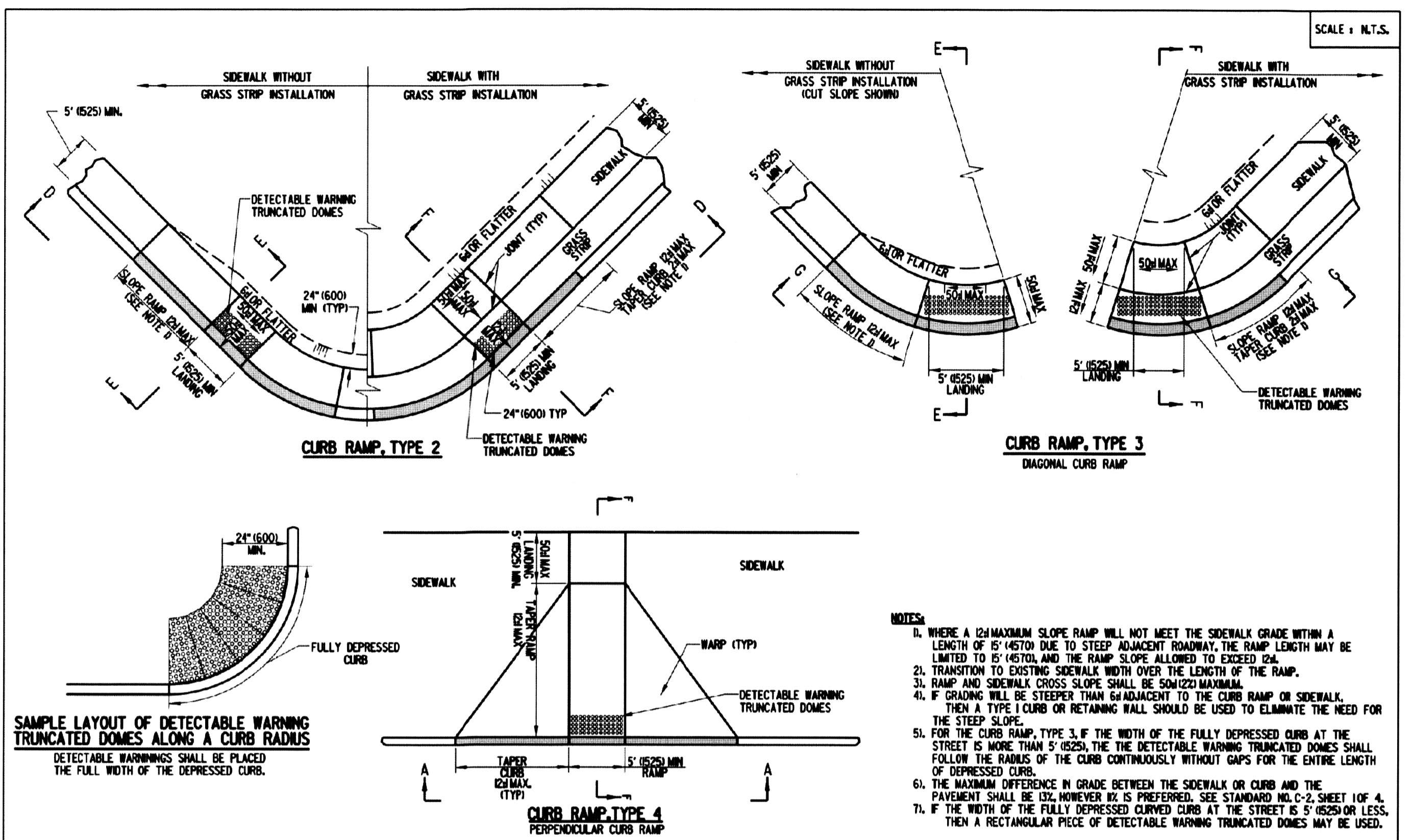
DATE:	FEBRUARY 2013
JOB NUMBER:	DS090182
SCALE:	N/A
DRAWN BY:	JDC
DESIGNED BY:	JDC
APPROVED BY:	DS
FOLDER REFERENCE:	P-03090182

CONSTRUCTION DETAILS
FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR: EDDIE EVANS FARMAS, LLC

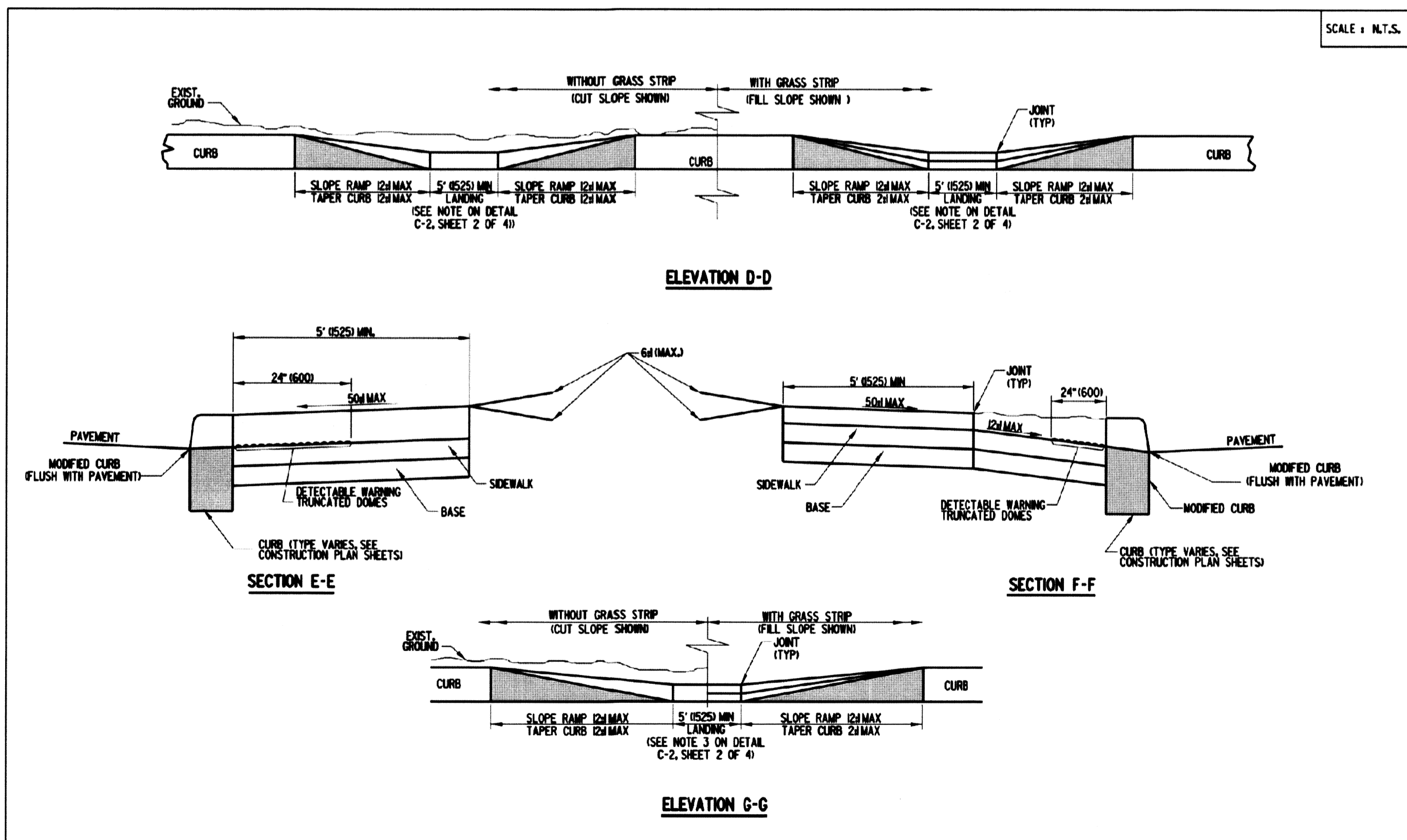
SHEET NO.: D-6
FILE NO.: 1446-B



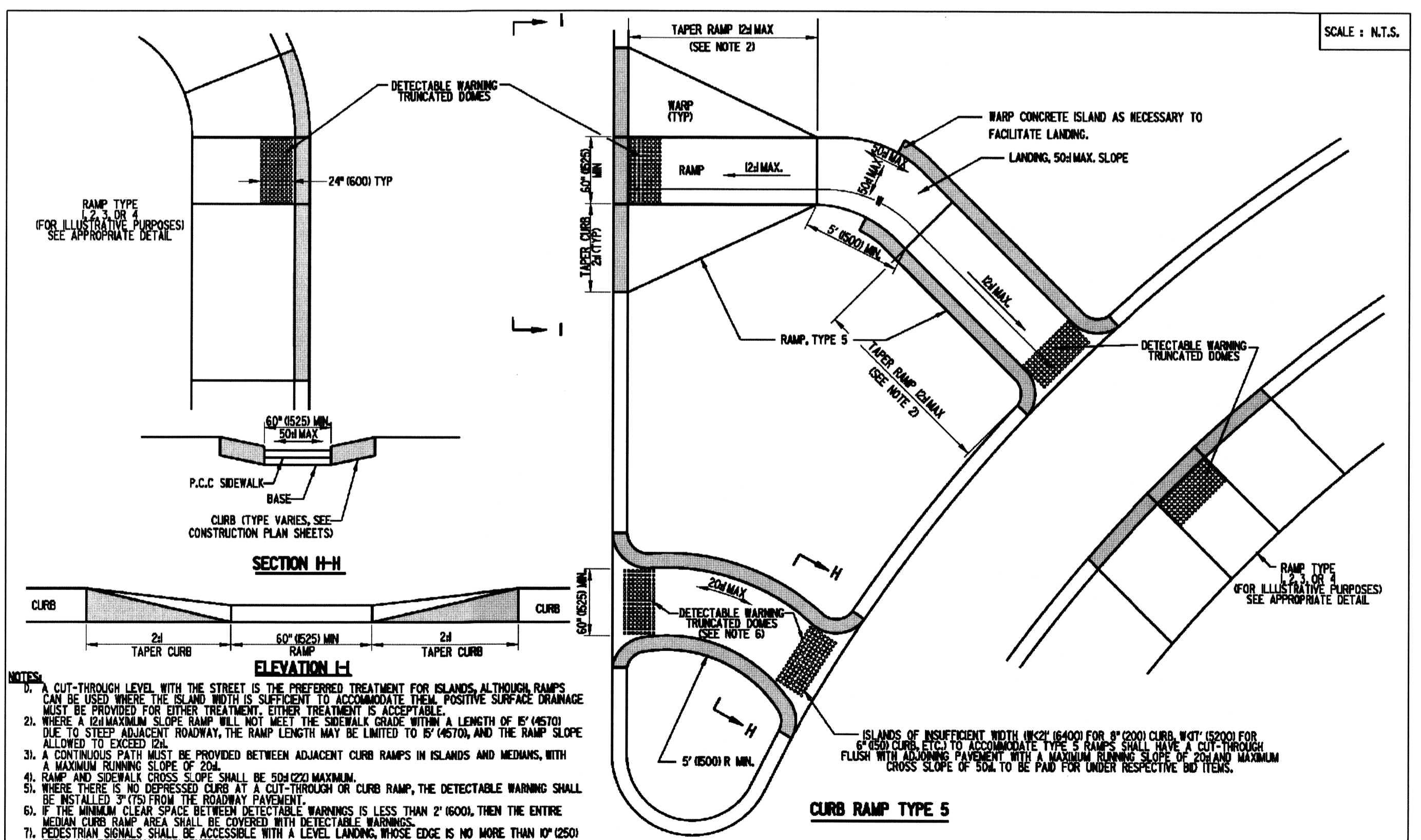
DELAWARE DEPARTMENT OF TRANSPORTATION	CURB RAMP TYPE 1 AND SECTIONS		APPROVED	<i>[Signature]</i> 11/16/08
	STANDARD NO. C-2 0900	SHT. 1 OF 4	RECOMMENDED	<i>[Signature]</i> 11/16/08



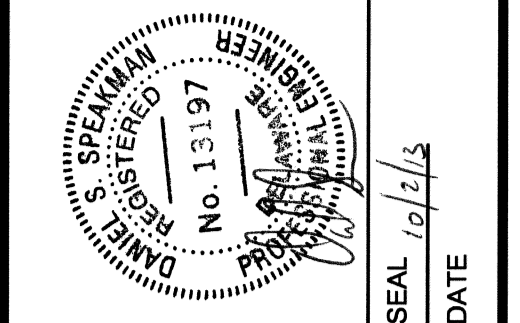
DELAWARE DEPARTMENT OF TRANSPORTATION	CURB RAMP TYPES 2, 3, & 4		APPROVED	<i>[Signature]</i> 11/16/08
	STANDARD NO. C-2 0900	SHT. 2 OF 4	RECOMMENDED	<i>[Signature]</i> 11/16/08



DELAWARE DEPARTMENT OF TRANSPORTATION	CURB RAMP SECTIONS FOR TYPES 2 & 3		APPROVED	<i>[Signature]</i> 11/16/08
	STANDARD NO. C-2 0900	SHT. 3 OF 4	RECOMMENDED	<i>[Signature]</i> 11/16/08



DELAWARE DEPARTMENT OF TRANSPORTATION	CURB RAMP TYPE 5 & SECTIONS		APPROVED	<i>[Signature]</i> 11/16/08
	STANDARD NO. C-2 0900	SHT. 4 OF 4	RECOMMENDED	<i>[Signature]</i> 11/16/08

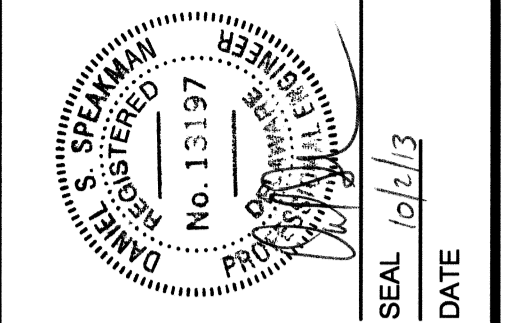
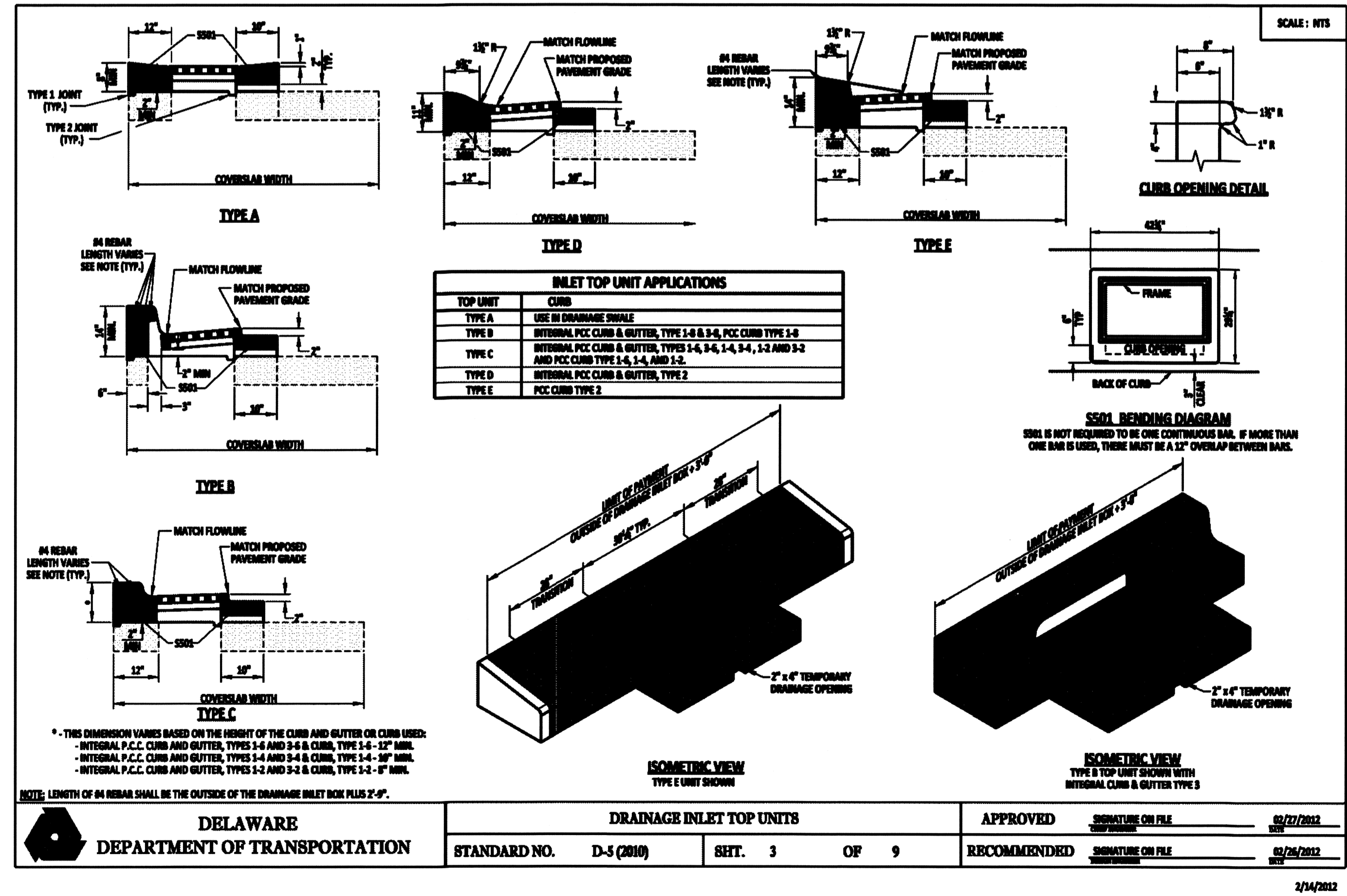
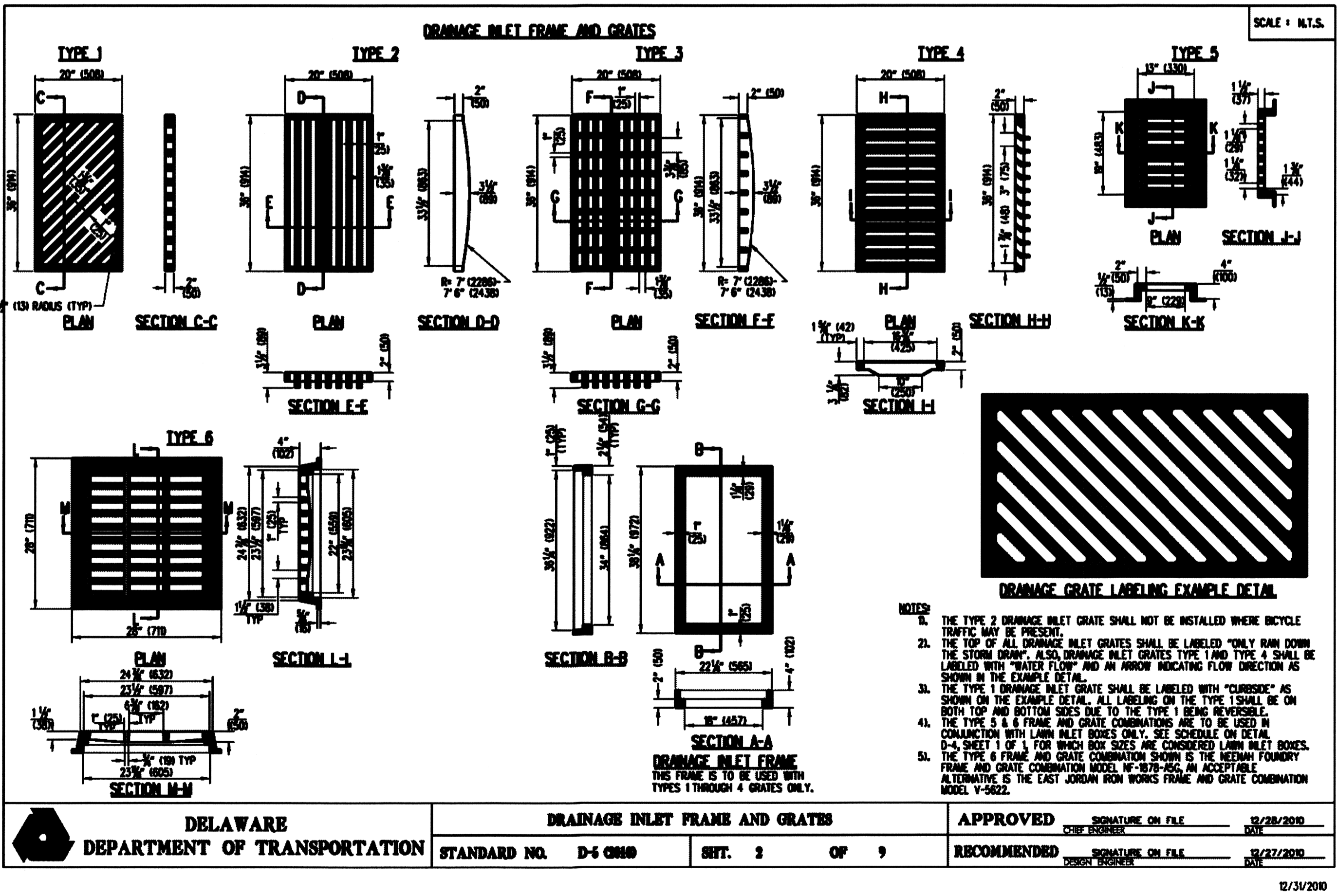
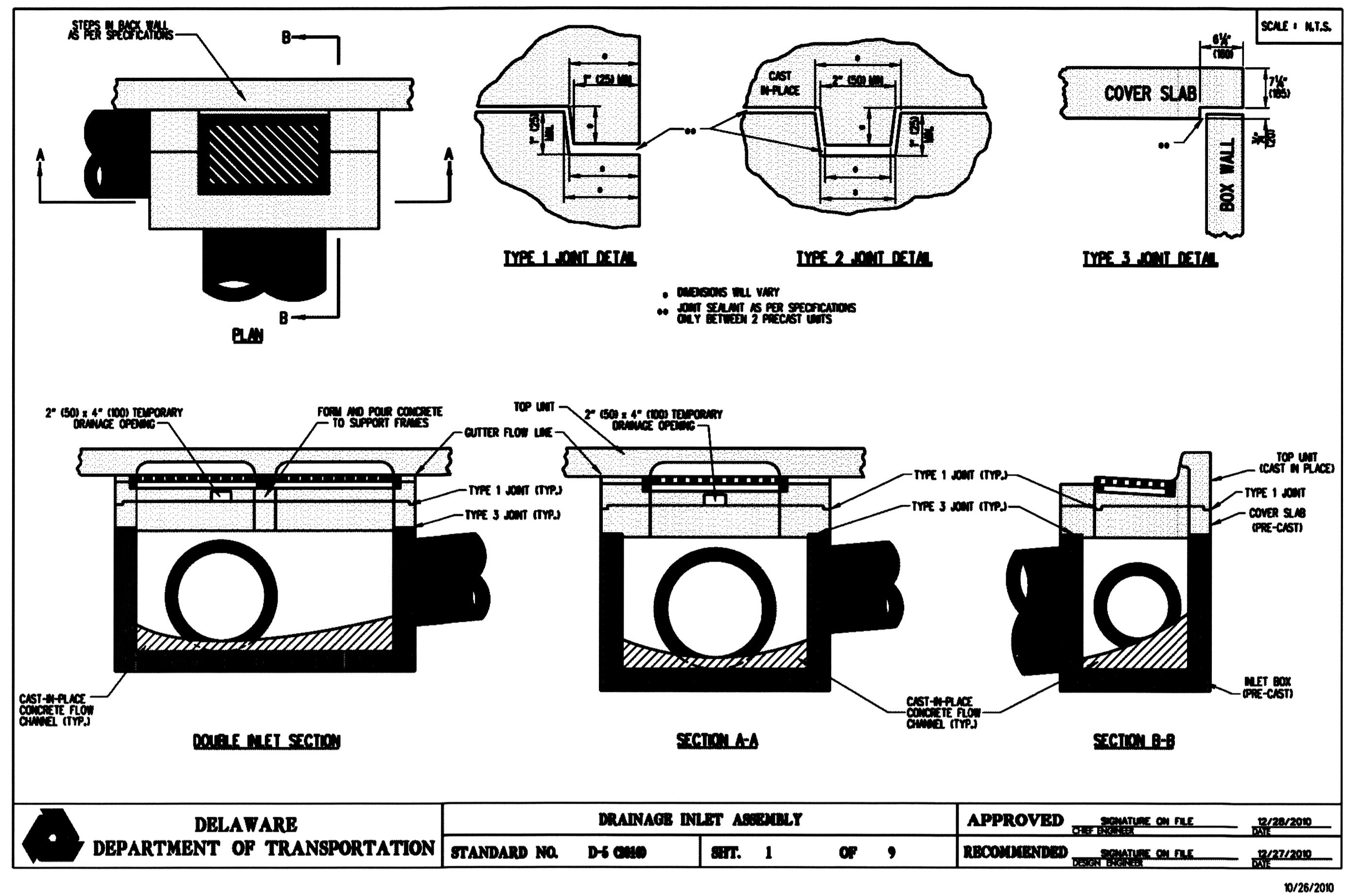
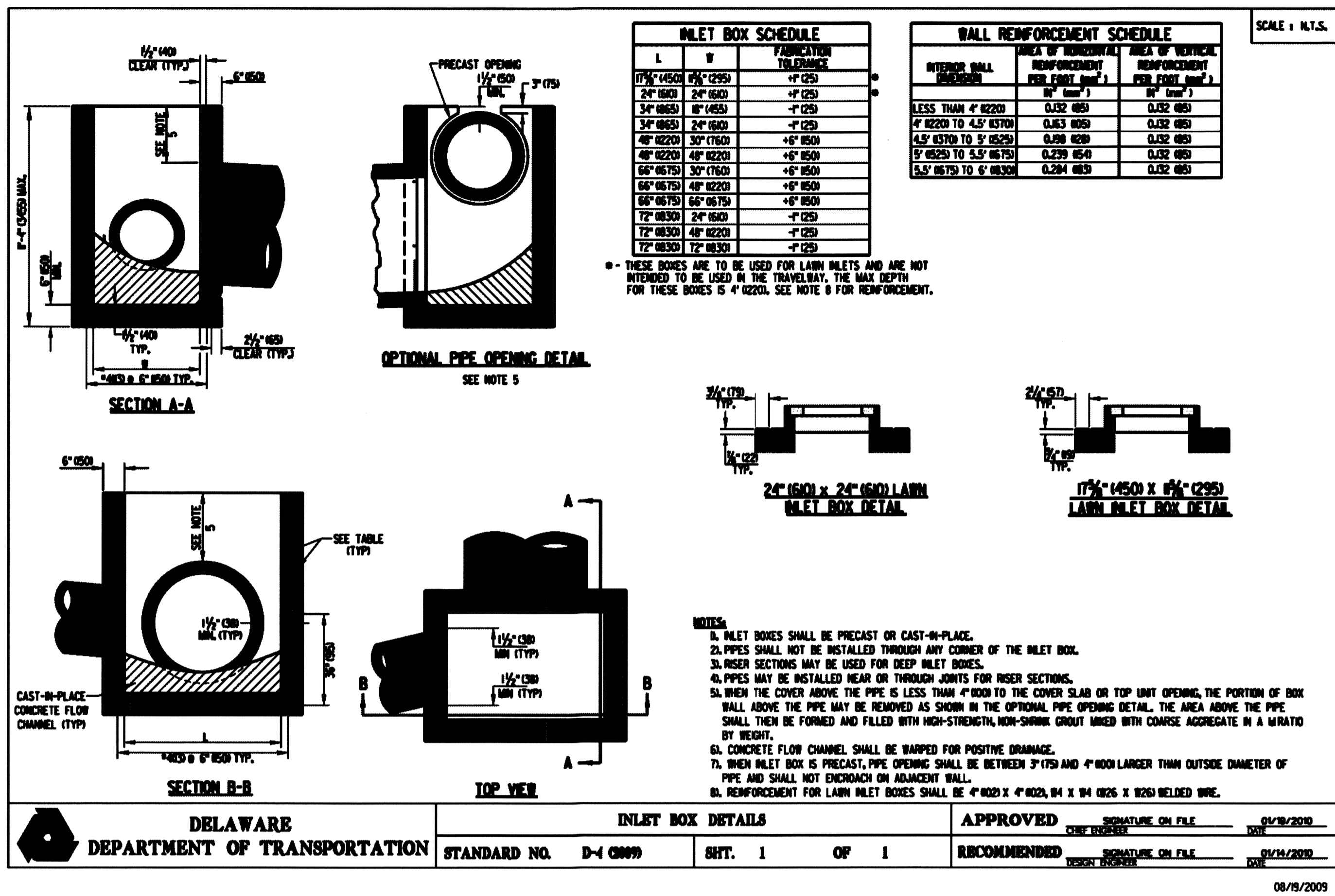


REV. #	DATE	DESCRIPTION

Celebrating 75 Years of Quality Services and Innovation
McCRONE
 ENGINEERS ■ SURVEYORS ■ PLANNERS
 ANNAPOLIS ■ CENTREVILLE ■ ELKTON ■ SALISBURY
 100 EAST MAIN STREET, SUITE 101
 ELKTON, MARYLAND 21921
 (410) 396-1550
 www.mccrone-inc.com

DATE:	FEBRUARY 2013
JOB NUMBER:	D3080102
SCALE:	N/A
DRAWN BY:	JDC
DESIGNED BY:	JDC
APPROVED BY:	JDC
FOLDER REFERENCE:	DSS P-03080102

CONSTRUCTION DETAILS
 FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
 KENTON HUNDRED, KENT COUNTY, DELAWARE
 FOR: EDDIE EVANS FARMS, LLC

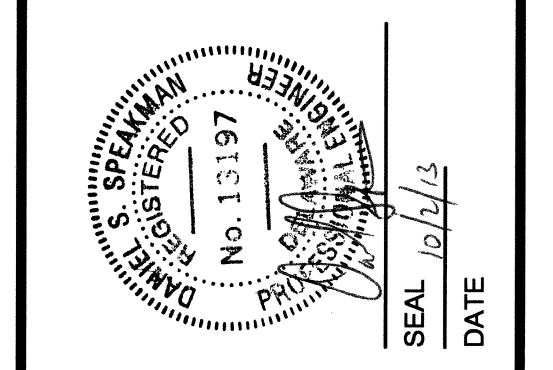
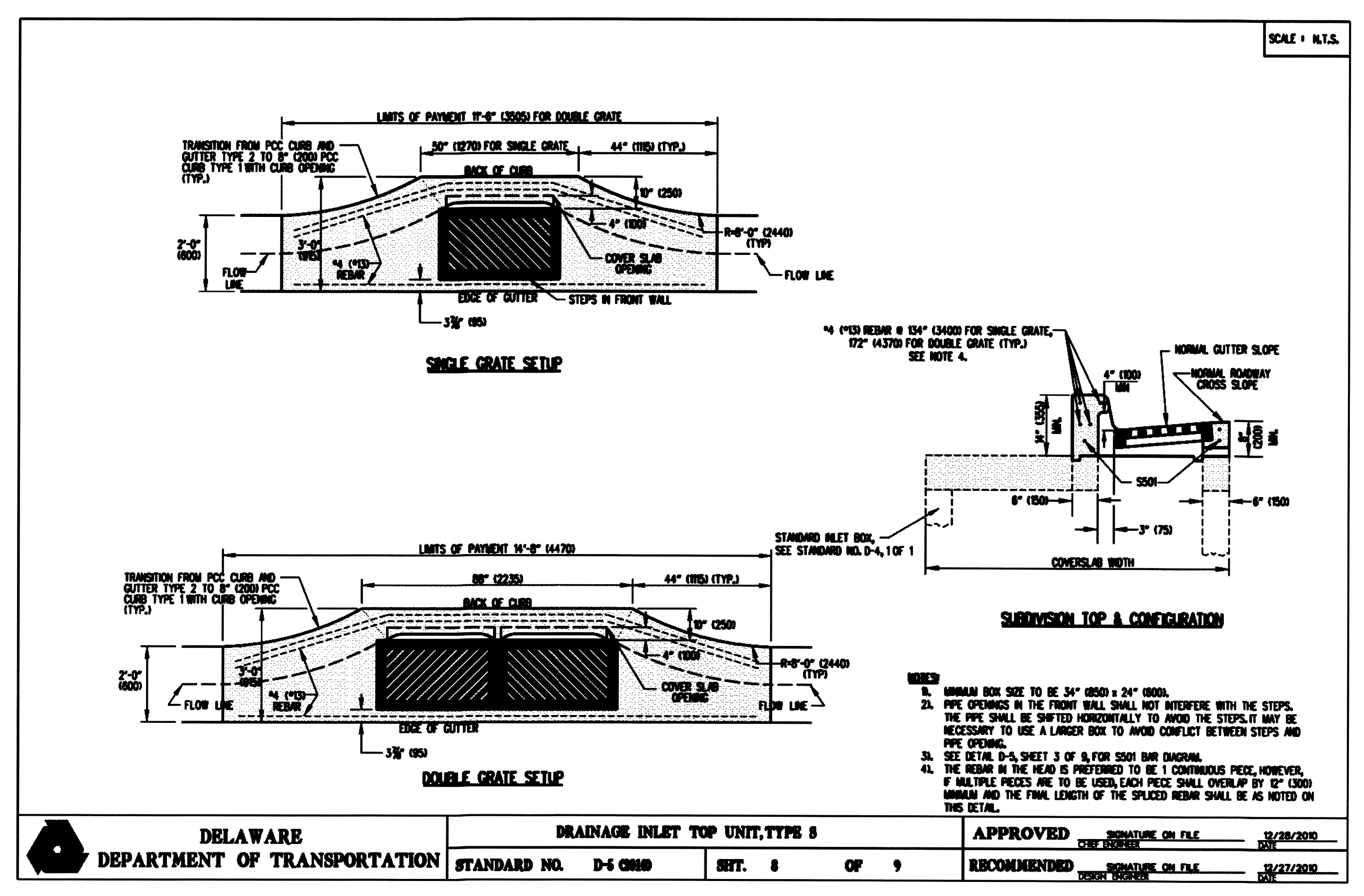
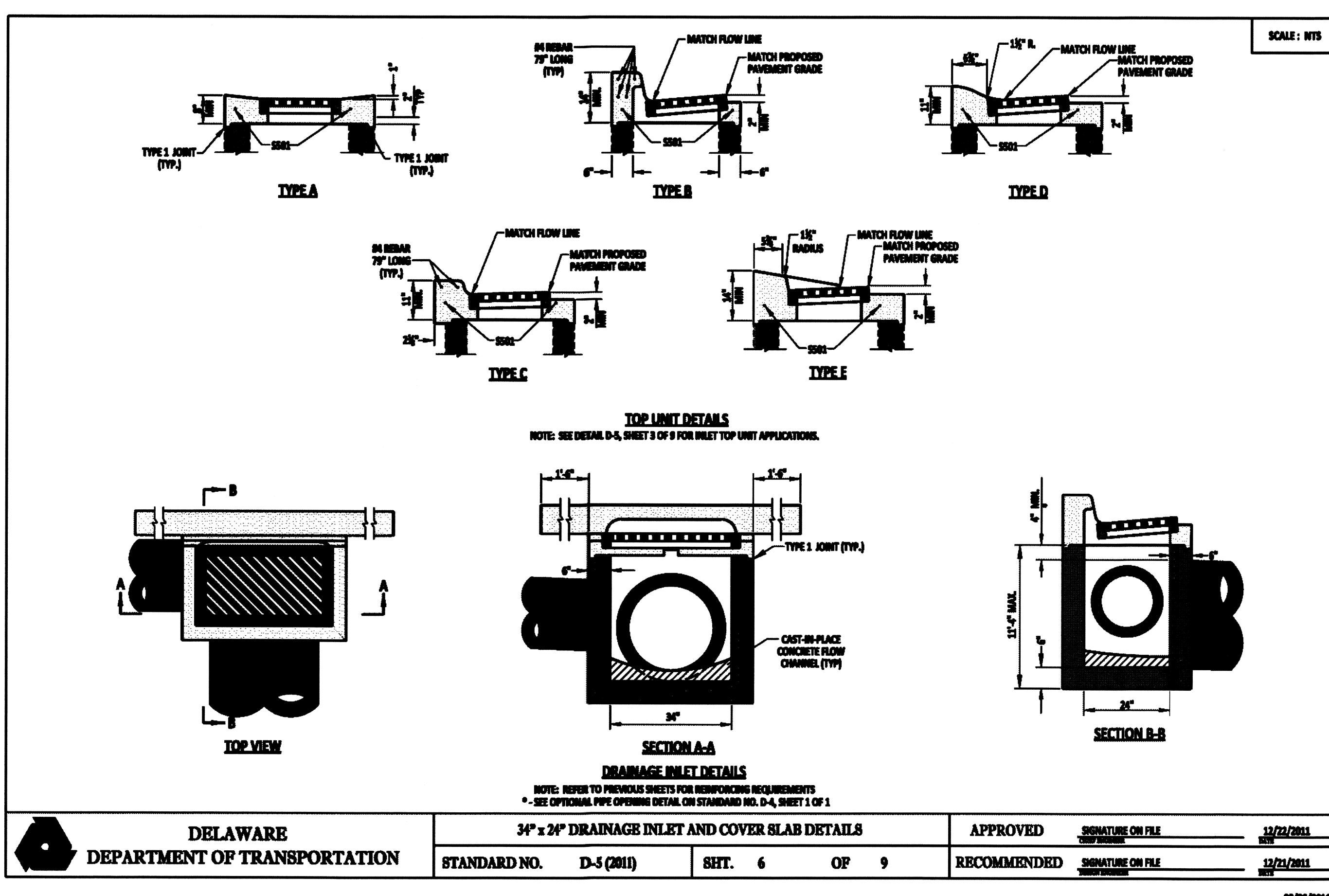
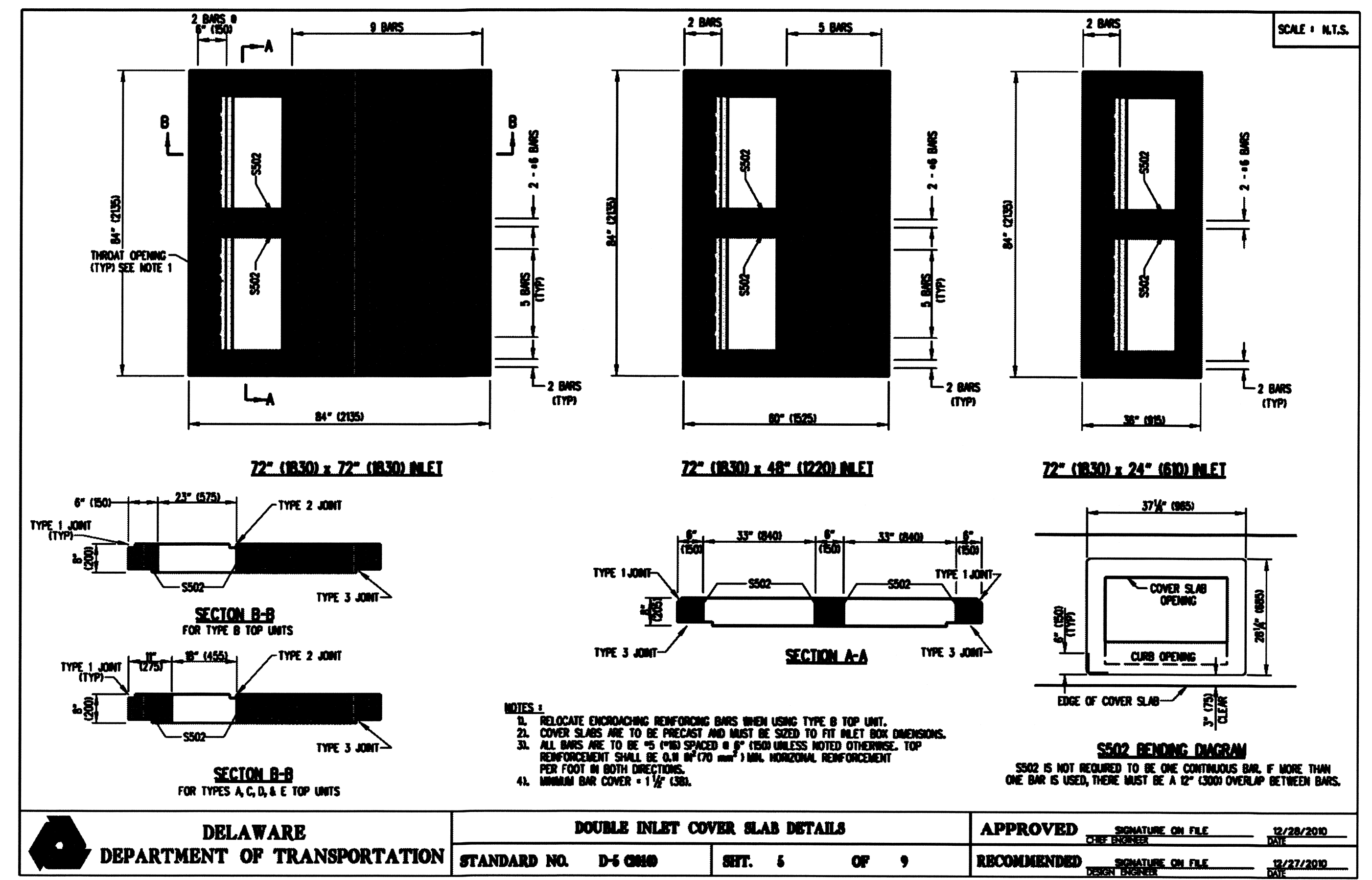
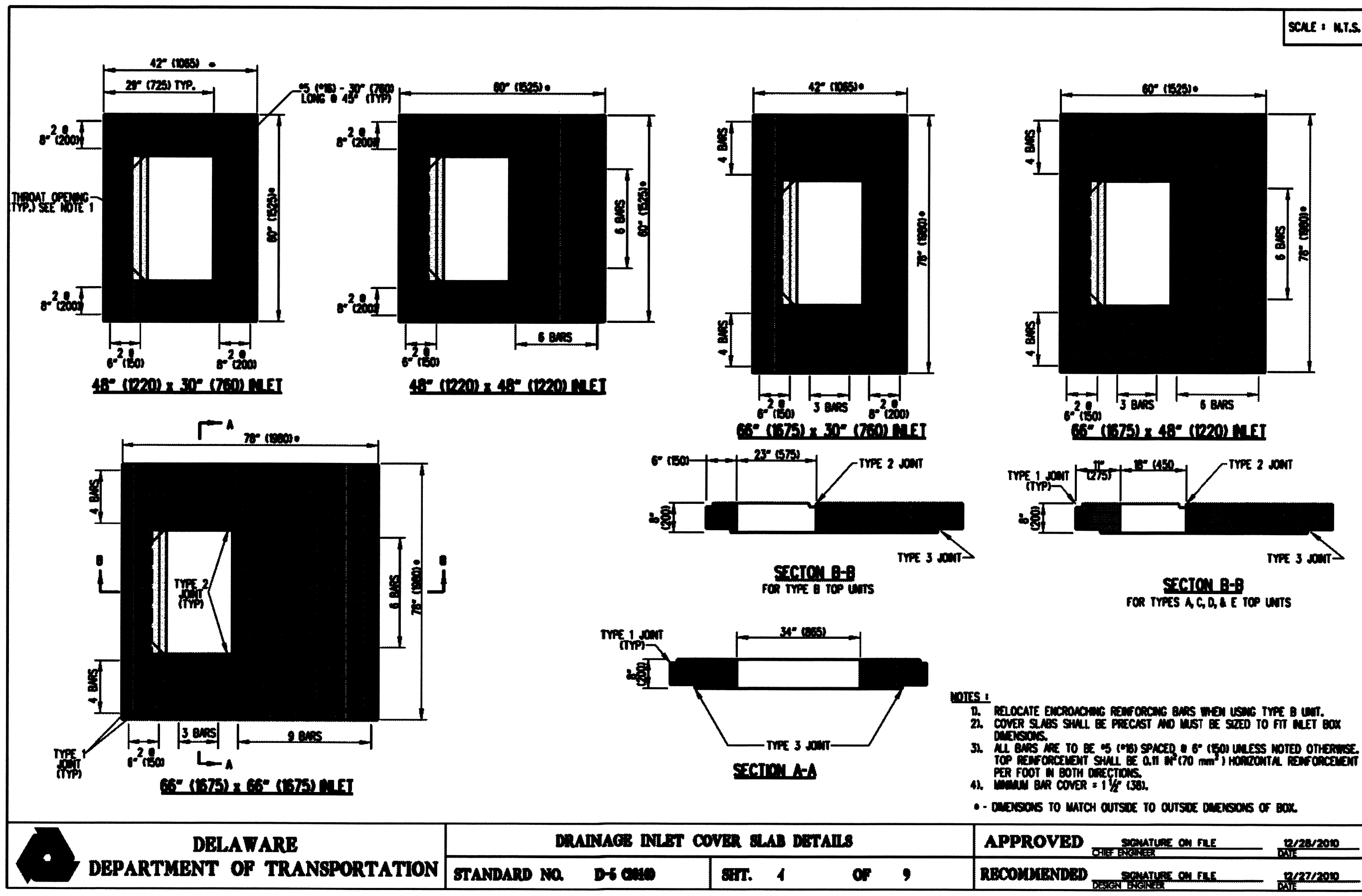


REV. #	DATE	DESCRIPTION

McCRONE
 Celebrating 75 Years of Quality Service and Innovation
 ENGINEERS • SURVEYORS • PLANNERS
 ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY
 106 EAST MAIN STREET, SUITE 101
 ELKTON, MARYLAND 21921
 (410) 396-1250
 www.mccrone-inc.com
 Copyright © 2012

DATE:	FEBRUARY 2013
JOB NUMBER:	D500182
SCALE:	N/A
DRAWN BY:	JDC
DESIGNED BY:	JDC
APPROVED BY:	DSS
FOLDER REFERENCE:	P-23090182

CONSTRUCTION DETAILS
 FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
 KENTON HUNDRED, KENT COUNTY, DELAWARE
 FOR: EDDIE EVANS FARMS, LLC



REV #	DATE	DESCRIPTION

McCRONE
 Celebrating 75 Years of Quality Services and Innovation
 ENGINEERS • SURVEYORS • PLANNERS
 ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY

106 EASTMAN STREET, SUITE 101
 ELKTON, MD 21921
 (410) 398-1500
 www.mccrone-inc.com

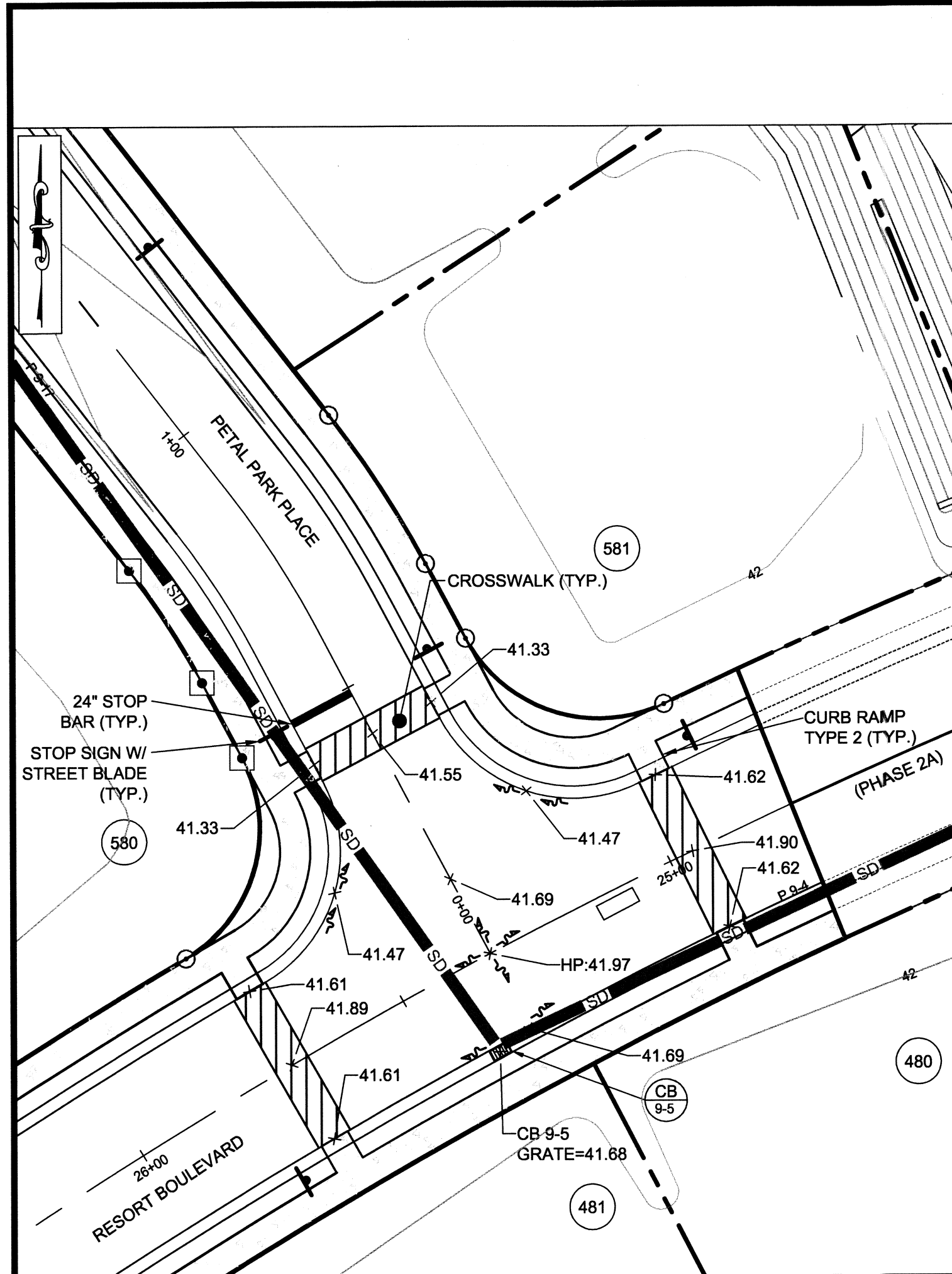
DATE:	FEBRUARY 2013
JOB NUMBER:	D3080182
SCALE:	N/A
DRAWN BY:	JDC
DESIGNED BY:	JDC
APPROVED BY:	DSS
FOLDER REFERENCE:	F-03080182

CONSTRUCTION DETAILS

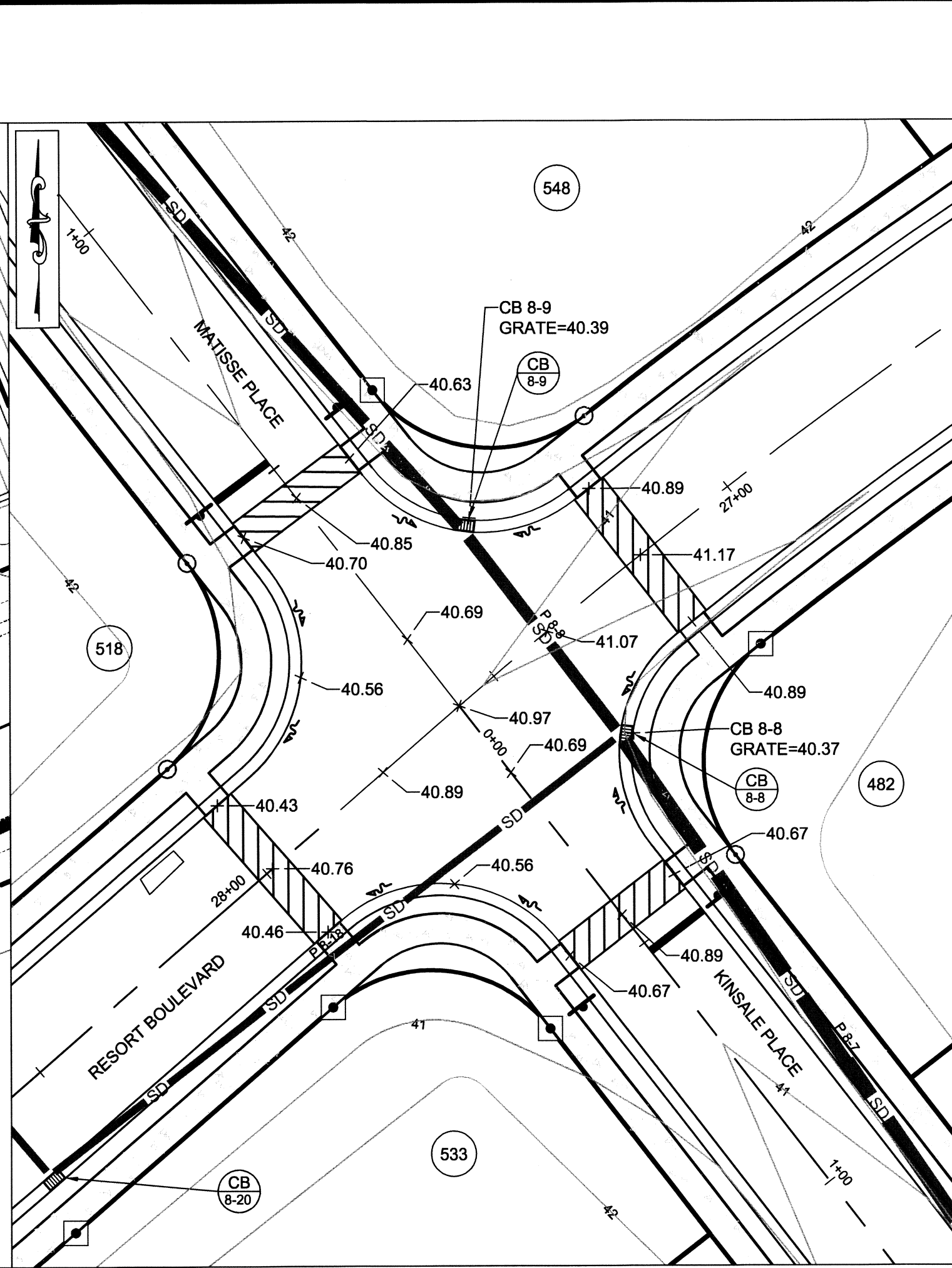
FILE NO. SL-11-01
**VILLAGES OF NOBLES POND
 PHASES 3A & 4A**
 KENTON HUNDRED, KENT COUNTY, DELAWARE

FOR: EDDIE EVANS FARMS, LLC

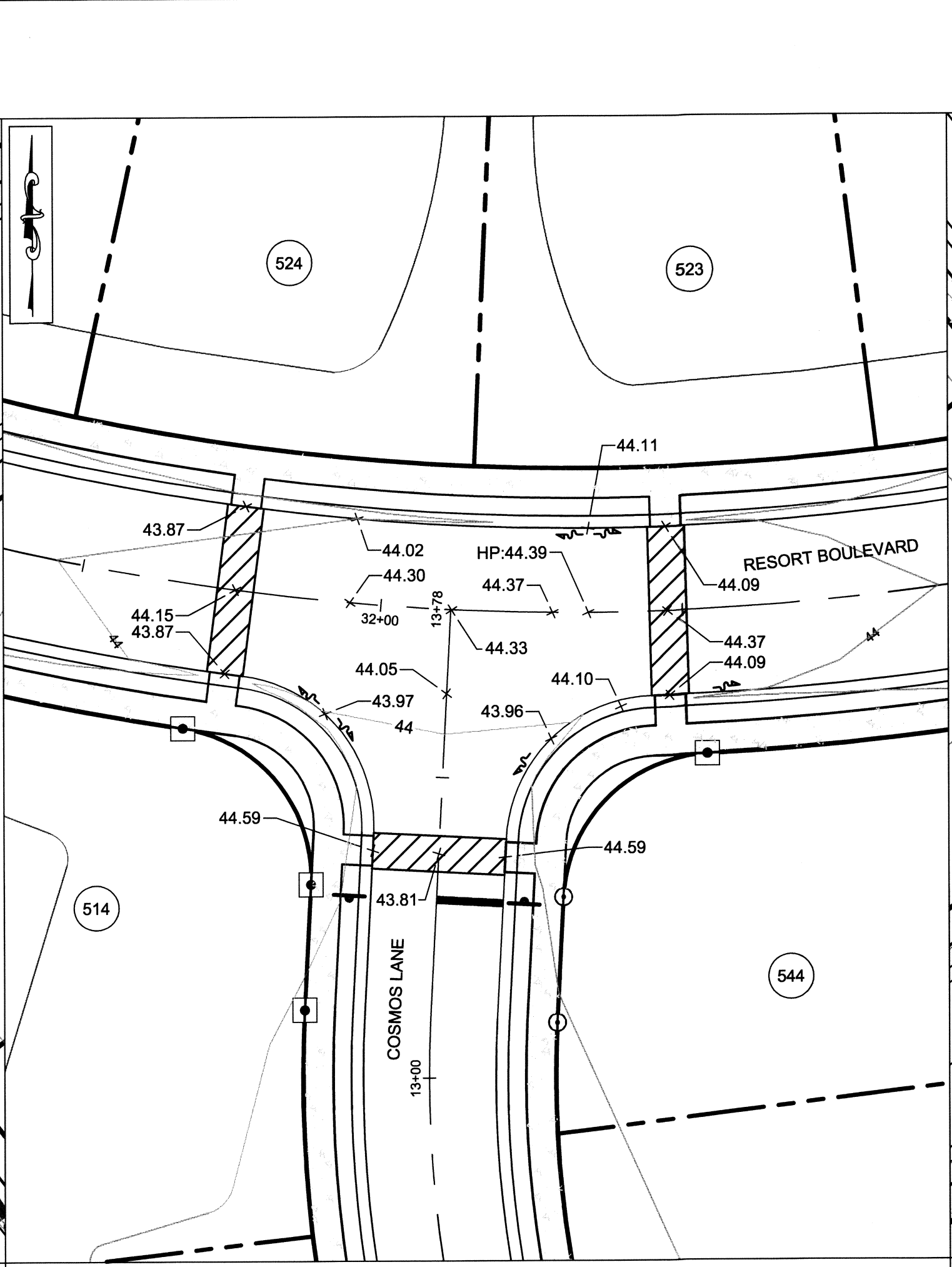
September 13, 2013 7:17am User: mizam C:\D3080182\DWG\Detail Sheets\D3080182-X-Details and Notes-PL13 (download)11a.dwg



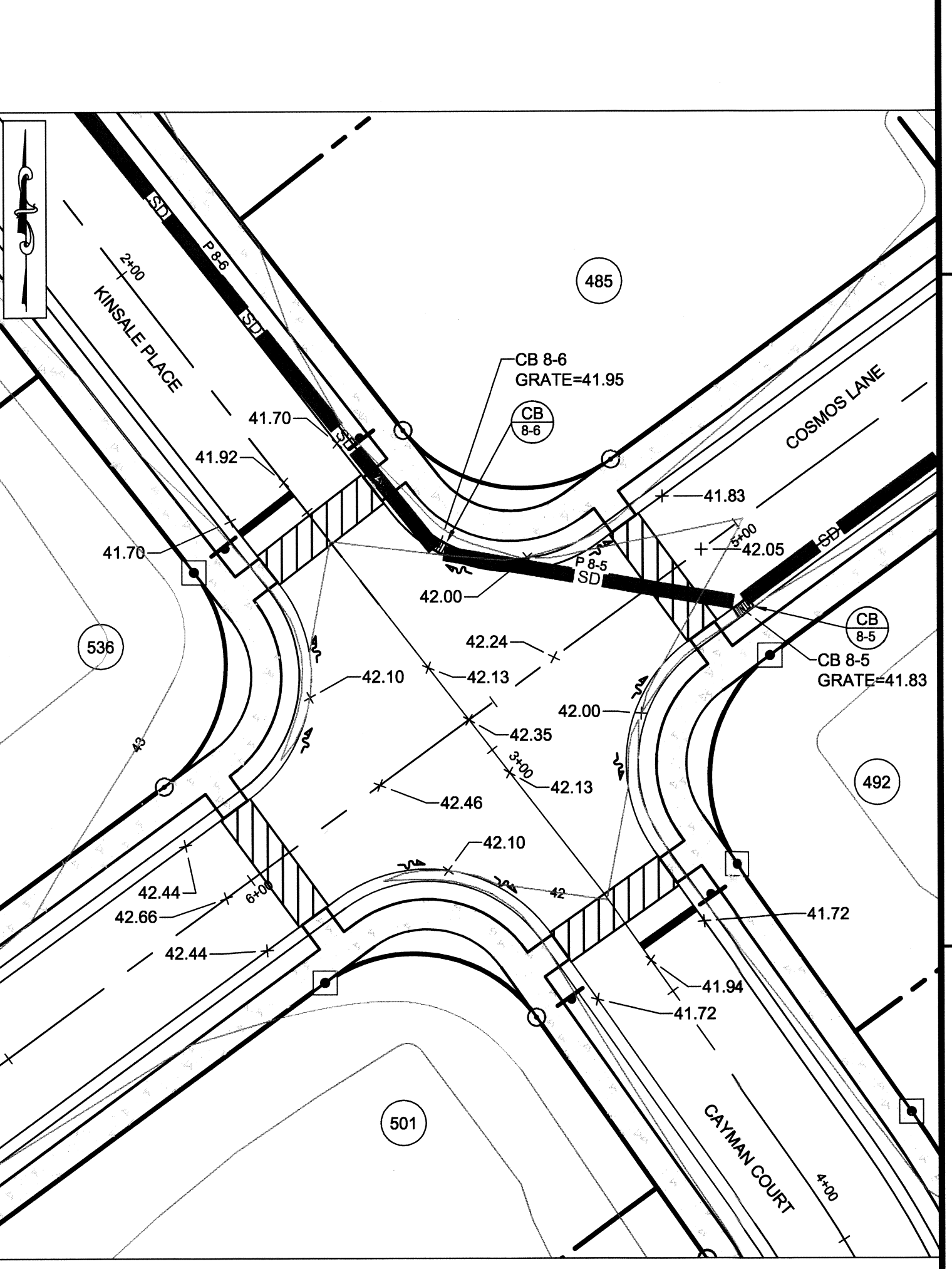
RESORT BOULEVARD & PETAL PARK PLACE
SCALE: 1" = 20'



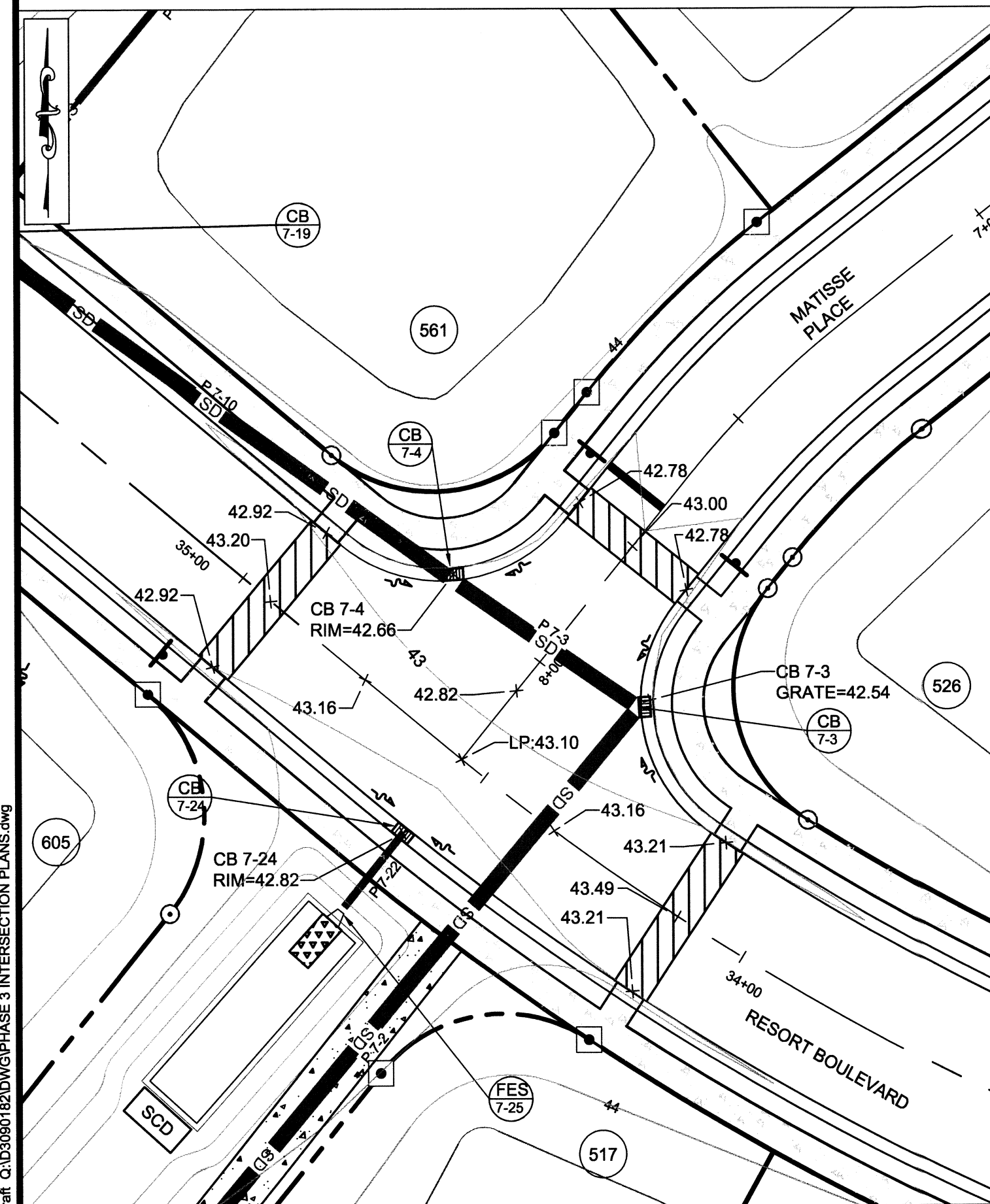
RESORT BOULEVARD, MATISSE PLACE, & KINSALE PLACE
SCALE: 1" = 20'



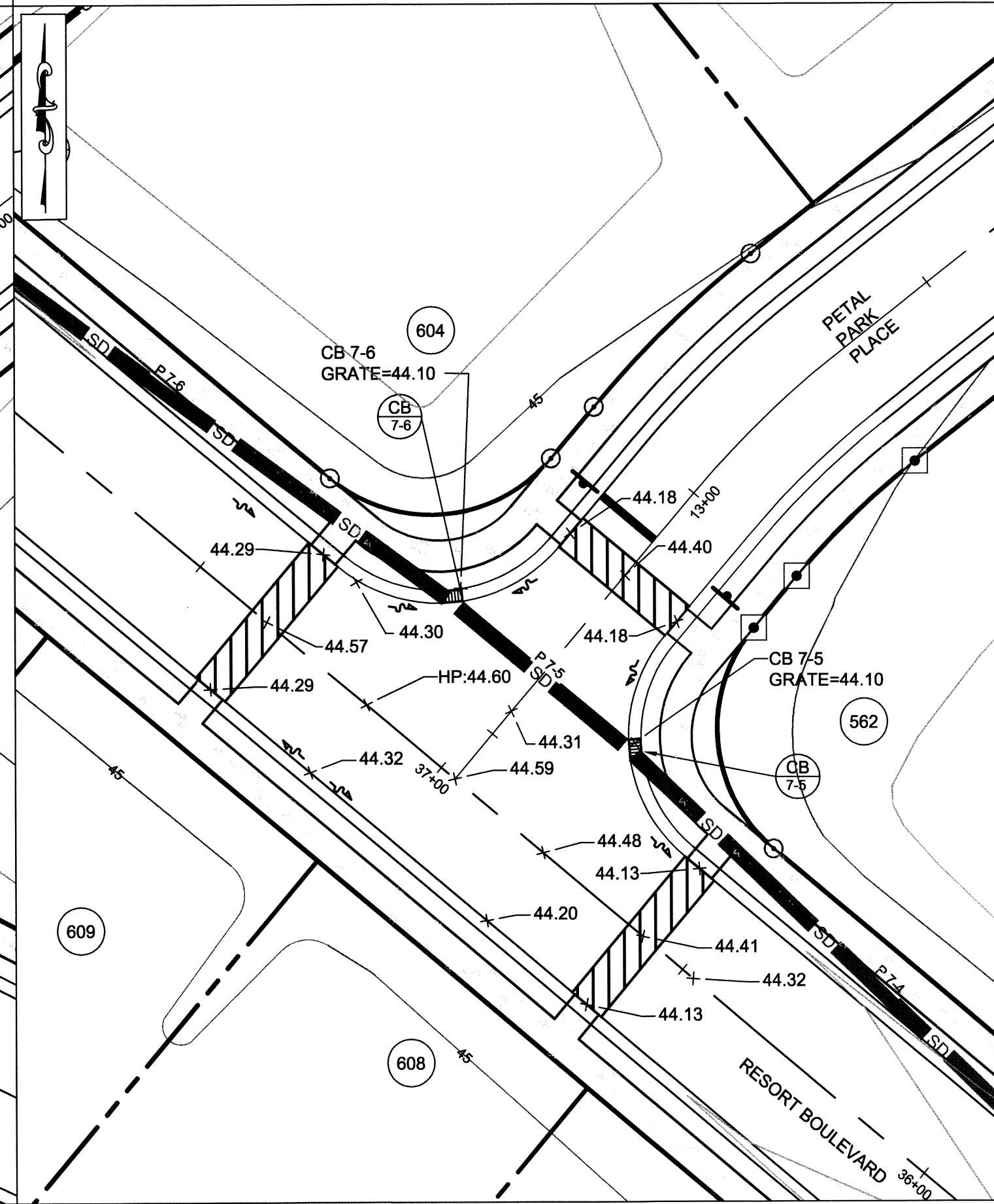
RESORT BOULEVARD & COSMOS LANE
SCALE: 1" = 20'



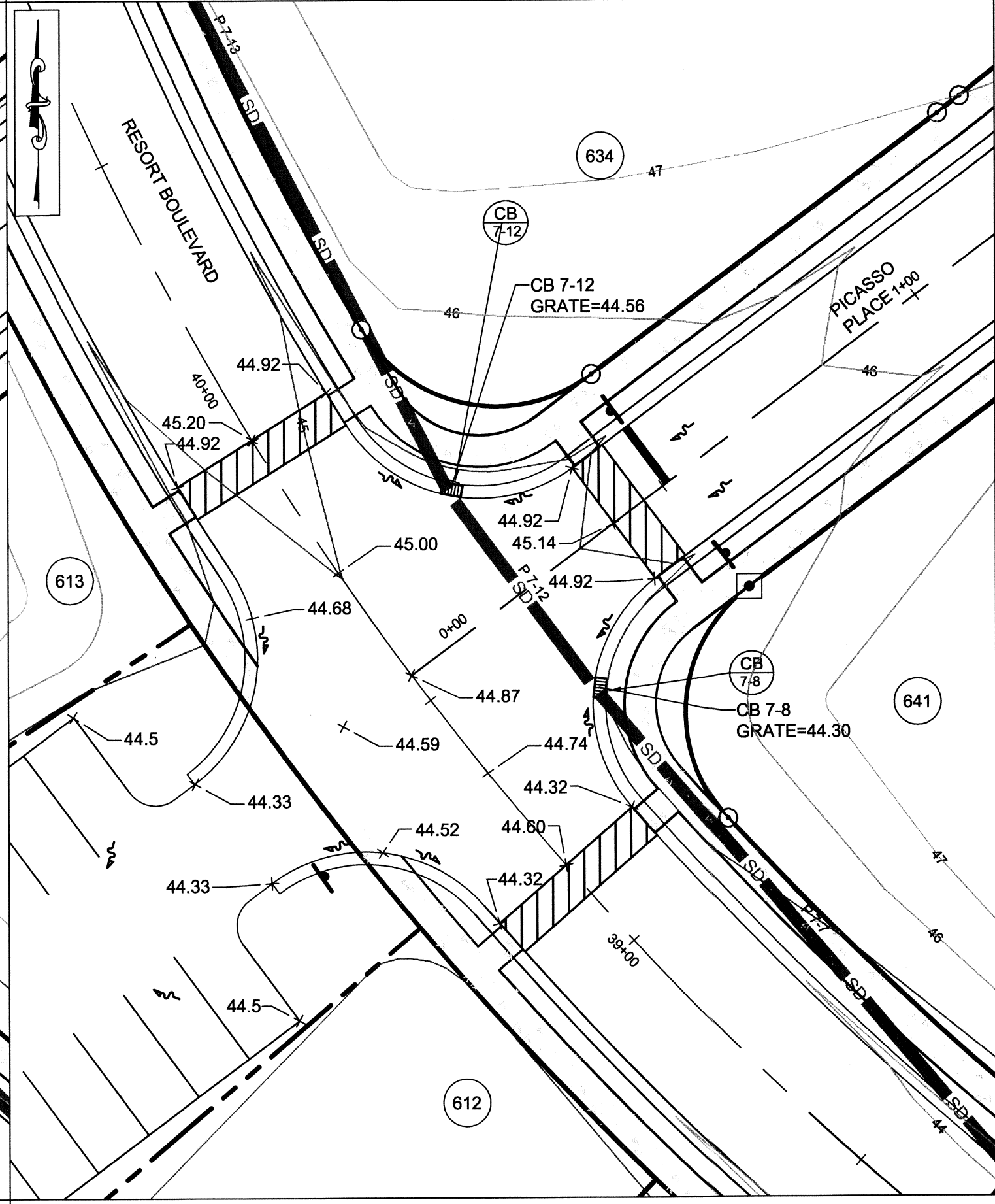
COSMOS LANE, KINSALE PLACE, & CAYMAN COURT
SCALE: 1" = 20'



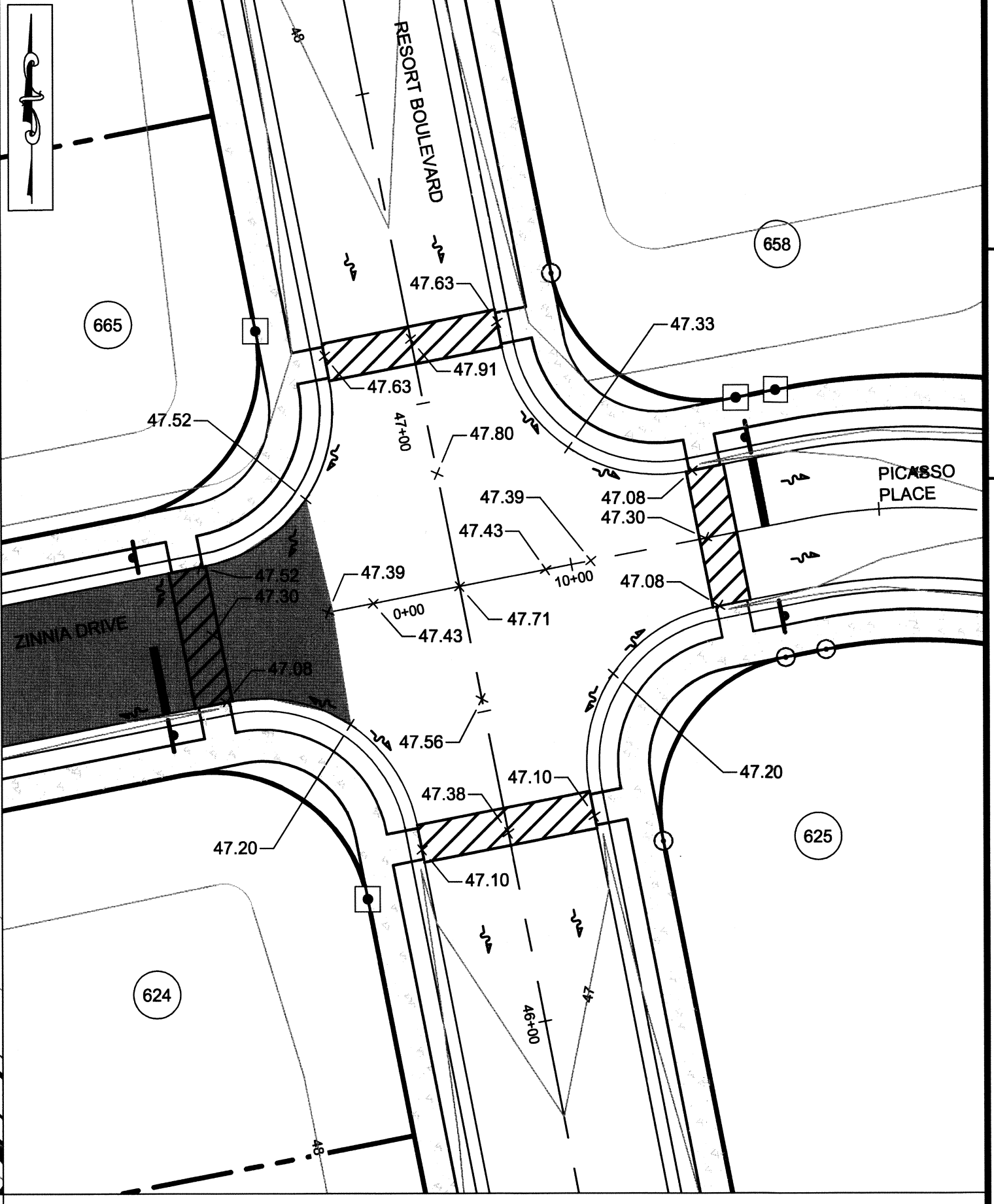
RESORT BOULEVARD & MATISSE PLACE
SCALE: 1" = 20'



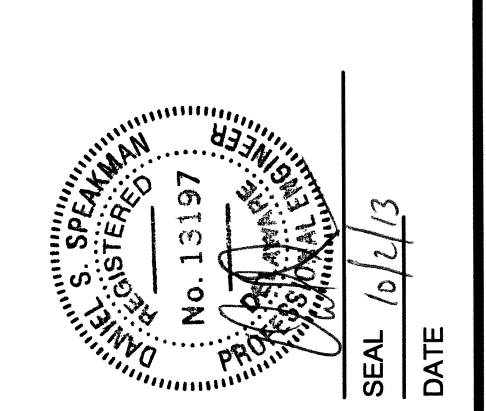
RESORT BOULEVARD & PETAL PARK PLACE
SCALE: 1" = 20'



RESORT BOULEVARD & PICASSO PLACE
SCALE: 1" = 20'



RESORT BOULEVARD, PICASSO PLACE, & ZINNIA DRIVE
SCALE: 1" = 20'



REV #	DATE	DESCRIPTION

McCRONE
Celebrating 75 Years of Quality Services and Innovation
ENGINEERS ■ SURVEYORS ■ PLANNERS
ANNAPOLIS ■ CENTREVILLE ■ ELKTON ■ SALISBURY
106 EAST MAIN STREET, SUITE 101
ELKTON, MD 21921
(410) 398-1150
www.mccrone-inc.com

DATE:	FEBRUARY 2013
JOB NUMBER:	DD090182
SCALE:	1"=20'
DRAWN BY:	CHC
DESIGNED BY:	JMA
APPROVED BY:	DSS
FOLDER REFERENCE:	F-0090182

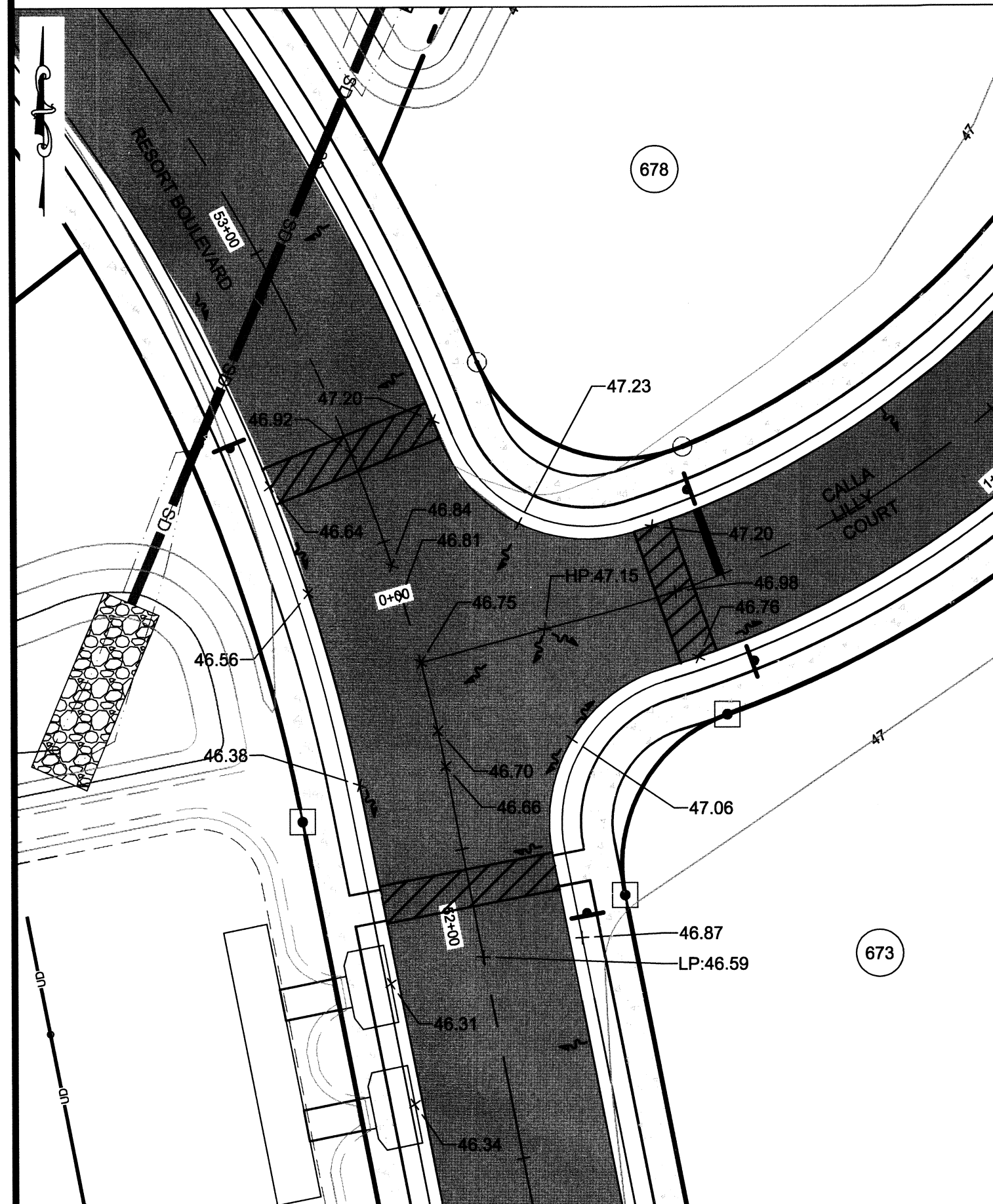
PHASE 3 INTERSECTION DETAILS
FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR EDDIE EVANS FARMS, LLC

SHEET NO.: **I-1**
FILE NO.: **1446-B**

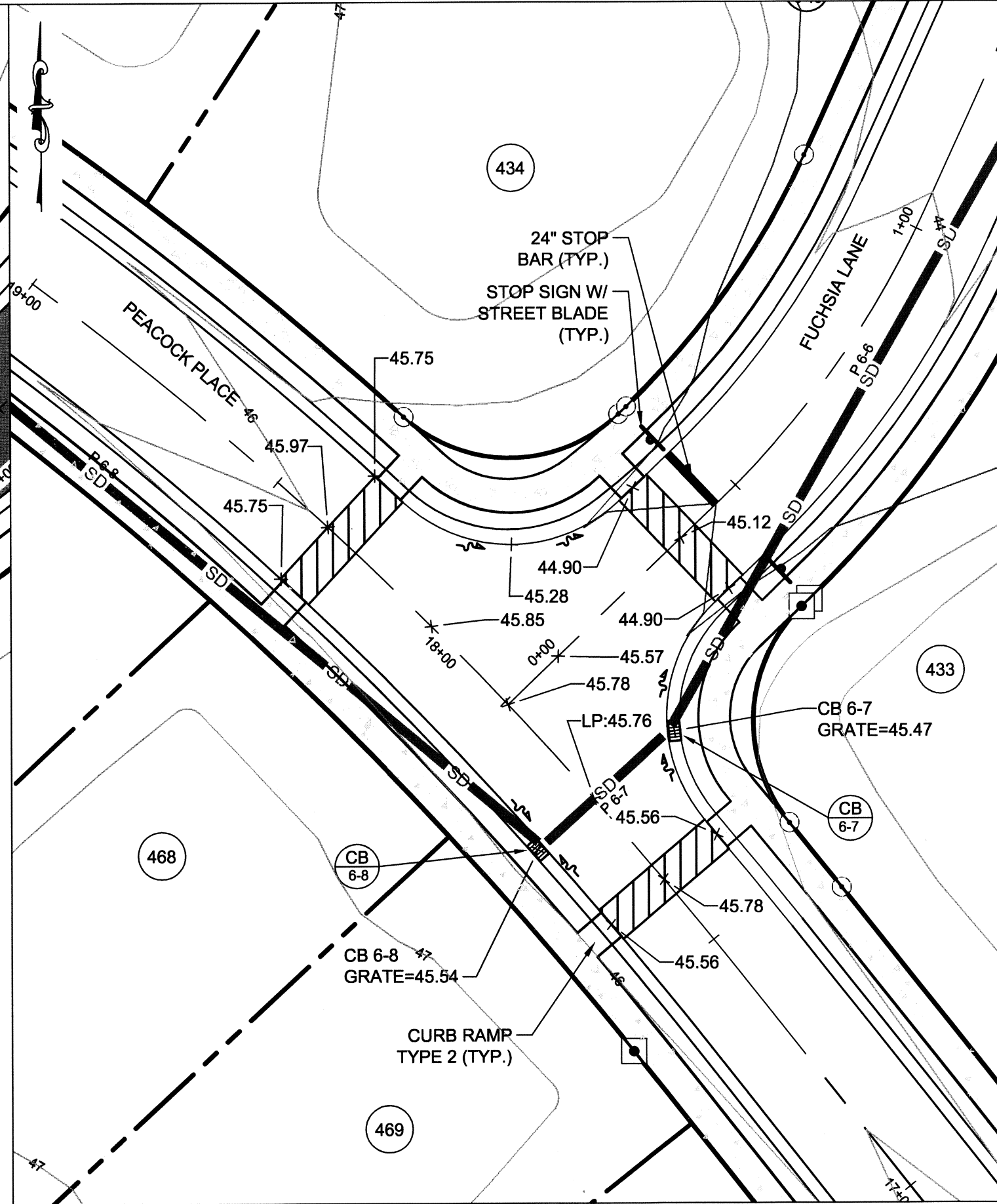
NOTE: ALL CURB FLOWLINE RADII AT INTERSECTIONS ARE 25'

SUPERELEVATED ROAD SECTION

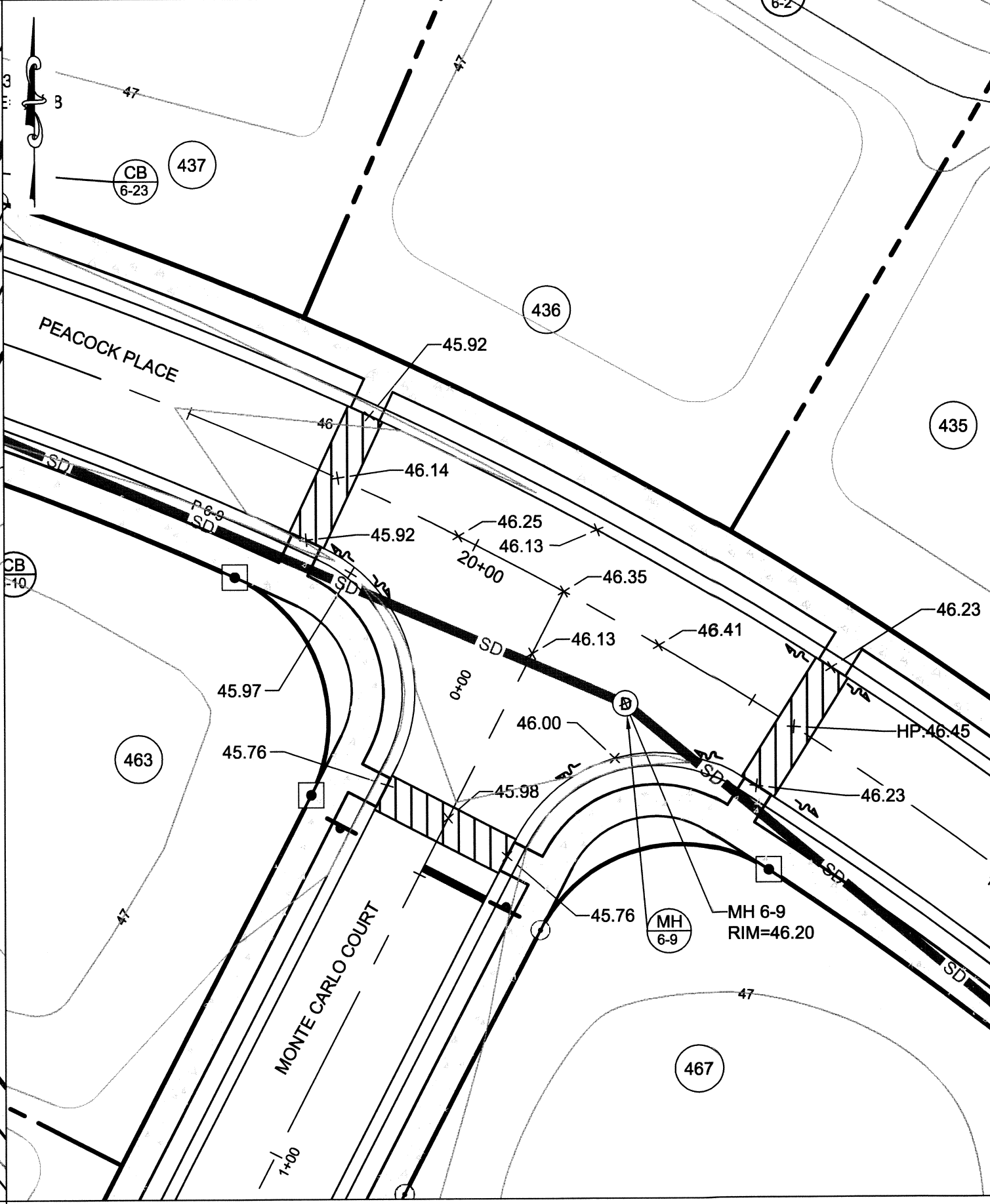
September 13, 2013 7:34am User: mshaff C:\03060182\DWG\PHASE 3 INTERSECTION PLANS.dwg



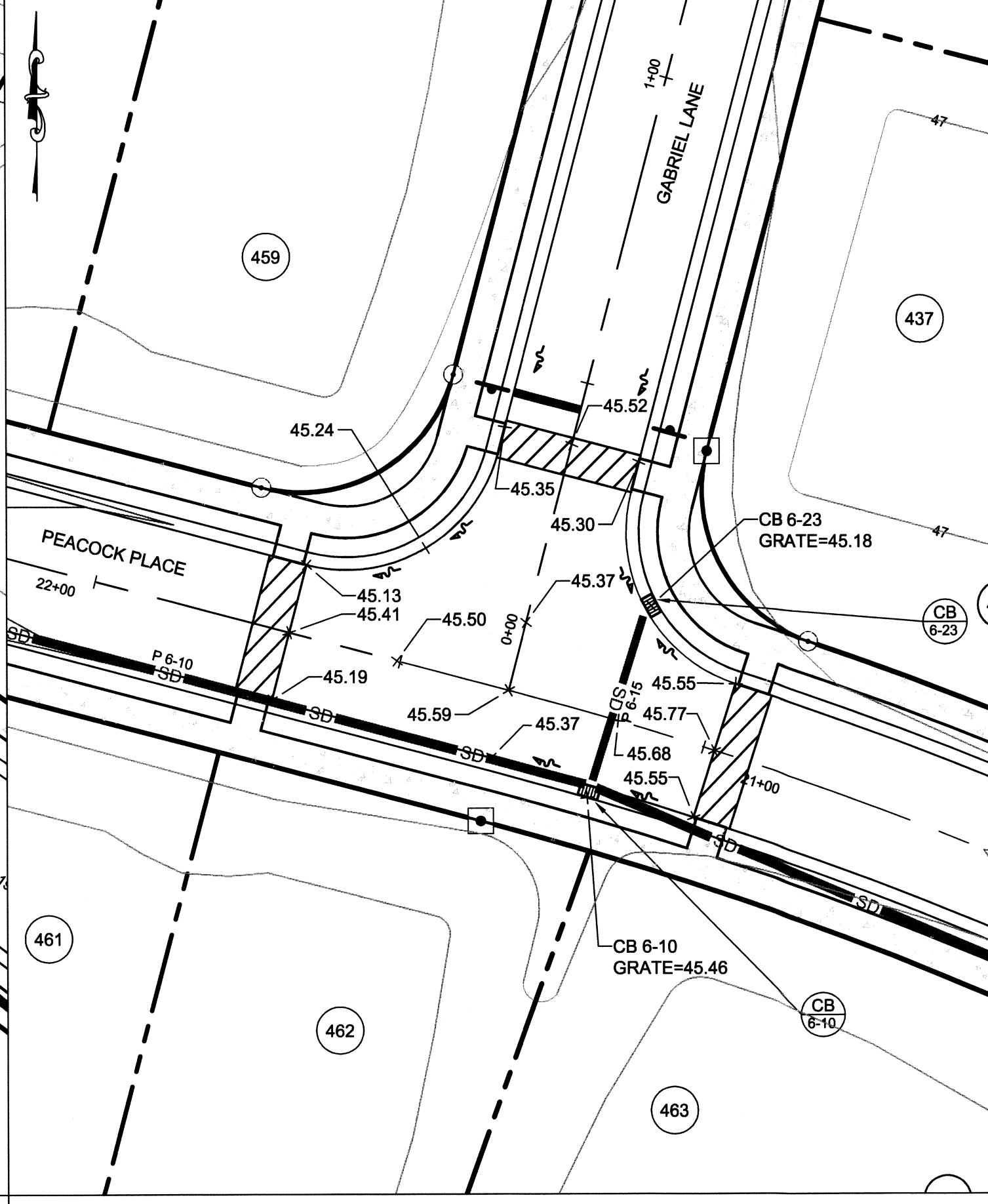
RESORT BOULEVARD & CALLA LILLY COURT
SCALE: 1" = 20'



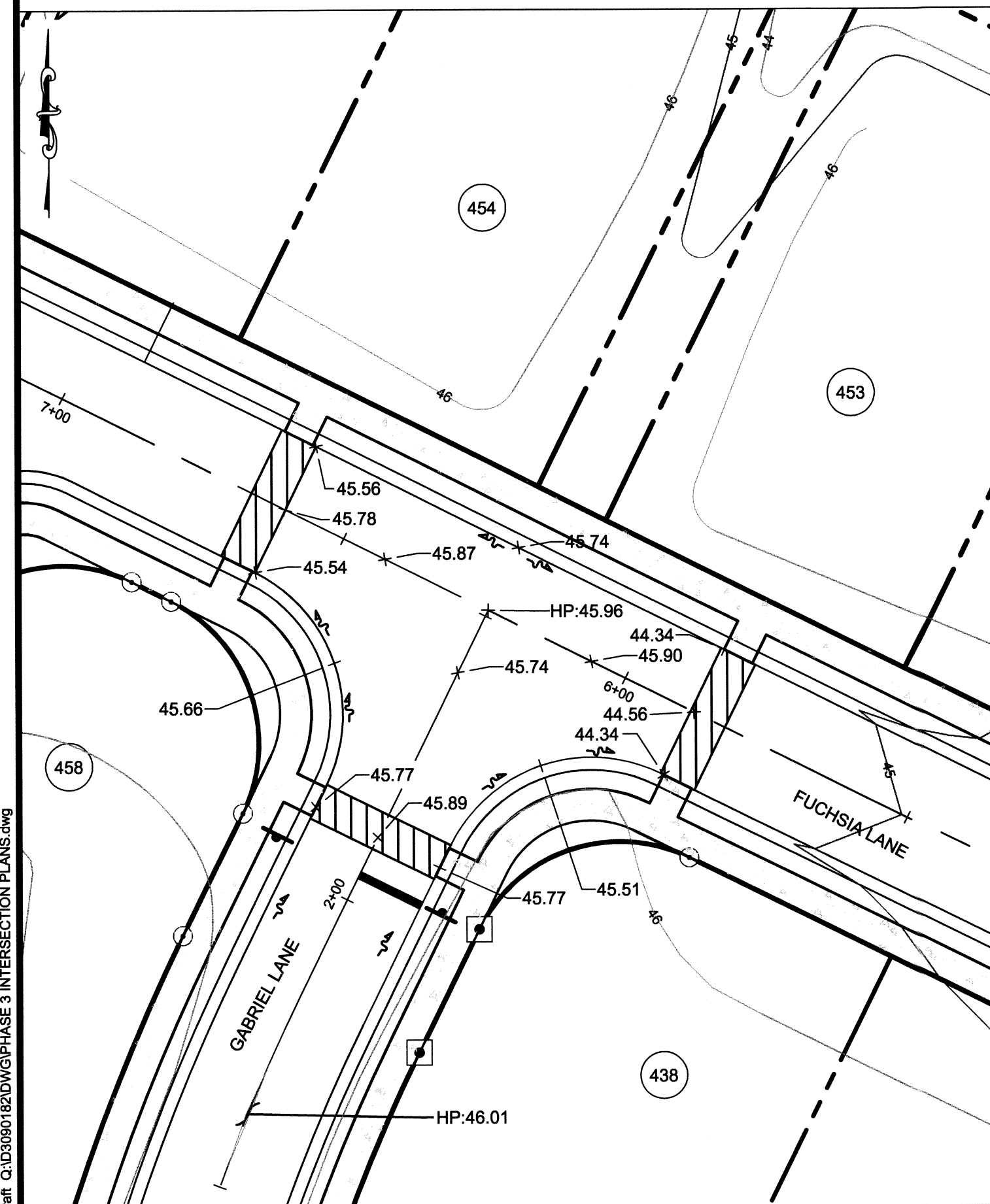
PEACOCK PLACE & FUCHSIA LANE
SCALE: 1" = 20'



PEACOCK PLACE & MONTE CARLO COURT
SCALE: 1" = 20'



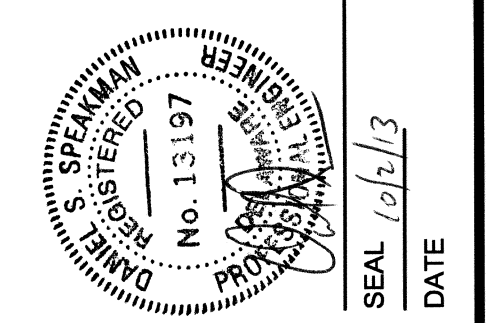
PEACOCK PLACE & GABRIEL LANE
SCALE: 1" = 20'



GABRIEL LANE & FUCHSIA LANE
SCALE: 1" = 20'

NOTE: ALL CURB FLOWLINE RADII AT INTERSECTIONS ARE 25'

SUPERELEVATED ROAD SECTION



REV. #	DATE	DESCRIPTION

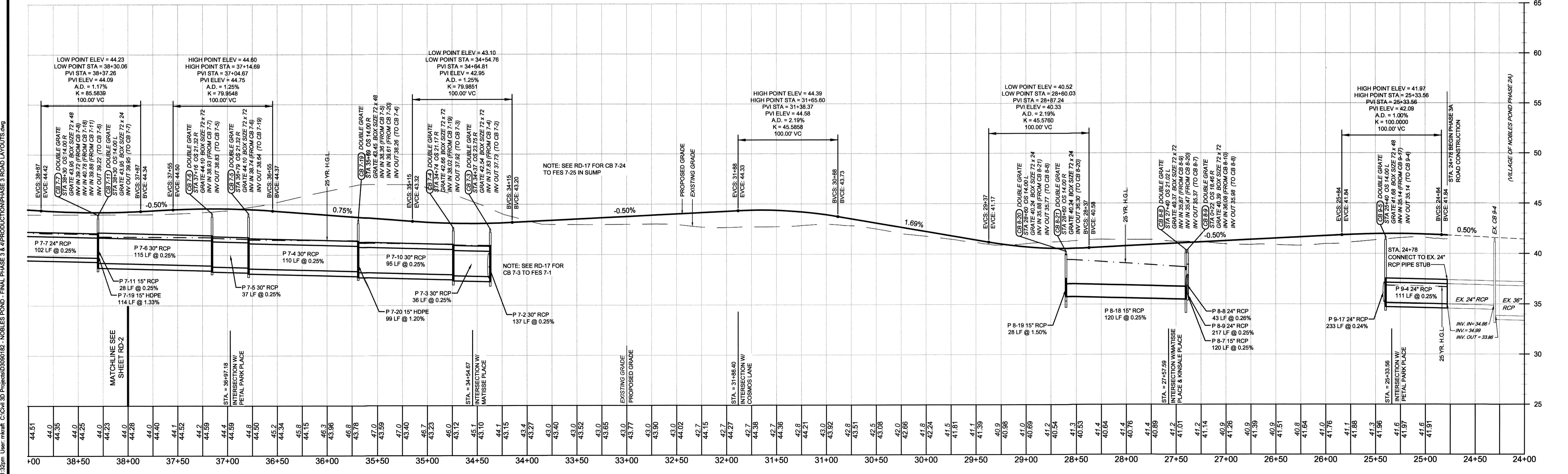
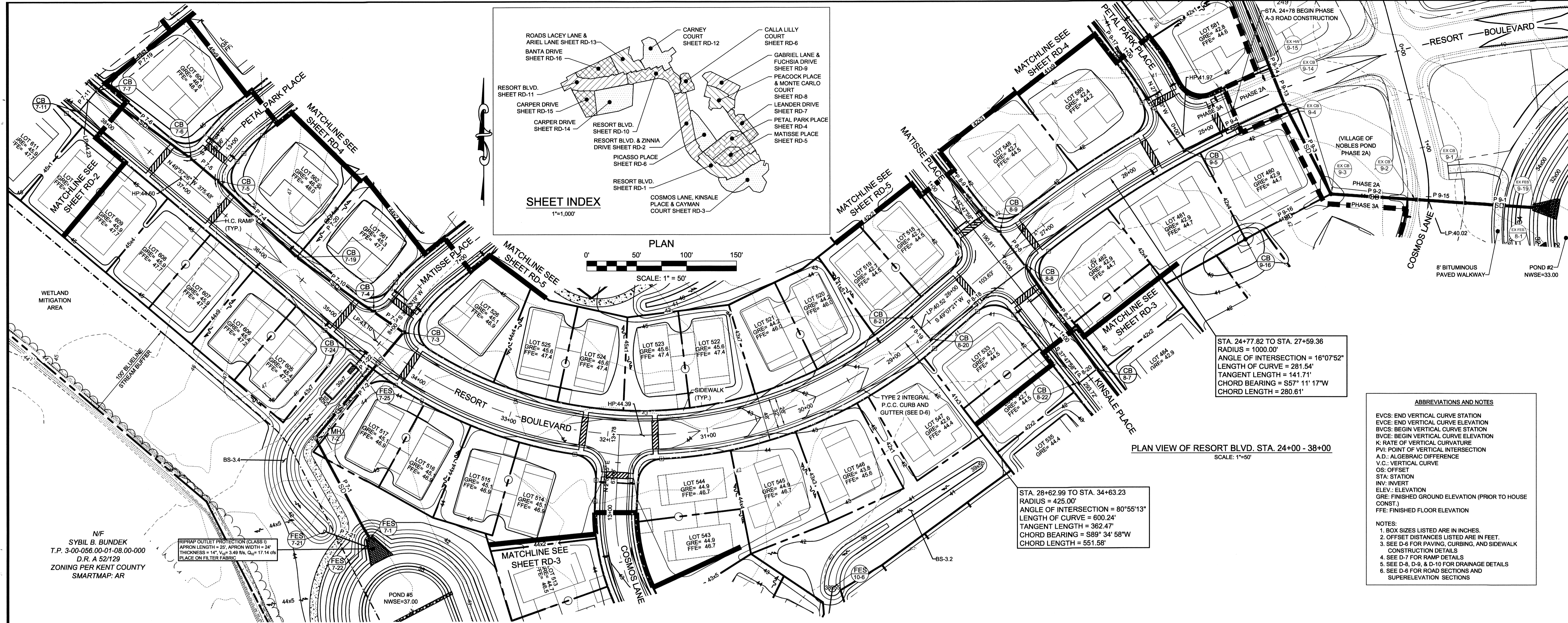
McCRONE
Celebrating 75 Years of Quality Services and Innovation
ENGINEERS SURVEYORS PLANNERS
ANNAPOLIS CENTREVILLE ELKTON SALISBURY
106 EAST MAIN STREET, SUITE 101
ELKTON, MD 21921
(410) 398-1150
www.mccrone-inc.com

DATE:	FEBRUARY 2013
JOB NUMBER:	03090182
SCALE:	1"=20'
DRAWN BY:	CJC
DESIGNED BY:	JMA
APPROVED BY:	DSS
FOLDER REFERENCE:	F-03090182

PHASE 3 INTERSECTION DETAILS
FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR EDDIE EVANS FARMS, LLC

SHEET NO.: I-2
FILE NO.: 1446-B

September 13, 2013 - 7:28am User: mcrone C:\03090182\03PHASE 3 INTERSECTION PLANS.dwg



REVISIONS

REV #	DATE	DESCRIPTION

ABBREVIATIONS AND NOTES

EVCS: END VERTICAL CURVE STATION
 EVCE: END VERTICAL CURVE ELEVATION
 BVCS: BEGIN VERTICAL CURVE STATION
 BVCE: BEGIN VERTICAL CURVE ELEVATION
 K: RATE OF VERTICAL CURVATURE
 PVI: POINT OF VERTICAL INTERSECTION
 A.D.: ALGEBRAIC DIFFERENCE
 V.C.: VERTICAL CURVE
 OS: OFFSET
 STA: STATION
 INV: INVERT
 ELEV: ELEVATION
 GRE: FINISHED GROUND ELEVATION (PRIOR TO HOUSE CONST.)
 FFE: FINISHED FLOOR ELEVATION

NOTES:

- BOX SIZES LISTED ARE IN INCHES.
- OFFSET DISTANCES LISTED ARE IN FEET.
- SEE D-6 FOR PAVING, CURBING, AND SIDEWALK CONSTRUCTION DETAILS.
- SEE D-7 FOR RAMP DETAILS.
- SEE D-8, D-9 & D-10 FOR DRAINAGE DETAILS.
- SEE D-6 FOR ROAD SECTIONS AND SUPERELEVATION SECTIONS.

McCRORNE
 Celebrating 75 Years of Quality Services and Innovation
 ENGINEERS • SURVEYORS • PLANNERS
 ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY

106 EAST MAIN STREET, SUITE 101
 ELKTON, MARYLAND 21921
 (410) 391-1000
 Copyright © 2012
 www.mccrone-inc.com

ROAD & STORM DRAIN PLAN & PROFILES

FILE NO. SL-11-01
VILLAGES OF NOBLES POND PHASES 3A & 4A
 KENTON HUNDRED, KENT COUNTY, DELAWARE
 FOR: EDDIE EVANS FARMS, LLC

DATE: FEBRUARY 2013
 JOB NUMBER: CDB06182
 SCALE: 1"=50'
 DRAWN BY: MAK
 DESIGNED BY: MAK
 APPROVED BY: DSS
 FOLDER REFERENCE: F-LD090182

SHEET NO.: **RD-1**
 FILE NO.: **1446-B**

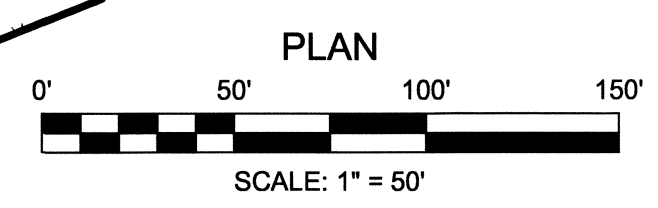
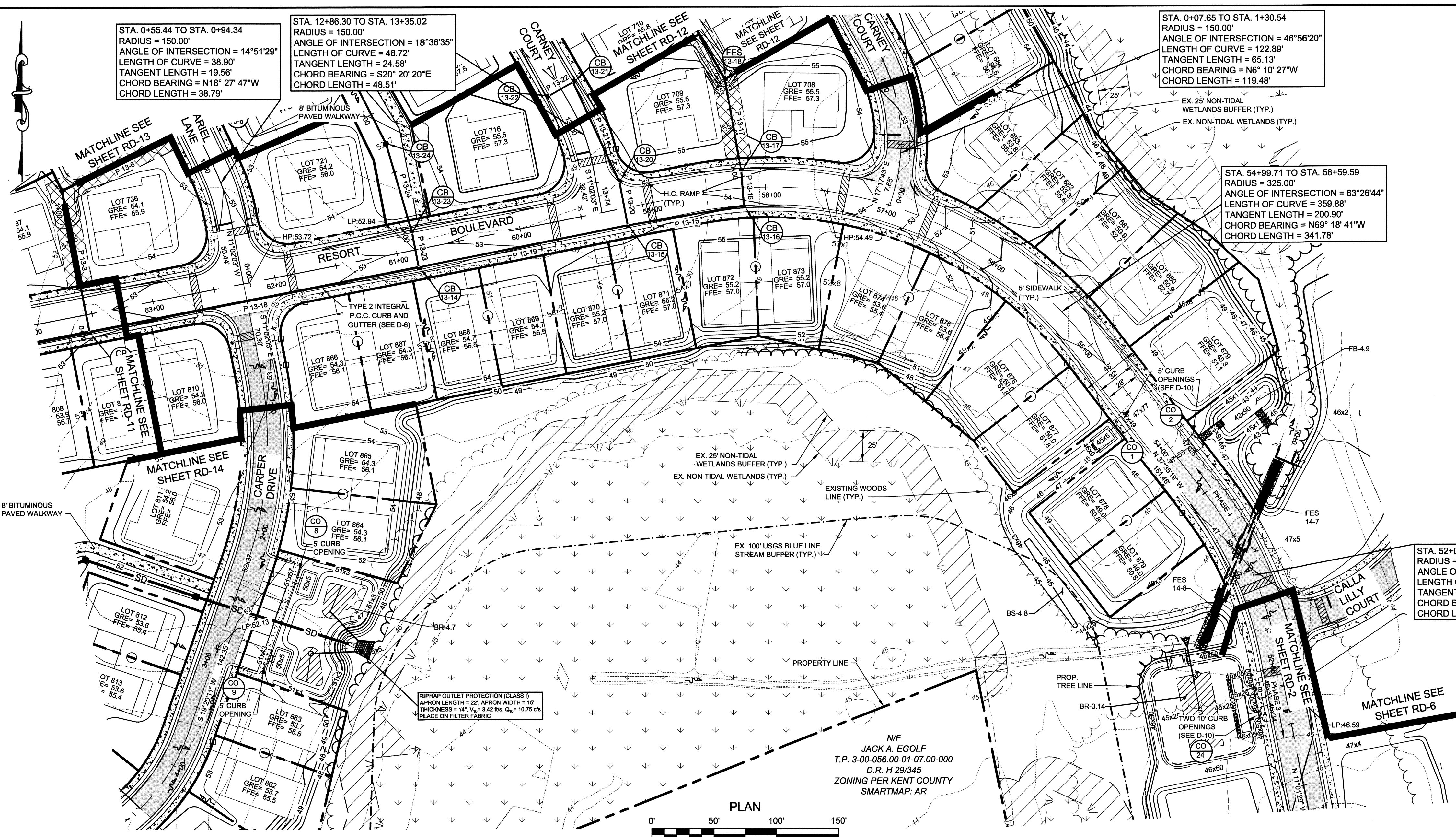
STA. 0+55.44 TO STA. 0+94.34
 RADIUS = 150.00'
 ANGLE OF INTERSECTION = 14°51'29"
 LENGTH OF CURVE = 36.90'
 TANGENT LENGTH = 19.58'
 CHORD BEARING = N18° 27' 47"W
 CHORD LENGTH = 38.79'

STA. 12+86.30 TO STA. 13+35.02
 RADIUS = 150.00'
 ANGLE OF INTERSECTION = 18°38'35"
 LENGTH OF CURVE = 48.72'
 TANGENT LENGTH = 24.58'
 CHORD BEARING = S20° 20' 20"E
 CHORD LENGTH = 48.51'

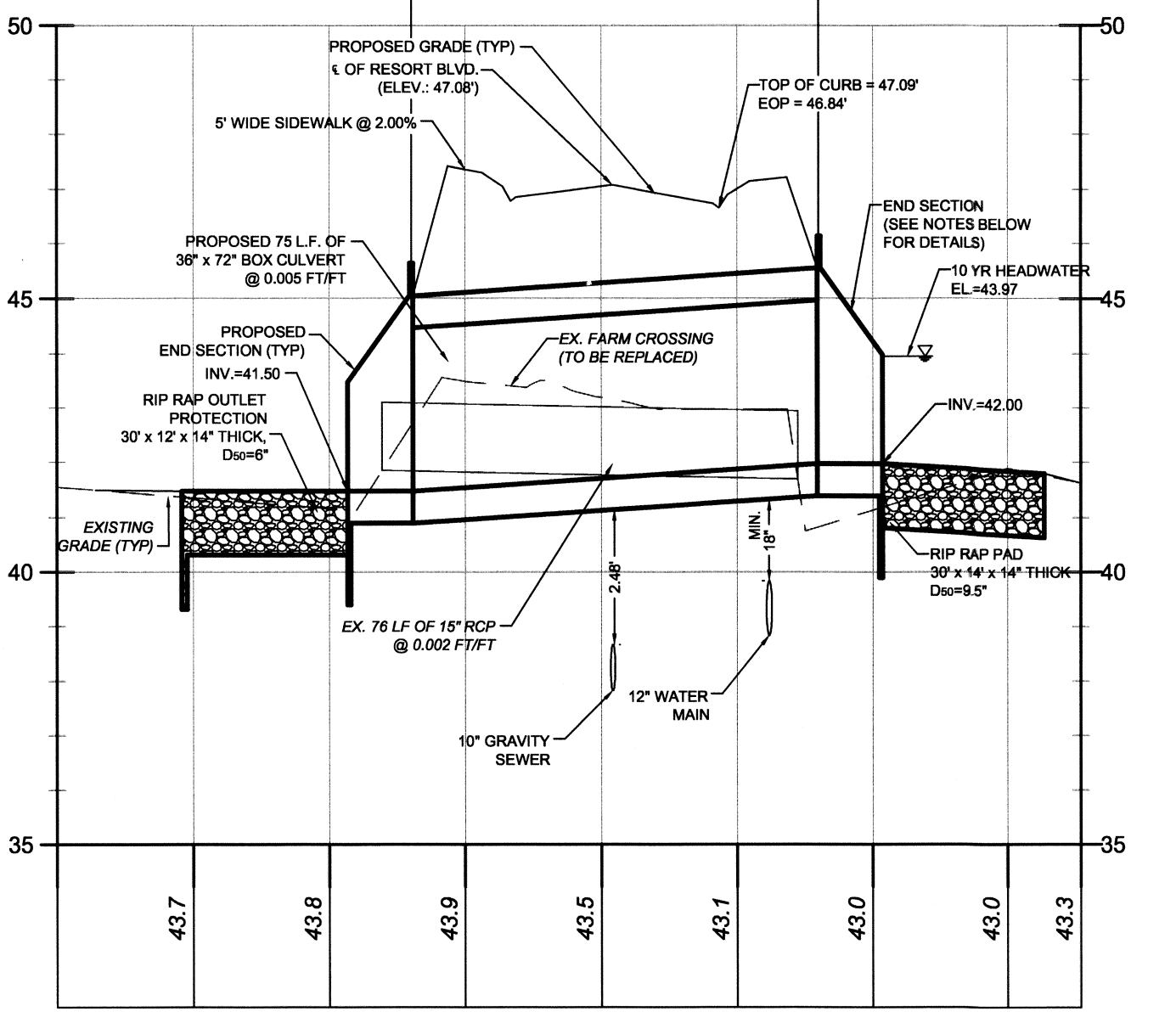
STA. 0+07.65 TO STA. 1+30.54
 RADIUS = 150.00'
 ANGLE OF INTERSECTION = 46°56'20"
 LENGTH OF CURVE = 122.89'
 TANGENT LENGTH = 65.13'
 CHORD BEARING = N6° 10' 27"W
 CHORD LENGTH = 119.48'

STA. 54+99.71 TO STA. 58+59.59
 RADIUS = 325.00'
 ANGLE OF INTERSECTION = 63°26'44"
 LENGTH OF CURVE = 359.88'
 TANGENT LENGTH = 200.90'
 CHORD BEARING = N69° 18' 41"W
 CHORD LENGTH = 341.78'

STA. 52+09.16 TO STA. 53+48.25
 RADIUS = 300.00'
 ANGLE OF INTERSECTION = 26°33'50"
 LENGTH OF CURVE = 139.09'
 TANGENT LENGTH = 70.82'
 CHORD BEARING = N24° 18' 24"W
 CHORD LENGTH = 137.85'



NF
 JACK A. EGOLF
 T.P. 3-00-056.00-01-07-00-000
 D.R. H 29/345
 ZONING PER KENT COUNTY
 SMARTMAP: AR



CULVERT CROSSING OF RESORT BOULEVARD STA. 52+96

HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'

SUPERELEVATED ROAD SECTION

SUPERELEVATION TRANSITION TABLE							
RESORT BOULEVARD							
SUPERELEVATED LANE		CENTER LINE		TYPICAL CROSS SLOPE LANE			
1	2	1	2	1	2	3	
EDGE OF PAVE	CROSS SLOPE (%)	LANE WIDTH (FT)	CENTER LINE STATION	CENTER LINE ELEVATION	LANE WIDTH (FT)	CROSS SLOPE (%)	EDGE OF PAVE
48.43	2	14	48+72.41	48.710	14	2	48.43
48.76	0	14	48+97.41	48.760	14	2	48.48
48.99	-2	14	49+22.41	48.710	14	2	48.43
47.56	-2	14	53+36.49	47.280	14	2	47.00
47.4	0	14	53+61.49	47.400	14	2	47.12
47.25	2	14	53+86.49	47.530	14	2	47.25

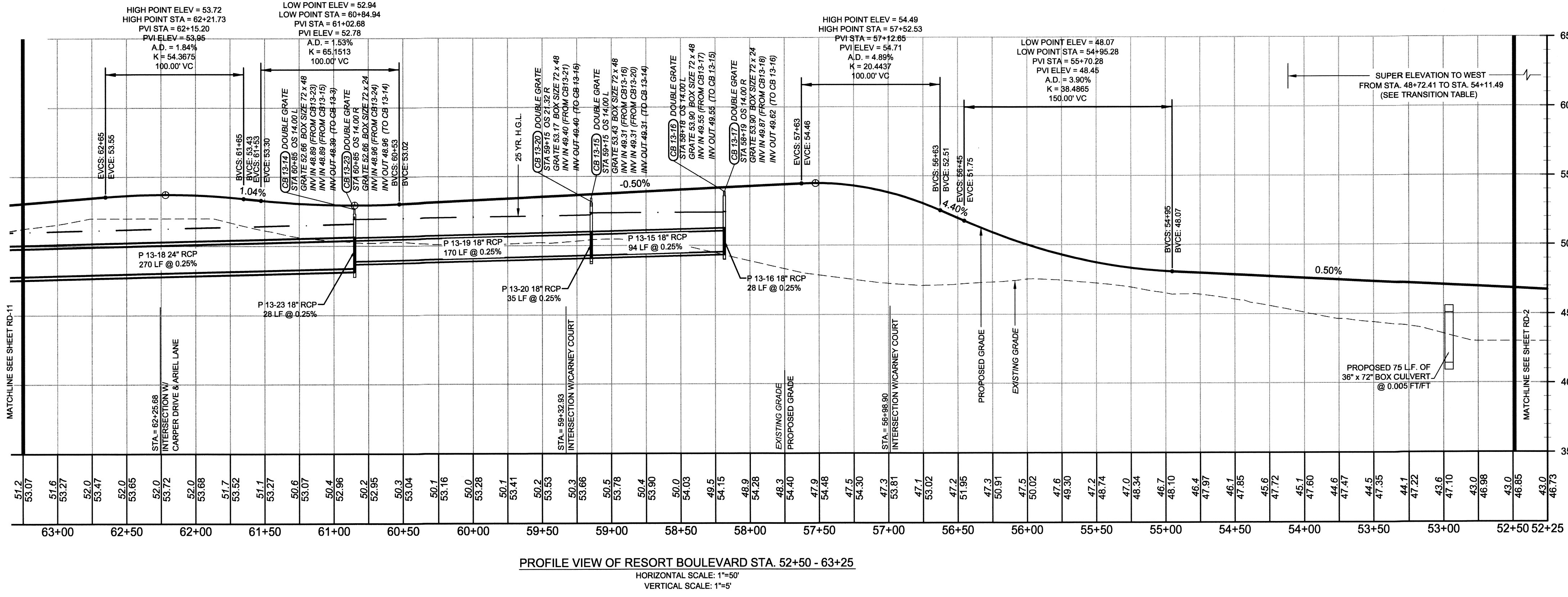
SEE TYPICAL TRANSITION FROM NORMAL CROSS SECTION TO SUPERELEVATED CROSS SECTION ON D-6.

ABBREVIATIONS AND NOTES

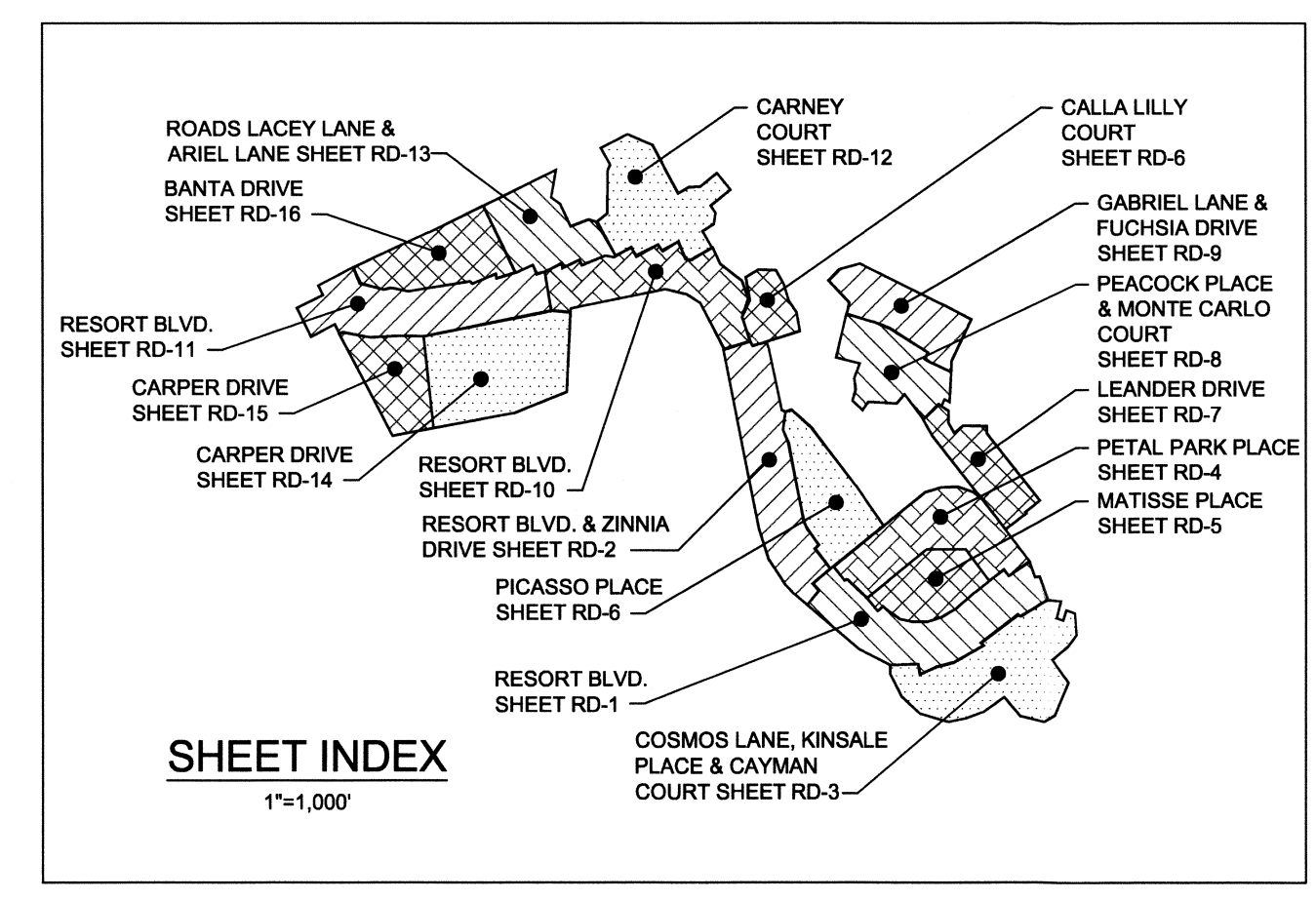
EVCS: END VERTICAL CURVE STATION
 EVCE: END VERTICAL CURVE ELEVATION
 BVCS: BEGIN VERTICAL CURVE STATION
 BVCE: BEGIN VERTICAL CURVE ELEVATION
 K: RATE OF VERTICAL CURVATURE
 PVI: POINT OF VERTICAL INTERSECTION
 A.D.: A. GSEMIAD DIFFERENCE
 V.C.: VERTICAL CURVE
 OS: OFFSET
 STA: STATION
 INV: INVERT
 ELEV.: ELEVATION
 GRE: FINISHED GROUND ELEVATION (PRIOR TO HOUSE CONST.)
 FFE: FINISHED FLOOR ELEVATION

NOTES:

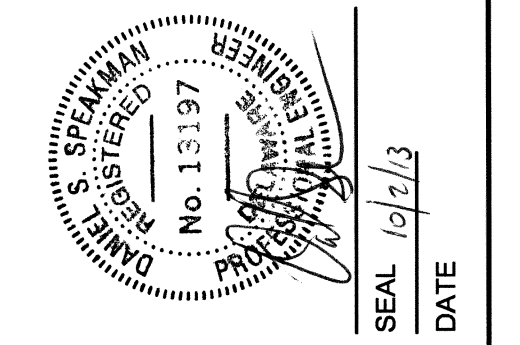
- BOX SIZES LISTED ARE IN INCHES.
- OFFSET DISTANCES LISTED ARE IN FEET.
- SEE D-8 FOR PAVING, CURBING, AND SIDEWALK CONSTRUCTION DETAILS.
- SEE D-7 FOR RAMP DETAILS.
- SEE D-8, D-9, & D-10 FOR DRAINAGE DETAILS.
- SEE D-8 FOR ROAD SECTIONS AND SUPERELEVATION SECTIONS.



PROFILE VIEW OF RESORT BOULEVARD STA. 52+50 - 63+25
 HORIZONTAL SCALE: 1"=50'
 VERTICAL SCALE: 1"=5'



SHEET INDEX
 1"=1,000'



REV. #	DATE	DESCRIPTION

McCORMICK
 Celebrating 75 Years of Quality Service and Innovation

ENGINEERS • SURVEYORS • PLANNERS
 ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY

106 EAST MAIN STREET, SUITE 101
 ELKTON, MARYLAND 21921
 (410) 396-1500
 www.mccormick.com

DATE	JOB NUMBER	SCALE	DRAWN BY	DESIGNED BY	APPROVED BY	FOLDER REFERENCE
FEBRUARY 2015	DB96182	AS SHOWN	MAK	MAK	DSS	P-03090182

ROAD & STORM DRAIN PLAN & PROFILES

FILE NO. SL-11-01

VILLAGES OF NOBLES POND PHASES 3A & 4A

KENTON HUNDRED, KENT COUNTY, DELAWARE

FOR: EDDIE EVANS FARMS, LLC

SHEET NO.: **RD-10**

FILE NO.: **1446-B**

October 01, 2013 11:22am User: mkratt C:\Civil 3D\Projects\0390182 - NOBLES POND - FINAL PHASE 3 & 4\PRODUCTION\PHASE 4 ROAD LAYOUTS.dwg

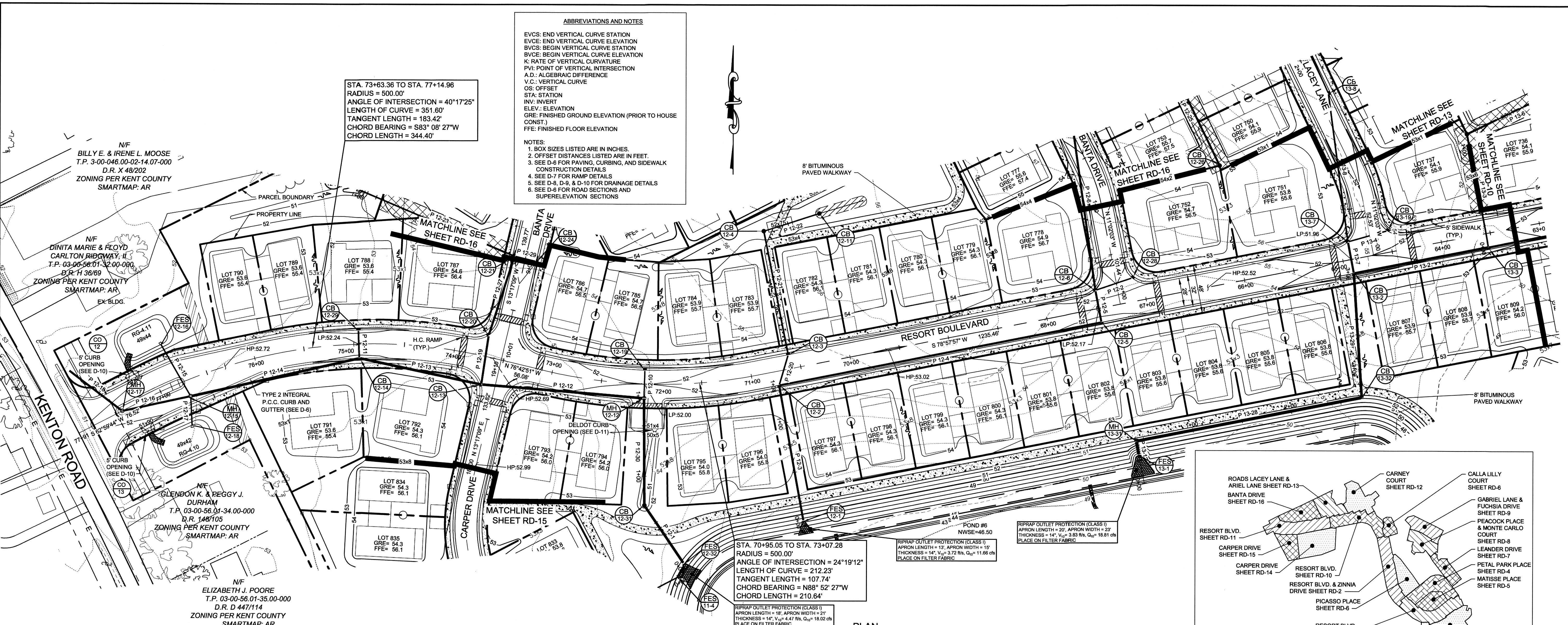
STA. 73+63.36 TO STA. 77+14.96
 RADIUS = 500.00'
 ANGLE OF INTERSECTION = 40°17'25"
 LENGTH OF CURVE = 351.60'
 TANGENT LENGTH = 183.42'
 CHORD BEARING = S83° 08' 27"W
 CHORD LENGTH = 344.40'

ABBREVIATIONS AND NOTES

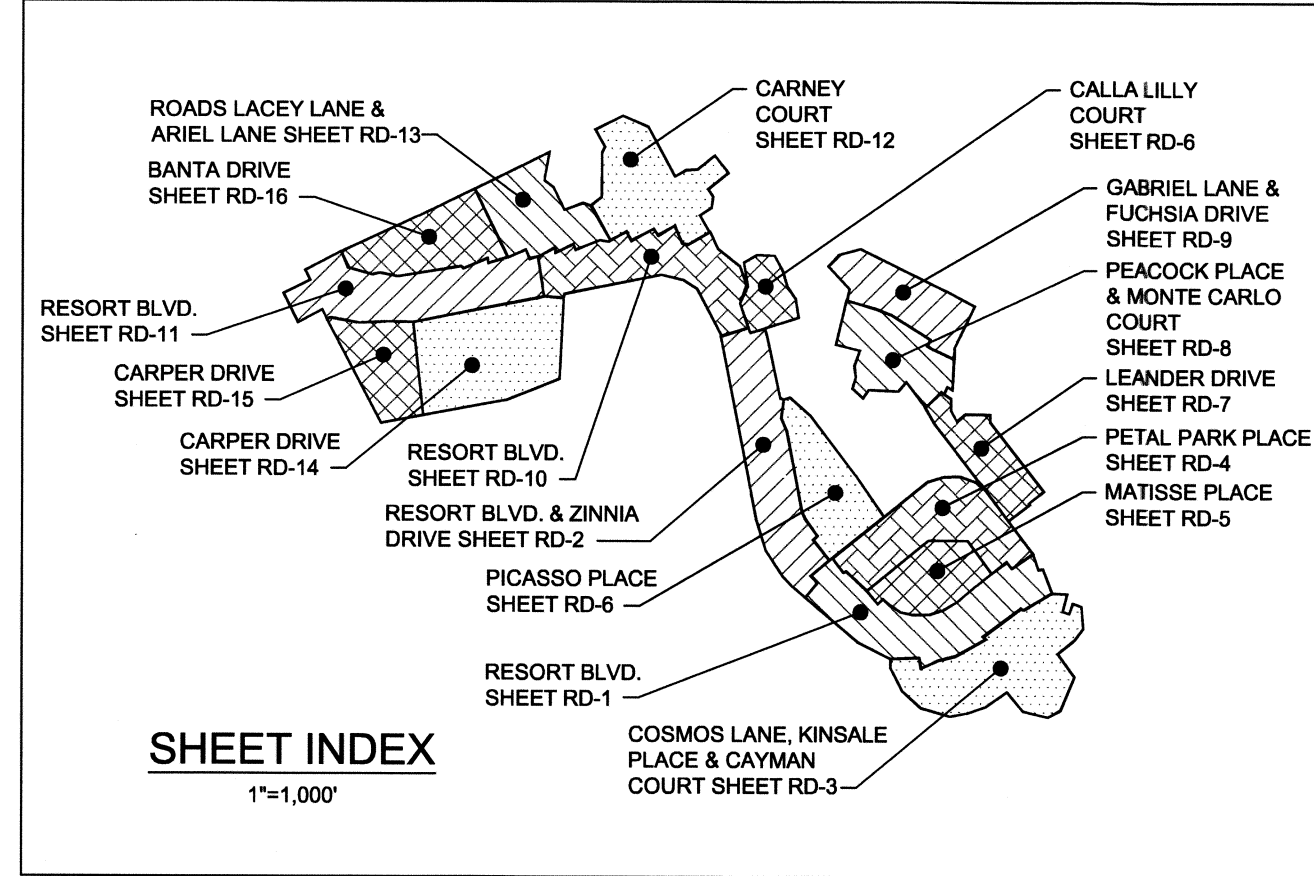
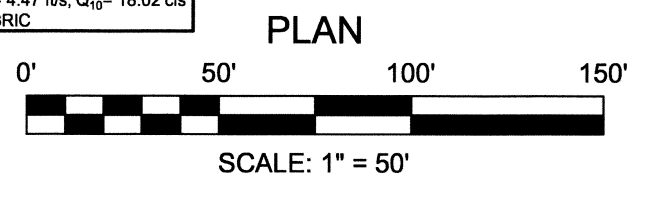
EVCS: END VERTICAL CURVE STATION
 EVEC: END VERTICAL CURVE ELEVATION
 BVCS: BEGIN VERTICAL CURVE STATION
 BVCE: BEGIN VERTICAL CURVE ELEVATION
 K: RATE OF VERTICAL CURVATURE
 PVI: POINT OF VERTICAL INTERSECTION
 A.D.: ALGEBRAIC DIFFERENCE
 V.C.: VERTICAL CURVE
 OS: OFFSET
 STA: STATION
 INV: INVERT
 ELEV.: ELEVATION
 GRE: FINISHED GROUND ELEVATION (PRIOR TO HOUSE CONST.)
 FFE: FINISHED FLOOR ELEVATION

NOTES:

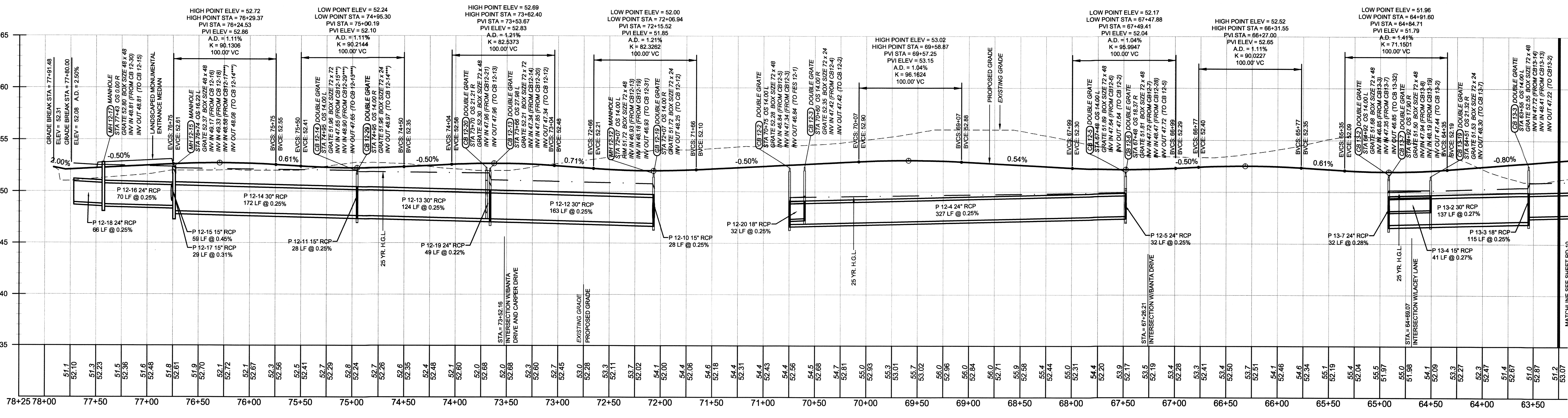
- BOX SIZES LISTED ARE IN INCHES.
- OFFSET DISTANCES LISTED ARE IN FEET.
- SEE D-6 FOR PAVING, CURBING, AND SIDEWALK CONSTRUCTION DETAILS.
- SEE D-7 FOR RAMP DETAILS.
- SEE D-8, D-9, & D-10 FOR DRAINAGE DETAILS.
- SEE D-9 FOR ROAD SECTIONS AND SUPERELEVATION SECTIONS.



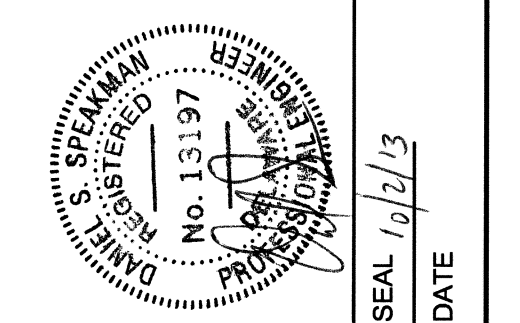
STA. 70+95.05 TO STA. 73+07.28
 RADIUS = 500.00'
 ANGLE OF INTERSECTION = 24°19'12"
 LENGTH OF CURVE = 212.23'
 TANGENT LENGTH = 107.74'
 CHORD BEARING = N88° 52' 27"W
 CHORD LENGTH = 210.64'



*** DENOTES THAT A TEMPORARY REINFORCEMENT BAR OVER THE OPENING TO STABILIZE THE BOX DURING TRANSPORTATION AND PLACEMENT MAY BE NEEDED. ONCE THE BOX IS IN PLACE, THE TEMPORARY REINFORCEMENT BAR MUST BE CUT OUT.



PROFILE VIEW OF RESORT BOULEVARD STA. 63+25 - 77+91
 HORIZONTAL SCALE: 1"=50'
 VERTICAL SCALE: 1"=5'



REV #	DATE	DESCRIPTION

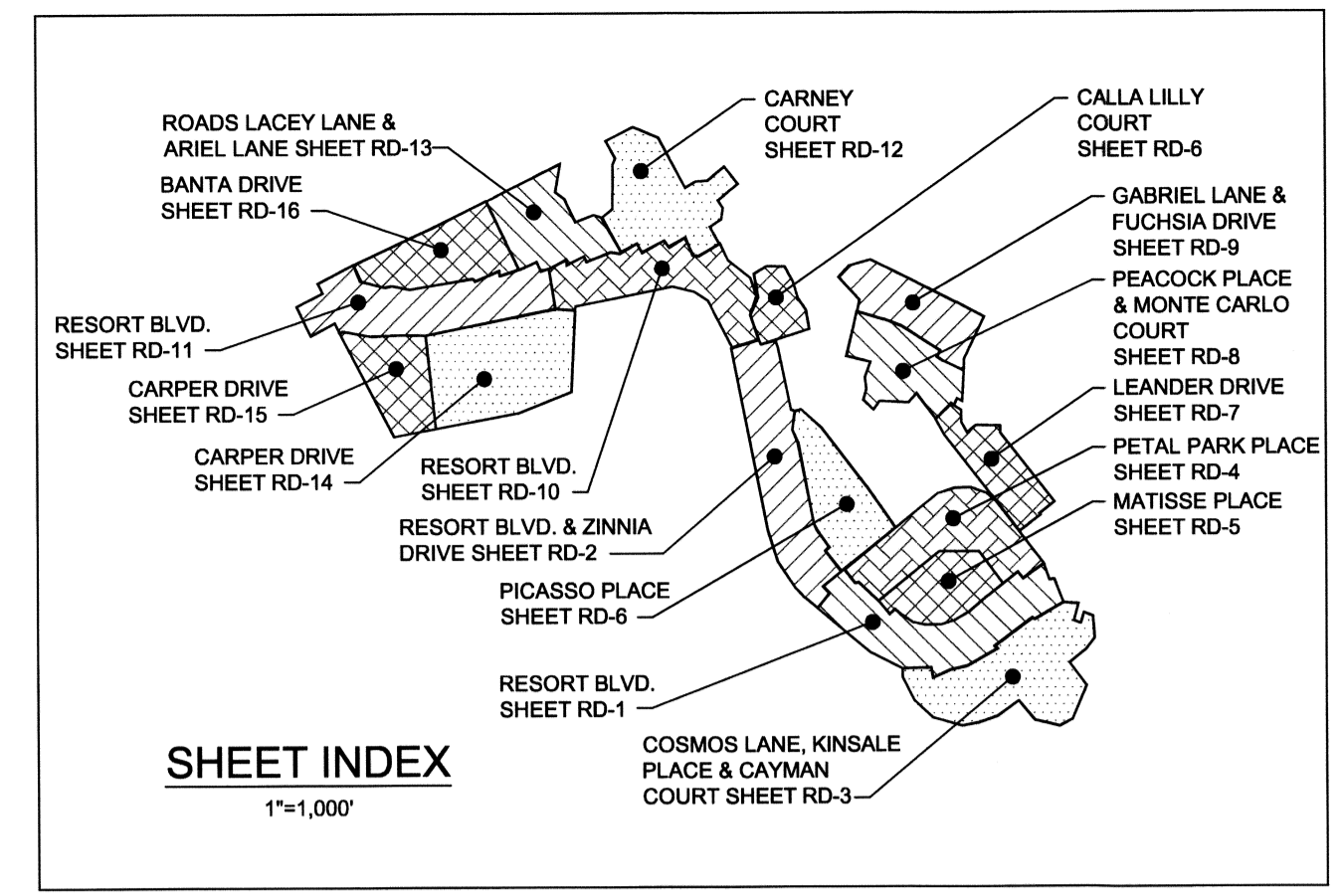
McCRONE
 Celebrating 75 Years of Quality Services and Innovation
 ENGINEERS • SURVEYORS • PLANNERS
 ANNAPOLIS • CENTREVILLE • ELKTON • SALISBURY
 106 EAST MAIN STREET, SUITE 101
 ELKTON, MD 21921
 (410) 398-1500
 www.mccrone-inc.com
 Copyright © 2012

DATE:	FEBRUARY 2013
JOB NUMBER:	D3090182
SCALE:	AS SHOWN
DRAWN BY:	MAK
DESIGNED BY:	MAK
APPROVED BY:	DSS
FOLDER REFERENCE:	F:\D3090182

ROAD & STORM DRAIN PLAN & PROFILES
 FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
 KENTON HUNDRED, KENT COUNTY, DELAWARE
 FOR: EDDIE EVANS FARMS, LLC

N/F
PAUL C. PHILLIPS
T.P. 3-00-046.00-02-14.00-000
D.R. D 410/87
ZONING PER KENT COUNTY SMARTMAP: AR

N/F
ALLEN THOMAS & MARY VIRGINIA REED
T.P. 3-00-046.00-02-27.00-000
D.R. Y 19/346
ZONING PER KENT COUNTY SMARTMAP: AR

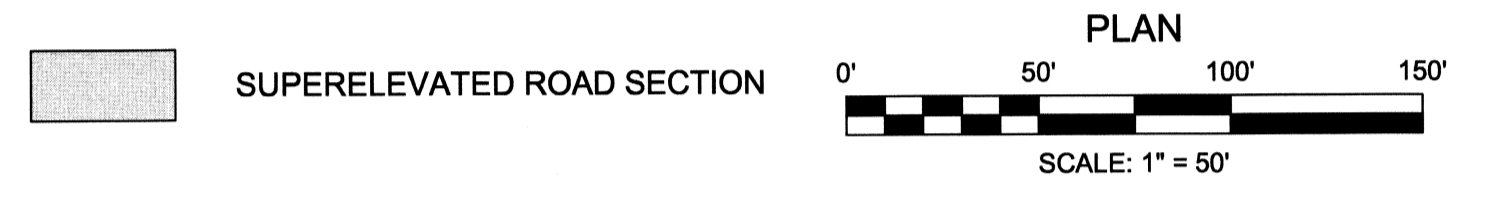


SHEET INDEX
1"=1,000'

SUPERELEVATION TRANSITION TABLE

CARNEY COURT							
SUPERELEVATED LANE		CENTER LINE		TYPICAL CROSS SLOPE LANE			
1	2	3	4	5	6	7	8
EDGE OF PAVE	CROSS SLOPE (%)	LANE WIDTH (FT)	CENTER LINE STATION	CENTER LINE ELEVATION	LANE WIDTH (FT)	CROSS SLOPE (%)	EDGE OF PAVE
53.72	-2	11	0+14	53.50	11	2	53.28
54.46	-2	11	11+14.77	54.24	11	2	54.02
54.50	0	11	11+39.77	54.50	11	2	54.28
54.36	2	11	11+64.77	54.58	11	2	54.36

SEE TYPICAL TRANSITION FROM NORMAL CROSS SECTION TO SUPERELEVATED CROSS SECTION ON D-6.



ABBREVIATIONS AND NOTES

EVCS: END VERTICAL CURVE STATION
EVE: END VERTICAL CURVE ELEVATION
BVCS: BEGIN VERTICAL CURVE STATION
BVE: BEGIN VERTICAL CURVE ELEVATION
K: RATE OF VERTICAL CURVATURE
PVI: POINT OF VERTICAL INTERSECTION
A.D.: ALGEBRAIC DIFFERENCE
V.C.: VERTICAL CURVE
OS: OFFSET
STA: STATION
INV: INVERT
ELEV: ELEVATION
GRE: FINISHED GROUND ELEVATION (PRIOR TO HOUSE CONST.)
FFE: FINISHED FLOOR ELEVATION

NOTES:
1. BOX SIZES LISTED ARE IN INCHES.
2. OFFSET DISTANCES LISTED ARE IN FEET.
3. SEE D-6 FOR PAVING, CURBING, AND SIDEWALK CONSTRUCTION DETAILS.
4. SEE D-7 FOR RAMP DETAILS.
5. SEE D-8, D-9, & D-10 FOR DRAINAGE DETAILS.
6. SEE D-6 FOR ROAD SECTIONS AND SUPERELEVATION SECTIONS.

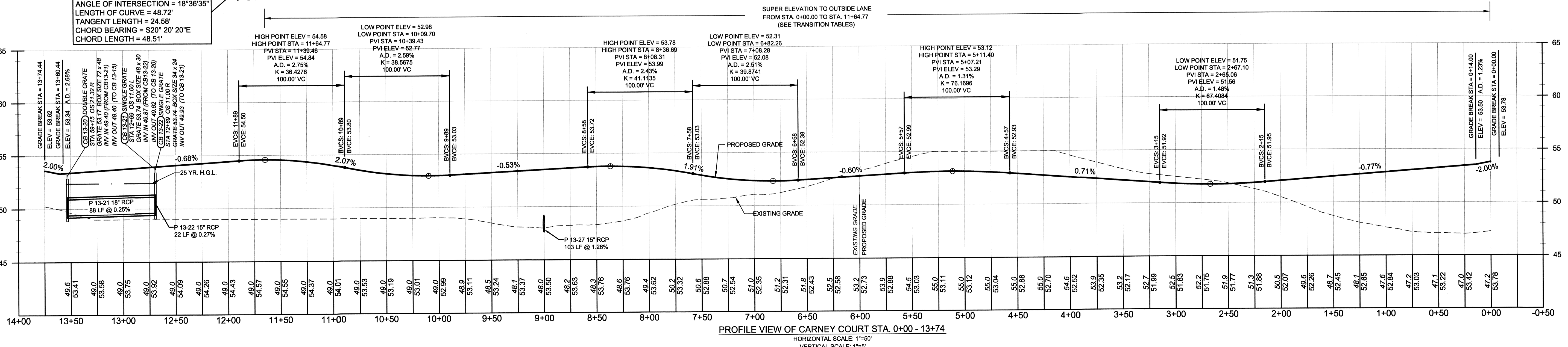
STA. 7+38.30 TO STA. 8+15.99
RADIUS = 75.00'
ANGLE OF INTERSECTION = 59°20'54"
LENGTH OF CURVE = 77.69'
TANGENT LENGTH = 42.73'
CHORD BEARING = S33°44'28"W
CHORD LENGTH = 74.26'

STA. 9+43.97 TO STA. 10+02.81
RADIUS = 100.00'
ANGLE OF INTERSECTION = 33°42'36"
LENGTH OF CURVE = 58.84'
TANGENT LENGTH = 30.30'
CHORD BEARING = S12°47'19"E
CHORD LENGTH = 57.99'

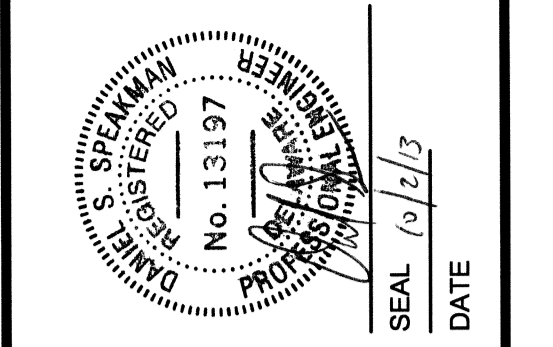
STA. 6+13.72 TO STA. 7+27.52
RADIUS = 75.00'
ANGLE OF INTERSECTION = 86°56'29"
LENGTH OF CURVE = 113.81'
TANGENT LENGTH = 71.10'
CHORD BEARING = N73°06'52"W
CHORD LENGTH = 103.20'

STA. 0+07.65 TO STA. 1+30.54
RADIUS = 150.00'
ANGLE OF INTERSECTION = 46°56'20"
LENGTH OF CURVE = 122.89'
TANGENT LENGTH = 65.13'
CHORD BEARING = N6°10'27"W
CHORD LENGTH = 119.48'

STA. 12+86.30 TO STA. 13+35.02
RADIUS = 150.00'
ANGLE OF INTERSECTION = 18°36'35"
LENGTH OF CURVE = 48.72'
TANGENT LENGTH = 24.58'
CHORD BEARING = S20°20'20"E
CHORD LENGTH = 48.51'



October 01, 2013 1:26pm User: mshaff C:\DWG\3D\Projects\03060162 - NOBLES POND - FINAL PHASE 3 & 4\PRODUCTION\PHASE 4 ROAD LAYOUTS.dwg



REVISIONS

REV. #	DATE	DESCRIPTION

McCRONE
Celebrating 75 Years of Quality Services and Innovation
ENGINEERS SURVEYORS PLANNERS
ANNAPOLIS CENTREVILLE ELKTON SALISBURY
106 EAST MAIN STREET, SUITE 101
ELKTON, MD 21921
(410) 396-1550
www.mccrone-inc.com

DATE:	FEBRUARY 2013
JOB NUMBER:	03060162
SCALE:	AS SHOWN
DRAWN BY:	MAK
DESIGNED BY:	MAK
APPROVED BY:	DSS
FOLDER REFERENCE:	F-03060162

ROAD & STORM DRAIN PLAN & PROFILES

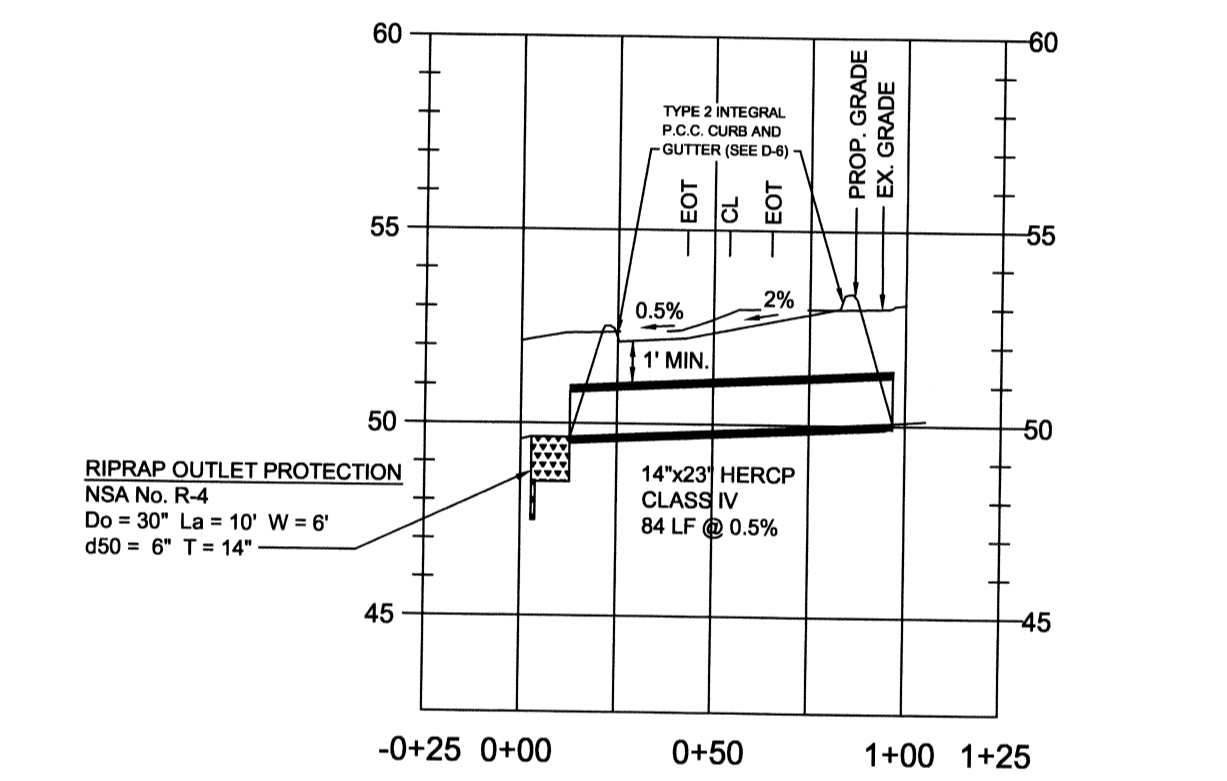
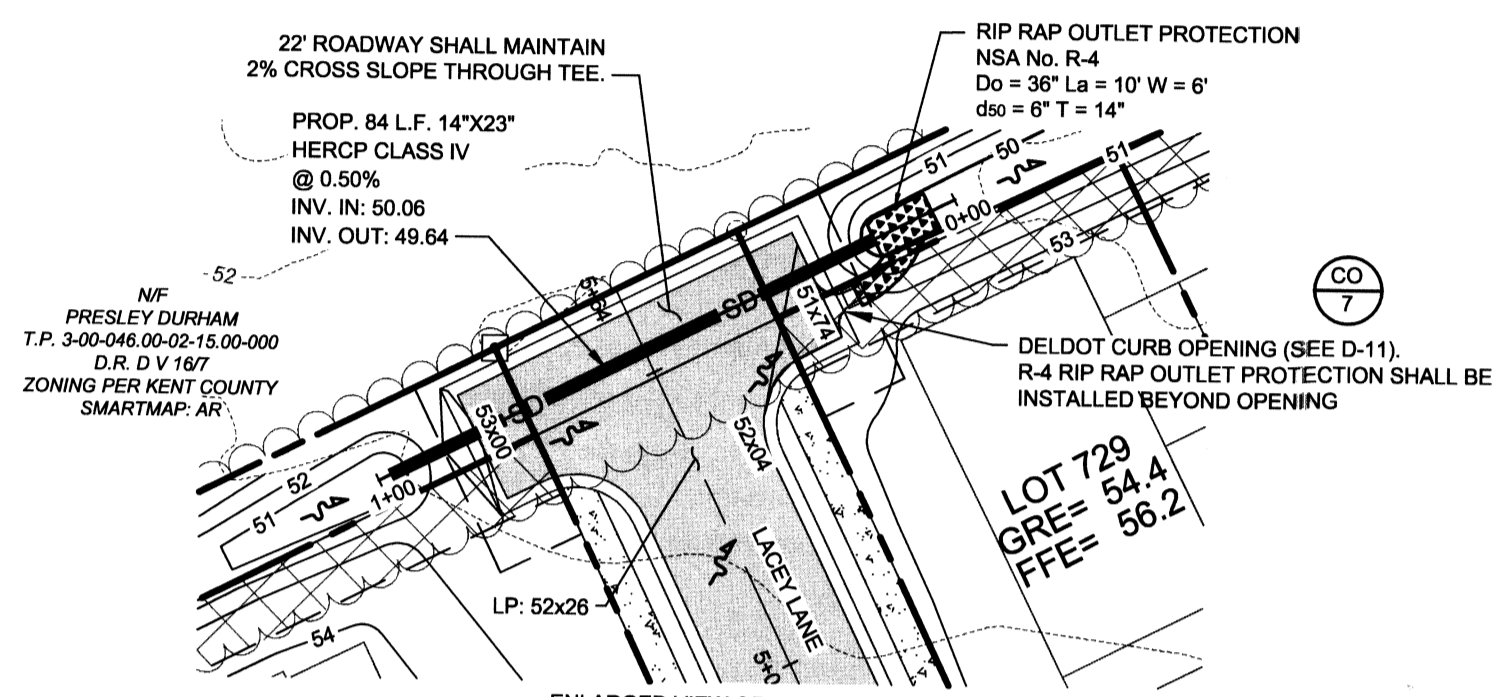
FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR: EDDIE EVANS FARMS, LLC

SHEET NO.: **RD-12**
FILE NO.: **1446-B**

SUPERELEVATION TRANSITION TABLE						
LACEY LANE						
SUPERELEVATED LANE		CENTER LINE		TYPICAL CROSS SLOPE LANE		
1	2	1	2	1	2	3
EDGE OF PAVE	CROSS SLOPE (%)	LANE WIDTH (FT)	CENTER LINE STATION	CENTER LINE ELEVATION	LANE WIDTH (FT)	CROSS SLOPE (%)
52.89	-2	11	5+64.00	52.67	11	2
52.63	-2	11	5+01.00	52.41	11	2
52.53	0	11	4+76.00	52.53	11	2
52.44	2	11	4+51.00	52.66	11	2

SUPERELEVATION TRANSITION TABLE						
ARIEL LANE						
SUPERELEVATED LANE		CENTER LINE		TYPICAL CROSS SLOPE LANE		
1	2	1	2	1	2	3
EDGE OF PAVE	CROSS SLOPE (%)	LANE WIDTH (FT)	CENTER LINE STATION	CENTER LINE ELEVATION	LANE WIDTH (FT)	CROSS SLOPE (%)
52.99	2	11	5+52.21	53.21	11	2
53.34	0	11	5+27.21	53.34	11	2
53.55	-2	11	5+02.21	53.33	11	2
52.48	-2	11	1+82.00	52.26	11	2
52.44	0	11	1+57.00	52.44	11	2
52.39	2	11	1+33.00	52.61	11	2

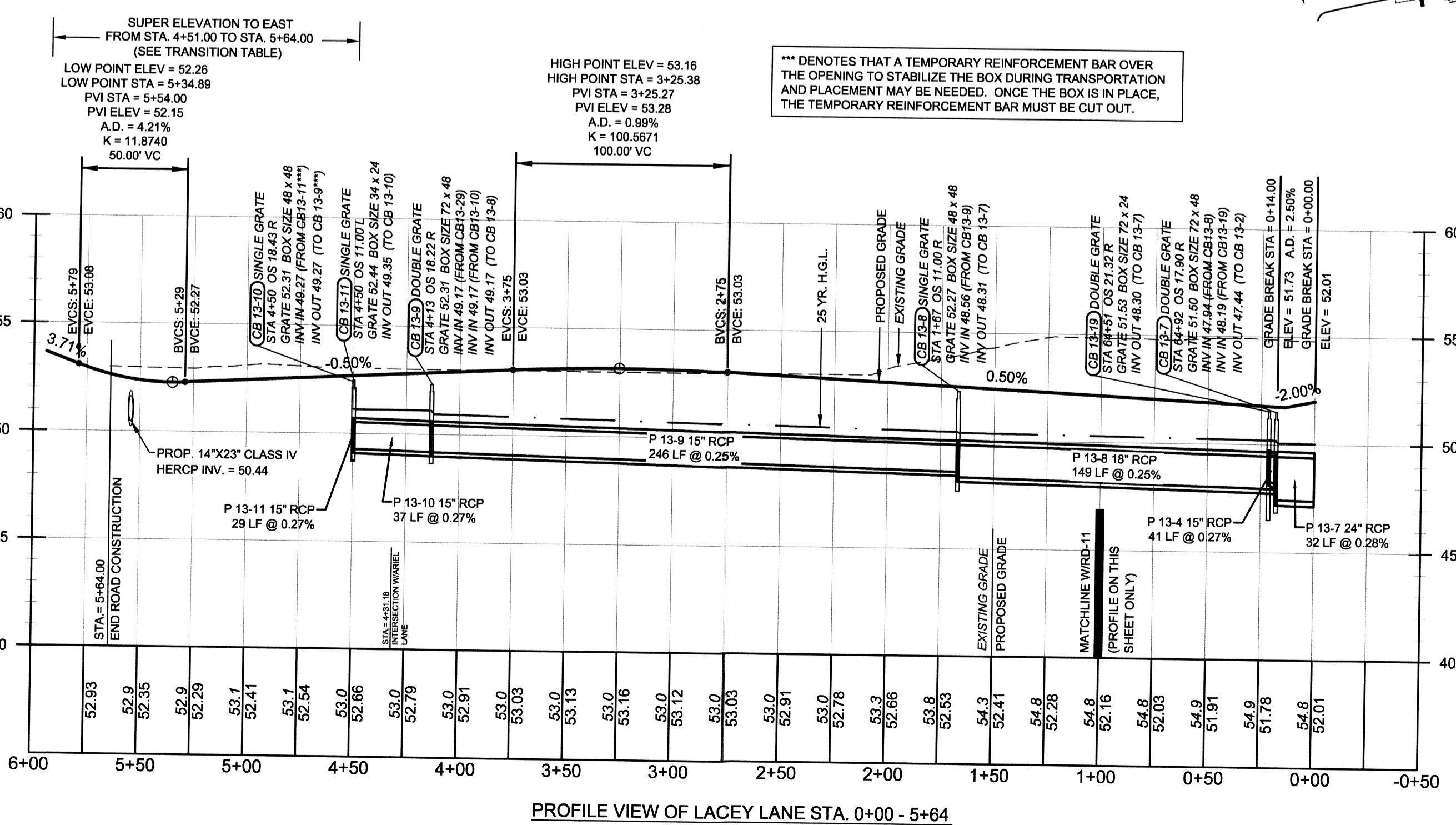
SEE TYPICAL TRANSITION FROM NORMAL CROSS SECTION TO SUPERELEVATED CROSS SECTION ON D-6.



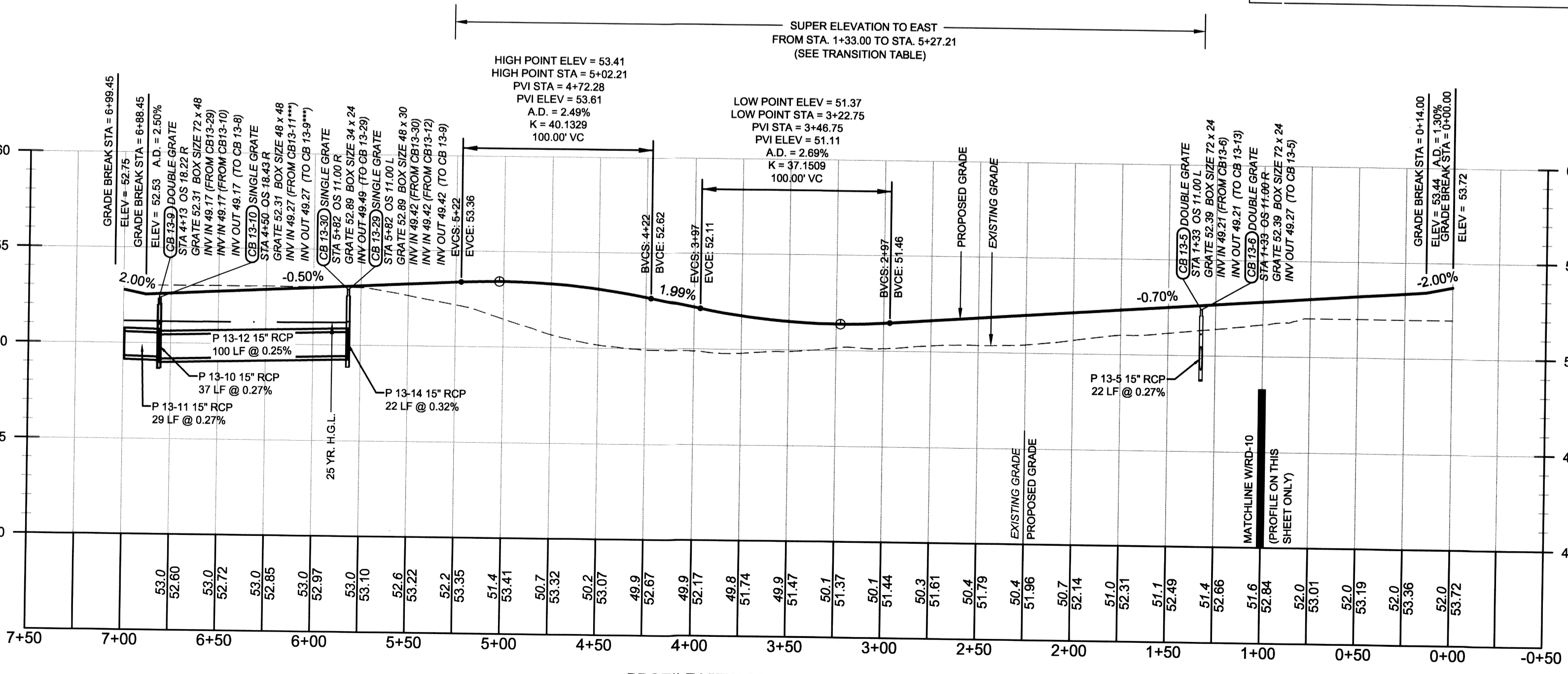
PROFILE: LACEY LANE CULVERT
SCALE HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

STA. 0+52.63 TO STA. 0+91.43
RADIUS = 150.00'
ANGLE OF INTERSECTION = 14°51'29"
LENGTH OF CURVE = 38.90'
TANGENT LENGTH = 19.56'
CHORD BEARING = N18°27'47"W
CHORD LENGTH = 38.79'

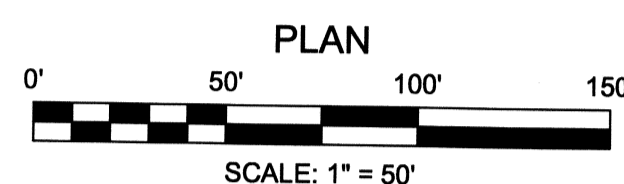
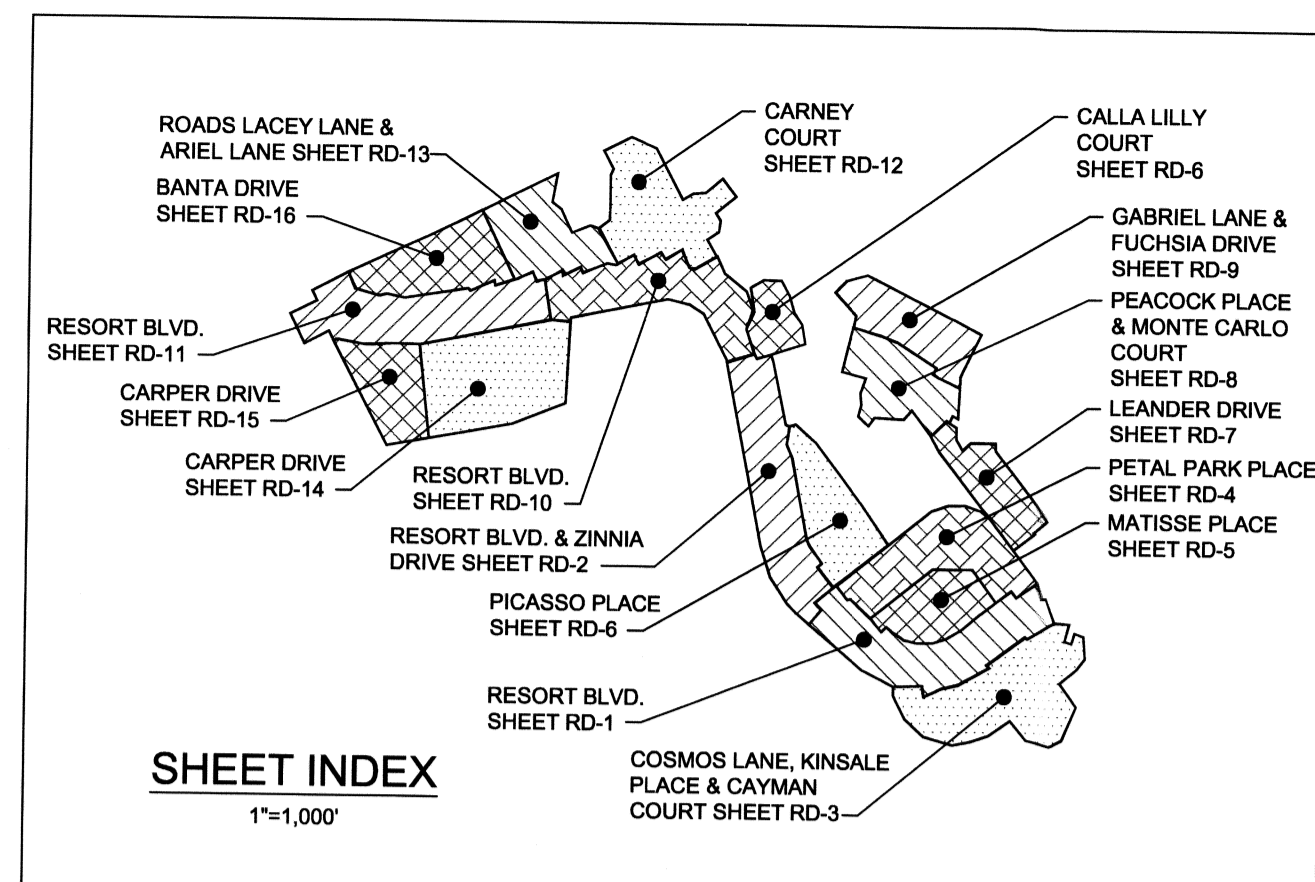
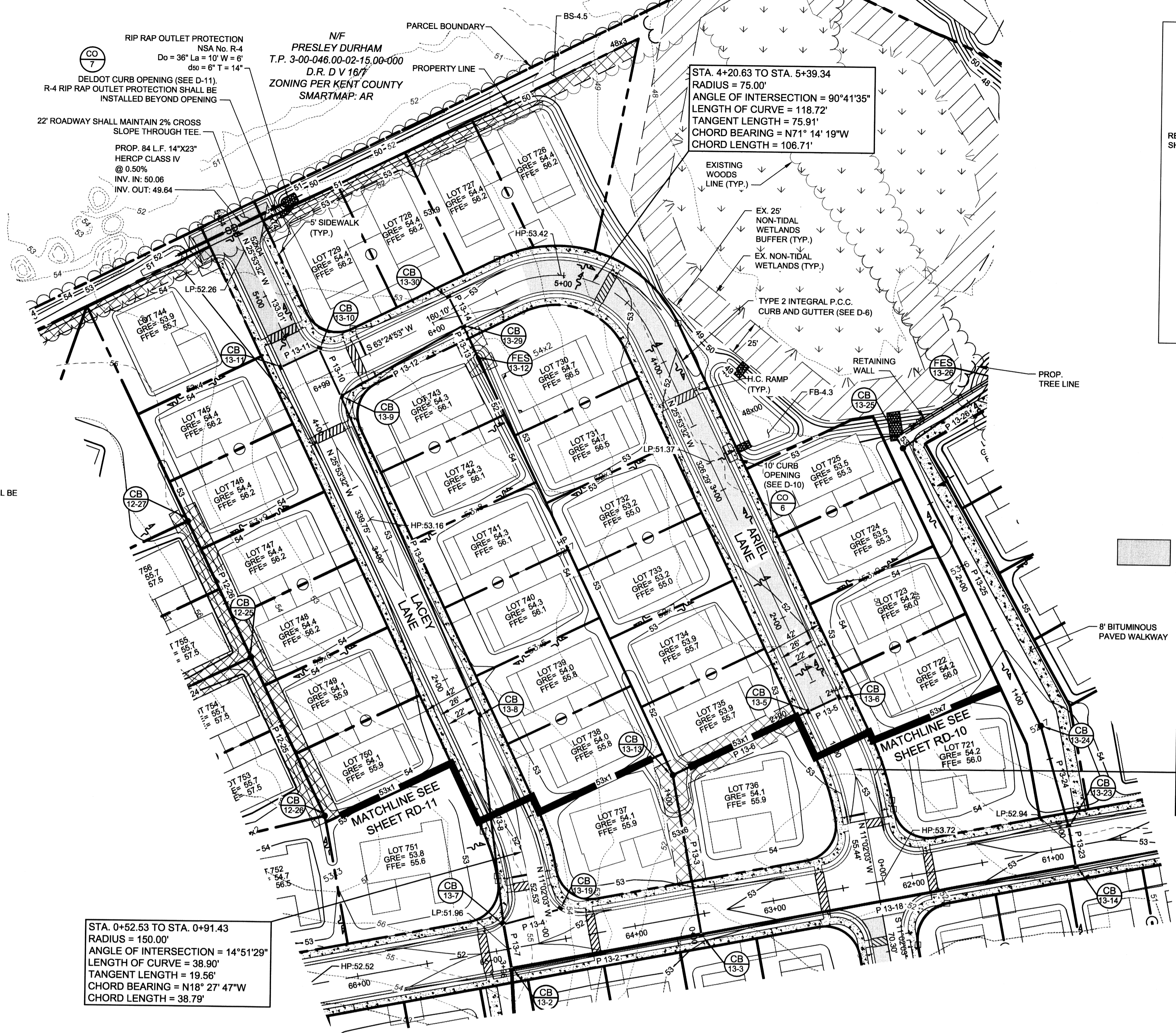
*** DENOTES THAT A TEMPORARY REINFORCEMENT BAR OVER THE OPENING TO STABILIZE THE BOX DURING TRANSPORTATION AND PLACEMENT MAY BE NEEDED. ONCE THE BOX IS IN PLACE, THE TEMPORARY REINFORCEMENT BAR MUST BE CUT OUT.



PROFILE VIEW OF LACEY LANE STA. 0+00 - 5+64
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



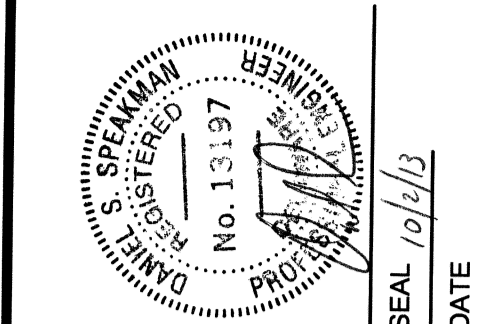
PROFILE VIEW OF ARIEL LANE STA. 0+00 - 6+99
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



SUPERELEVATED ROAD SECTION

STA. 0+55.44 TO STA. 0+94.34
RADIUS = 150.00'
ANGLE OF INTERSECTION = 14°51'29"
LENGTH OF CURVE = 38.90'
TANGENT LENGTH = 19.56'
CHORD BEARING = N18°27'47"W
CHORD LENGTH = 38.79'

- ABBREVIATIONS AND NOTES
- EVCS: END VERTICAL CURVE STATION
 - EVCE: END VERTICAL CURVE ELEVATION
 - BVCS: BEGIN VERTICAL CURVE STATION
 - BVCE: BEGIN VERTICAL CURVE ELEVATION
 - K: RATE OF VERTICAL CURVATURE
 - PVI: POINT OF VERTICAL INTERSECTION
 - A.D.: ALGEBRAIC DIFFERENCE
 - V.C.: VERTICAL CURVE
 - OS: OFFSET
 - STA: STATION
 - INV: INVERT
 - ELEV: ELEVATION
 - EOP: EDGE OF PAVE
 - ET: EDGE OF TRAVEL
 - CL: CENTER LINE
 - GRE: FINISHED GROUND ELEVATION (PRIOR TO HOUSE CONSTRUCTION)
 - FFE: FINISHED FLOOR ELEVATION
- NOTES:
- BOX SIZES LISTED ARE IN INCHES.
 - OFFSET DISTANCES LISTED ARE IN FEET.
 - SEE D-6 FOR PAVING, CURBING, AND SIDEWALK CONSTRUCTION DETAILS.
 - SEE D-7 FOR RAMP DETAILS.
 - SEE D-8, D-9, & D-10 FOR DRAINAGE DETAILS.
 - SEE D-8 FOR ROAD SECTIONS AND SUPERELEVATION SECTIONS.



REV.#	DATE	DESCRIPTION

McCRONE
ENGINEERS SURVEYORS PLANNERS
ANNAPOLIS CENTREVILLE ELKTON SALISBURY

100 EAST MAIN STREET, SUITE 101
ELKTON, MD 21921
TEL: 410.396.1550

DATE	JOB NUMBER	SCALE	DRAWN BY	DESIGNED BY	APPROVED BY	FOLDER REFERENCE
FEBRUARY 2013	D3090162	AS SHOWN	MAK	MAK	DIS	F-03090162

ROAD & STORM DRAIN PLAN & PROFILES

FILE NO. SL-11-01
VILLAGES OF NOBLES POND
PHASES 3A & 4A
KENTON HUNDRED, KENT COUNTY, DELAWARE
FOR: EDIE EVANS FARM, LLC

SHEET NO.: RD-13
FILE NO.: 1446-B