

LIQUID AC (TACK COAT) APPLICATION RATES	
SURFACE TYPE	APPLICATION RATES (GALLONS/YD <sup>2</sup> )
NEW HOT MIX ASPHALT	0.03 - 0.04
OXIDIZED ASPHALT	0.04 - 0.06
MILLED SURFACE (ASPHALT)	0.06 - 0.08
MILLED SURFACE (PCC)	0.06 - 0.08
PORTLAND CEMENT CONCRETE	0.04 - 0.06
VERTICAL SURFACES (CURBS, CONCRETE DRAINAGE STRUCTURES & APPURTENANCES)	*

\* LONGITUDINAL CONSTRUCTION JOINTS SHOULD BE TREATED USING A RATE THAT WILL THOROUGHLY COAT THE VERTICAL FACE WITHOUT RUNNING OFF OR AS DIRECTED BY ENGINEERING.

- NOTES:
1. REFER TO TABLE 407-1 OF NYS DOT STANDARD SPECIFICATIONS FOR APPLICATION OF BITUMINOUS MATERIAL UNDER 407-3.02
  2. TOP OF CURB IS EQUAL TO CENTER LINE CROWN.
  3. SUBGRADE MUST BE SUITABLE MATERIAL IN ACCORDANCE WITH DESIGN STANDARDS.

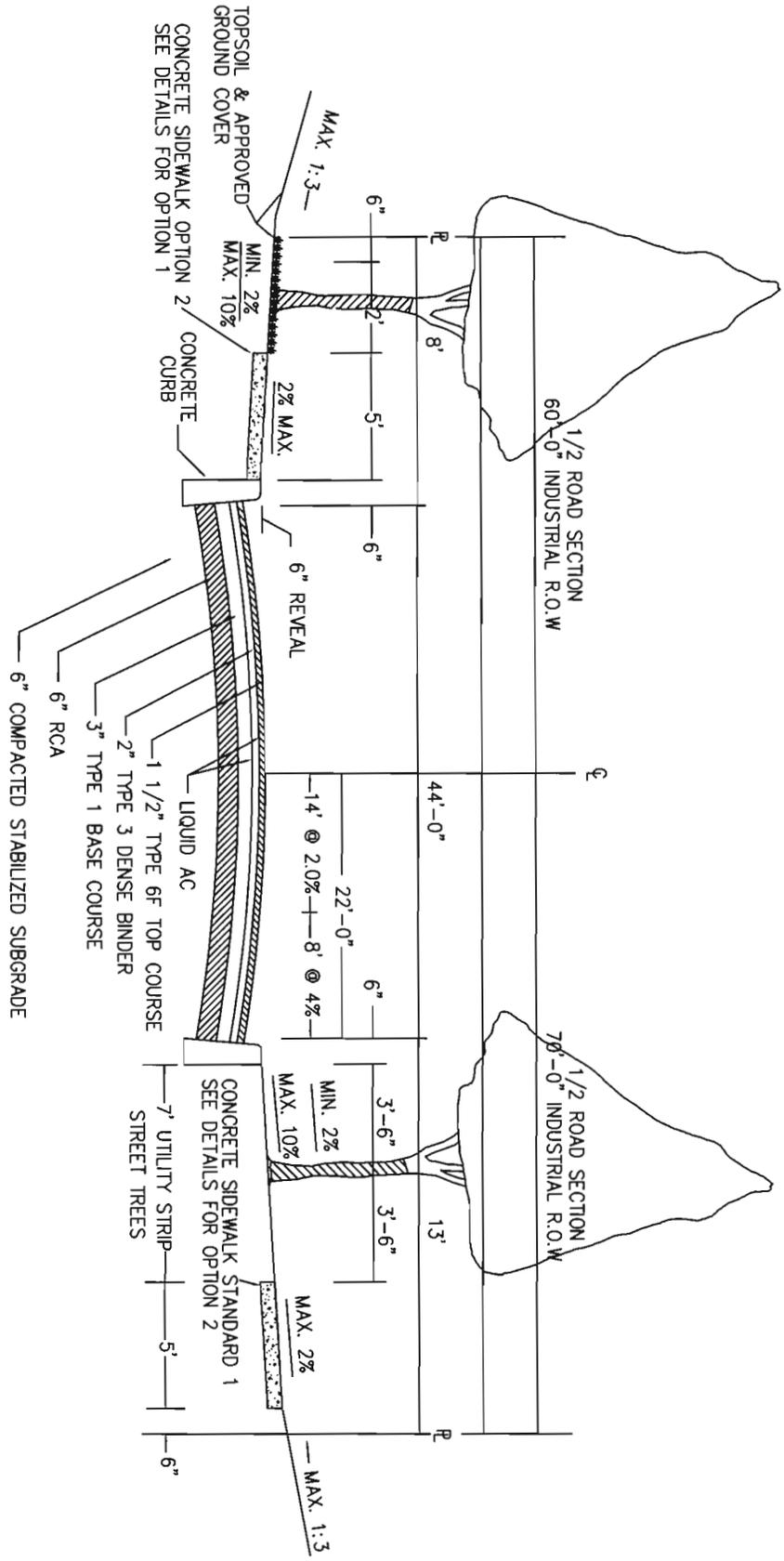
**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**TOWN ROAD SECTION**

RECOMMENDED:  
*[Signature]*  
 ENGINEER

APPROVED:  
*[Signature]*  
 CHAIRMAN

DATE: OCTOBER 7, 2013      SCALE: NONE      DRAFTED BY: G. CASSARA





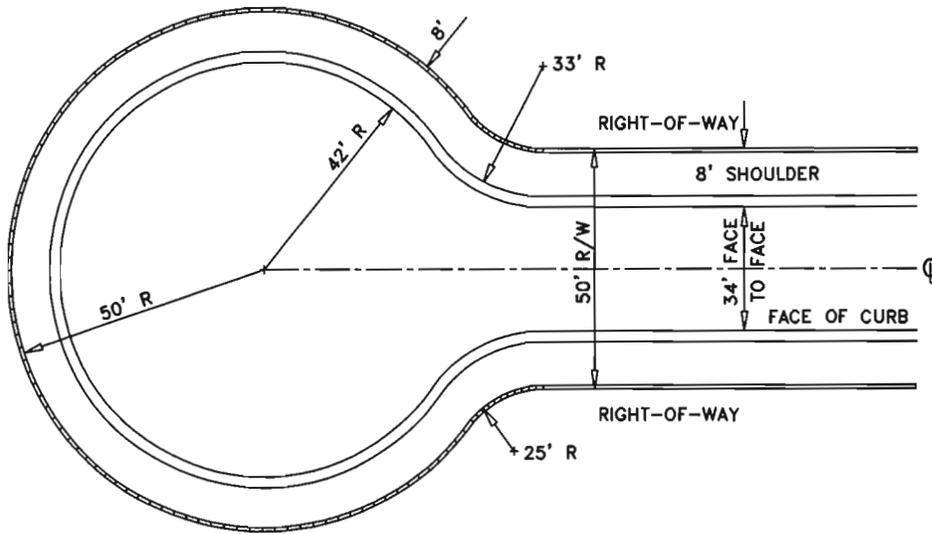
LIQUID AC (TACK COAT) APPLICATION RATES	
SURFACE TYPE	APPLICATION RATES (GALLONS/YD <sup>2</sup> )
NEW HOT MIX ASPHALT	0.03 - 0.04
OXIDIZED ASPHALT	0.04 - 0.06
MILLED SURFACE (ASPHALT)	0.06 - 0.08
MILLED SURFACE (PCC)	0.06 - 0.08
PORTLAND CEMENT CONCRETE	0.04 - 0.06
VERTICAL SURFACES (CURBS, CONCRETE DRAINAGE STRUCTURES & APPURTENANCES)	*

\* LONGITUDINAL CONSTRUCTION JOINTS SHOULD BE TREATED USING A RATE THAT WILL THOROUGHLY COAT THE VERTICAL FACE WITHOUT RUNNING OFF OR AS DIRECTED BY ENGINEERING.

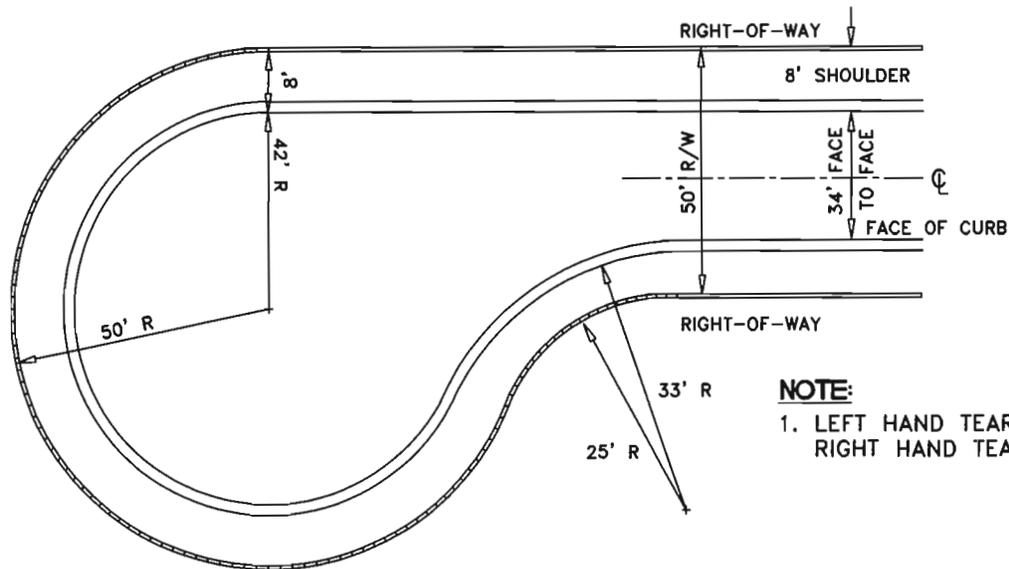
- NOTES:
1. REFER TO TABLE 407-1 OF NYS DOT STANDARD SPECIFICATIONS FOR APPLICATION OF BITUMINOUS MATERIAL UNDER 407-3.02. TOP OF CURB IS 1-1/4" BELOW CENTER LINE CROWN.
  2. SUBGRADE MUST BE SUITABLE MATERIAL IN ACCORDANCE WITH DESIGN STANDARDS.
  3. FOR L-2 ZONED AND COLLECTOR ROADS TO INDUSTRIAL ROADS.

**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**HEAVY DUTY TOWN ROAD SECTION**

RECOMMENDED: *[Signature]*  
 ENGINEER  
 APPROVED: *[Signature]*  
 CHAIRMAN  
 DATE: OCTOBER 7, 2013    SCALE: NONE    DRAFTED BY: G. CASSARA



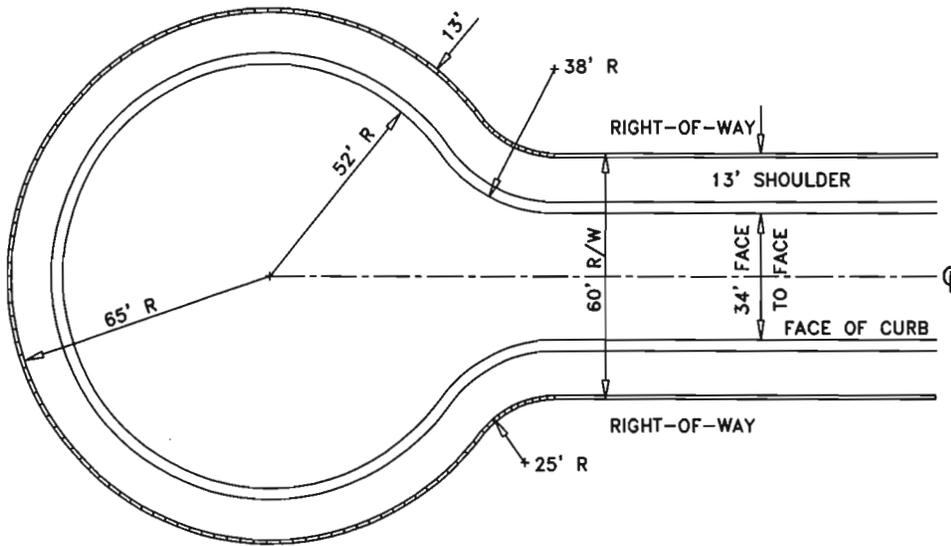
**'CENTERED' TURN-AROUND**



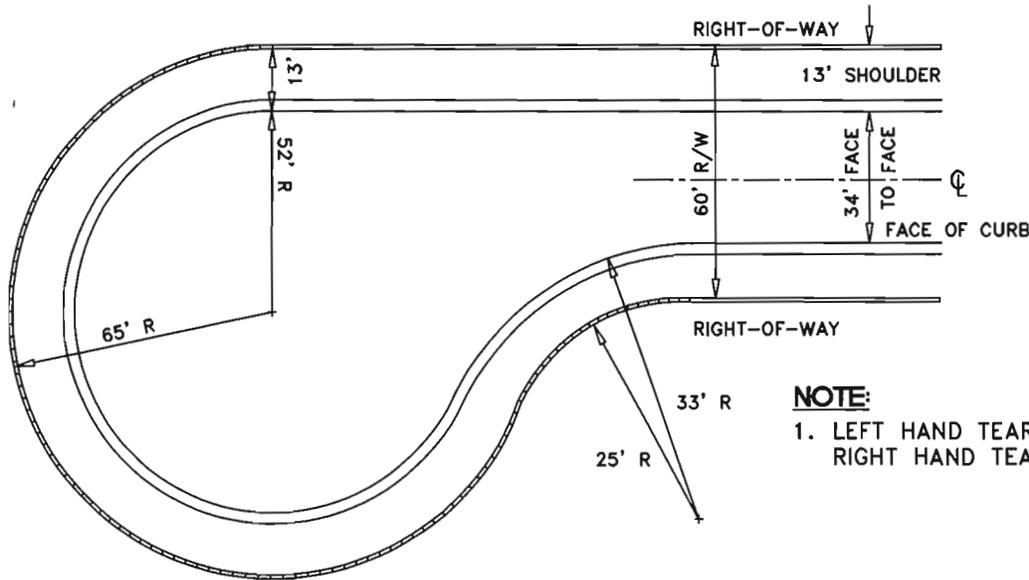
**'TEARDROP' TURN-AROUND**

**NOTE:**  
1. LEFT HAND TEARDROP SHOWN  
RIGHT HAND TEARDROP OPPOSITE

<b>TOWN OF BROOKHAVEN</b>	
SUFFOLK COUNTY	
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING	
<b>RESIDENTIAL TURN-AROUNDS 50' R.O.W.</b>	
RECOMMENDED BY: <i>[Signature]</i> ENGINEER	APPROVED BY: <i>[Signature]</i> CHAIRMAN
DATE: OCTOBER 7, 2013	SCALE: NONE
DRAFTED BY: G. CASSARA	



**'CENTERED' TURN-AROUND**



**NOTE:**

1. LEFT HAND TEARDROP SHOWN  
RIGHT HAND TEARDROP OPPOSITE

**'TEARDROP' TURN-AROUND**

**TOWN OF BROOKHAVEN**

SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

RESIDENTIAL TURN-AROUNDS 60' R.O.W.

RECOMMENDED:

*[Signature]*  
ENGINEER

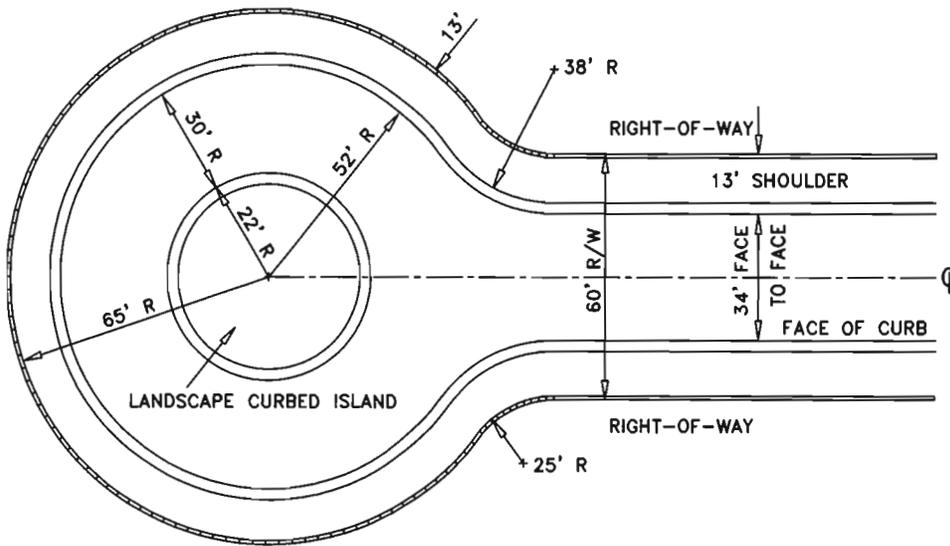
APPROVED:

*[Signature]*  
CHAIRMAN

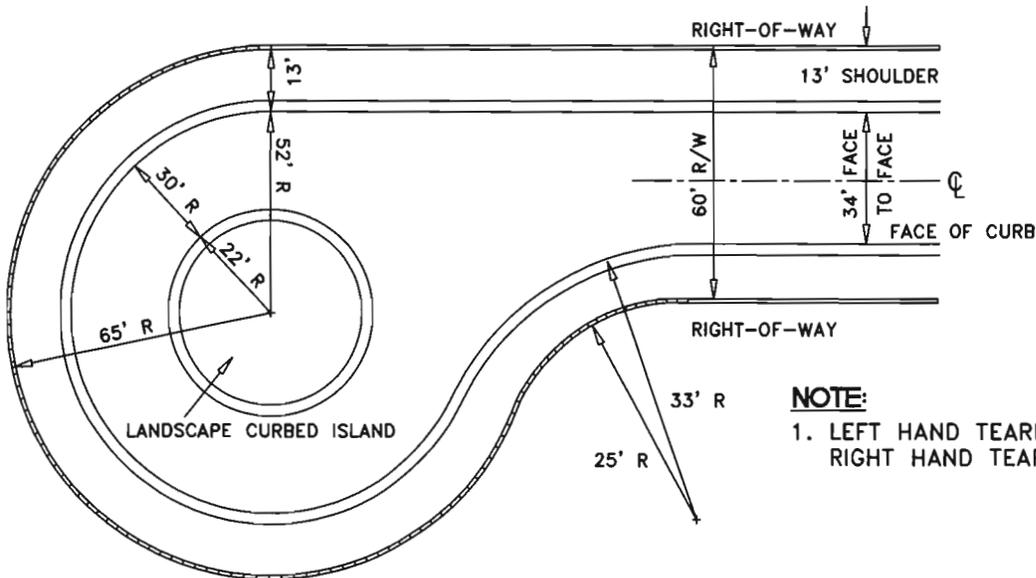
DATE: OCTOBER 7, 2013

SCALE: NONE

DRAFTED BY: G. CASSARA



**'CENTERED' TURN-AROUND**

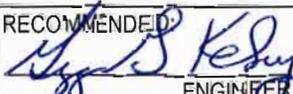
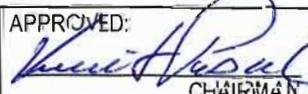


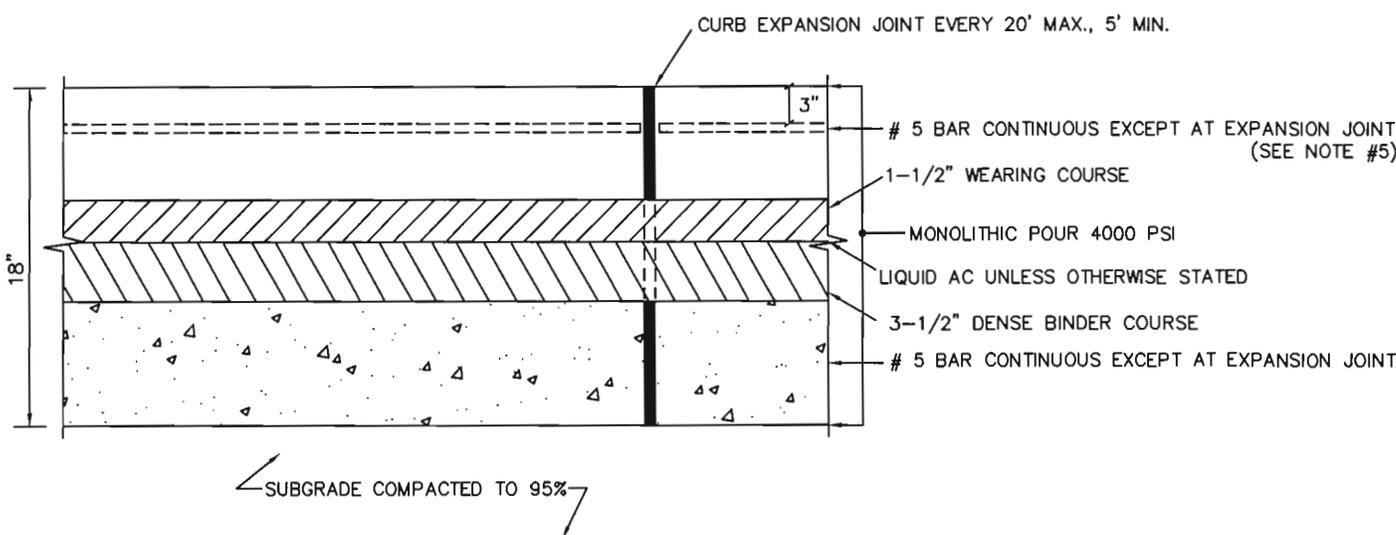
**NOTE:**  
1. LEFT HAND TEARDROP SHOWN  
RIGHT HAND TEARDROP OPPOSITE

**'TEARDROP' TURN-AROUND**

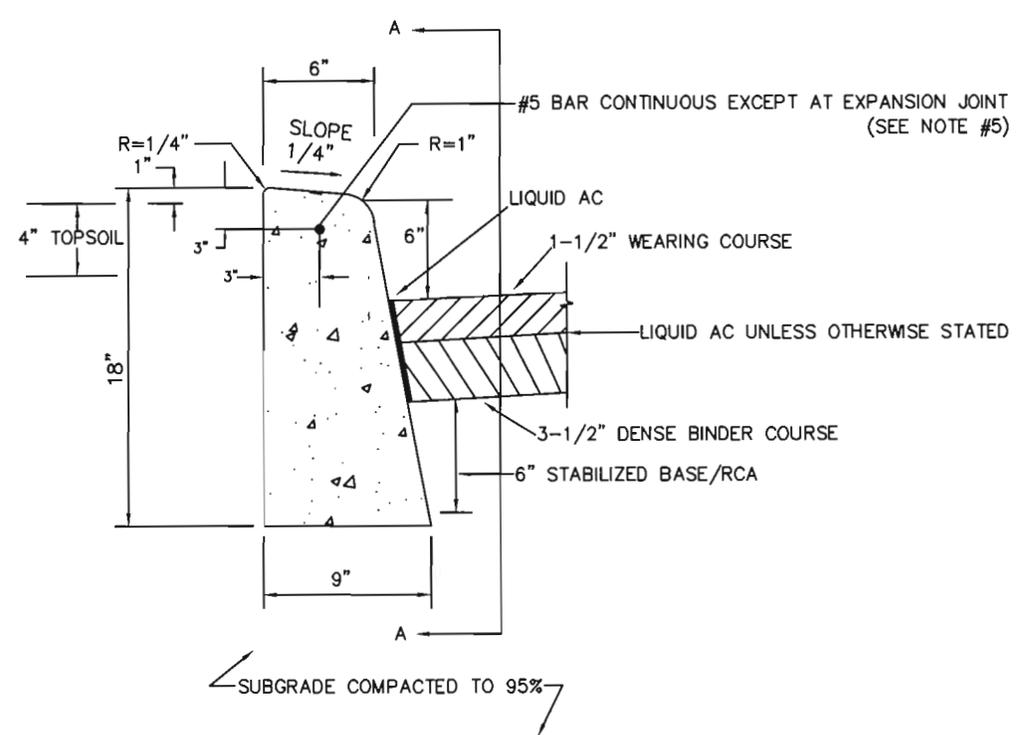
**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RESIDENTIAL TURN-AROUNDS 60' R.O.W.**

RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



**SECTION A-A**

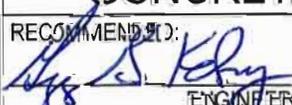
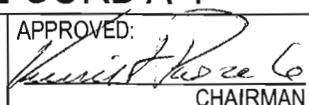


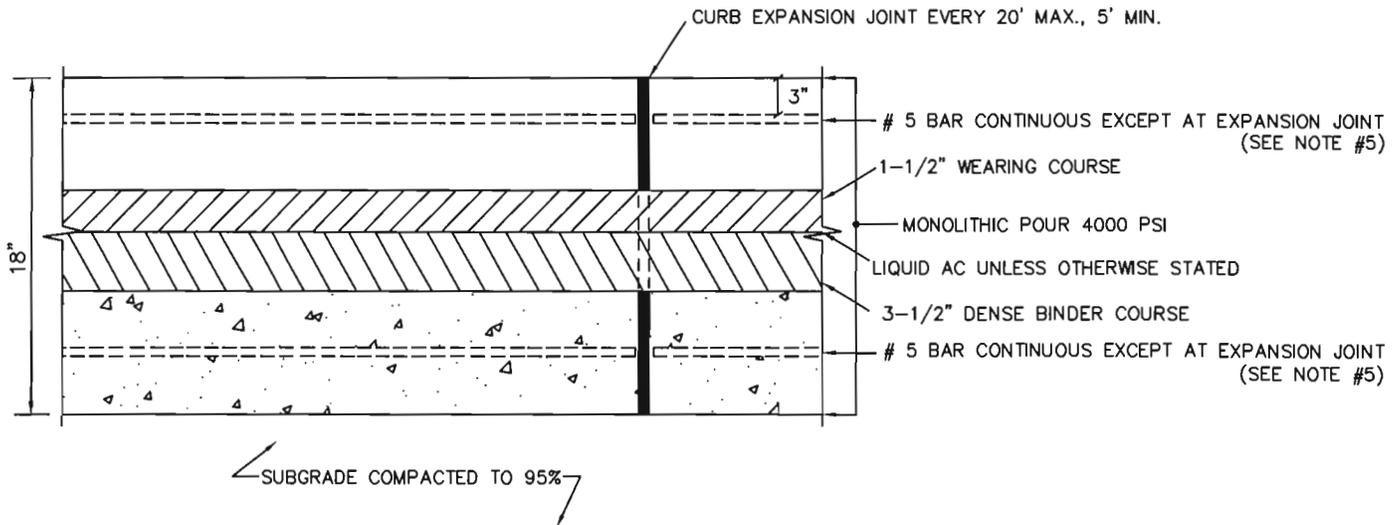
**DETAIL**  
WHEN ROADWAY IS BETWEEN 0-6% SLOPE

- NOTES:**
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ( TEST CYLINDERS STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER)
  2. CONCRETE SHALL BE A MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
  3. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
  4. EXPANSION JOINTS TO BE 5' MIN., 20' MAX..
  5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

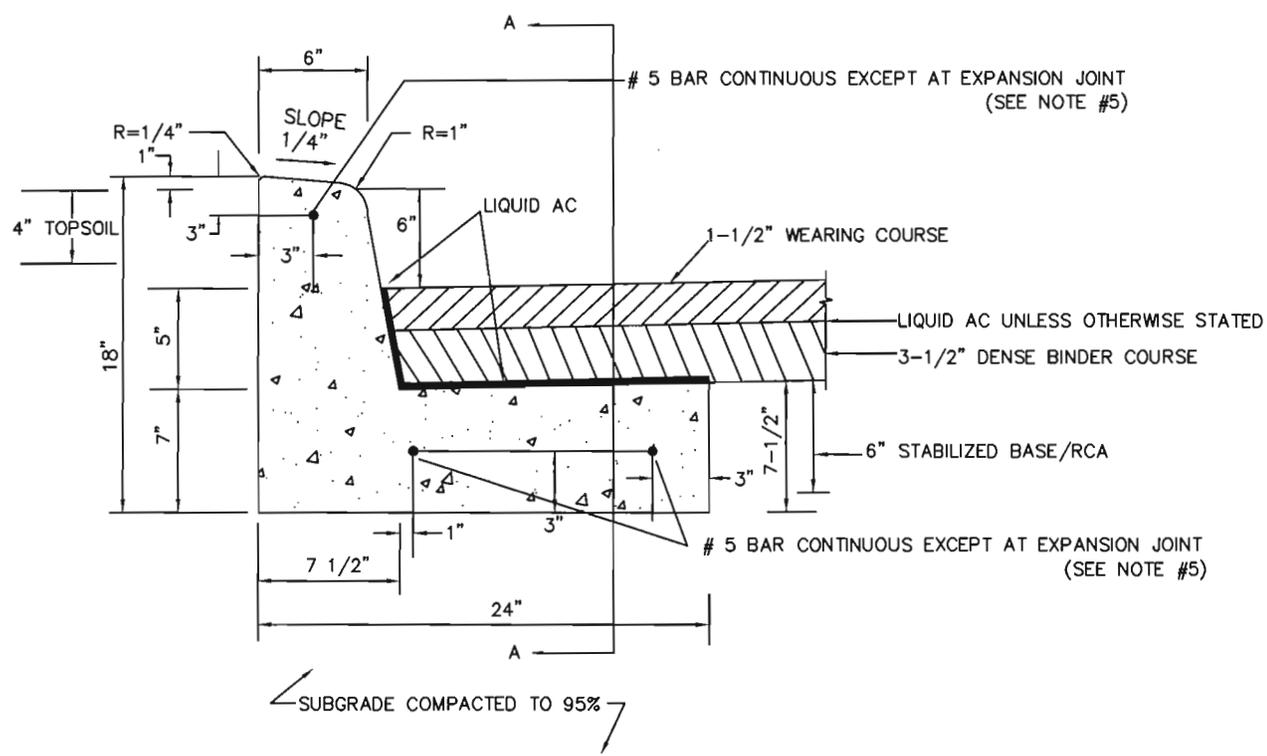
**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**CONCRETE CURB A-1**

RECOMMENDED BY:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



**SECTION A-A**

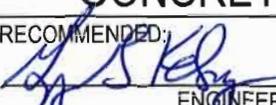
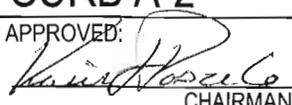


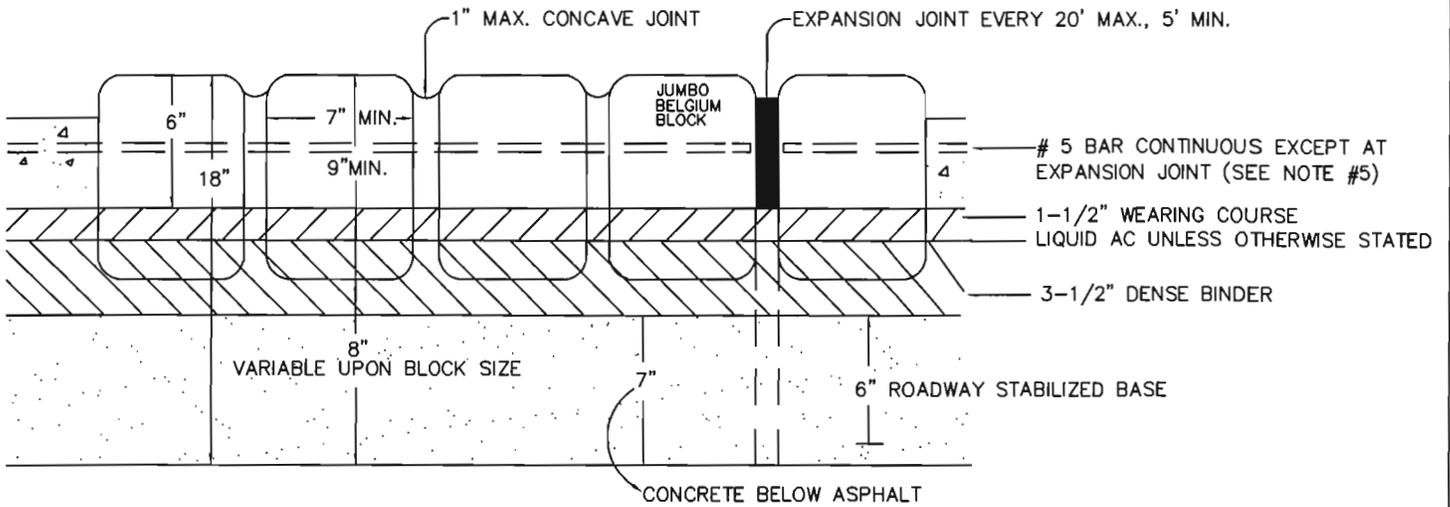
**DETAIL**  
REQUIRED WHEN ROADWAY IS GREATER THAN 6% SLOPE

- NOTES:**
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ( TEST CYLINDERS STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER)
  2. CONCRETE SHALL BE A MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
  3. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
  4. EXPANSION JOINTS TO BE 5' MIN., 20' MAX..
  5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

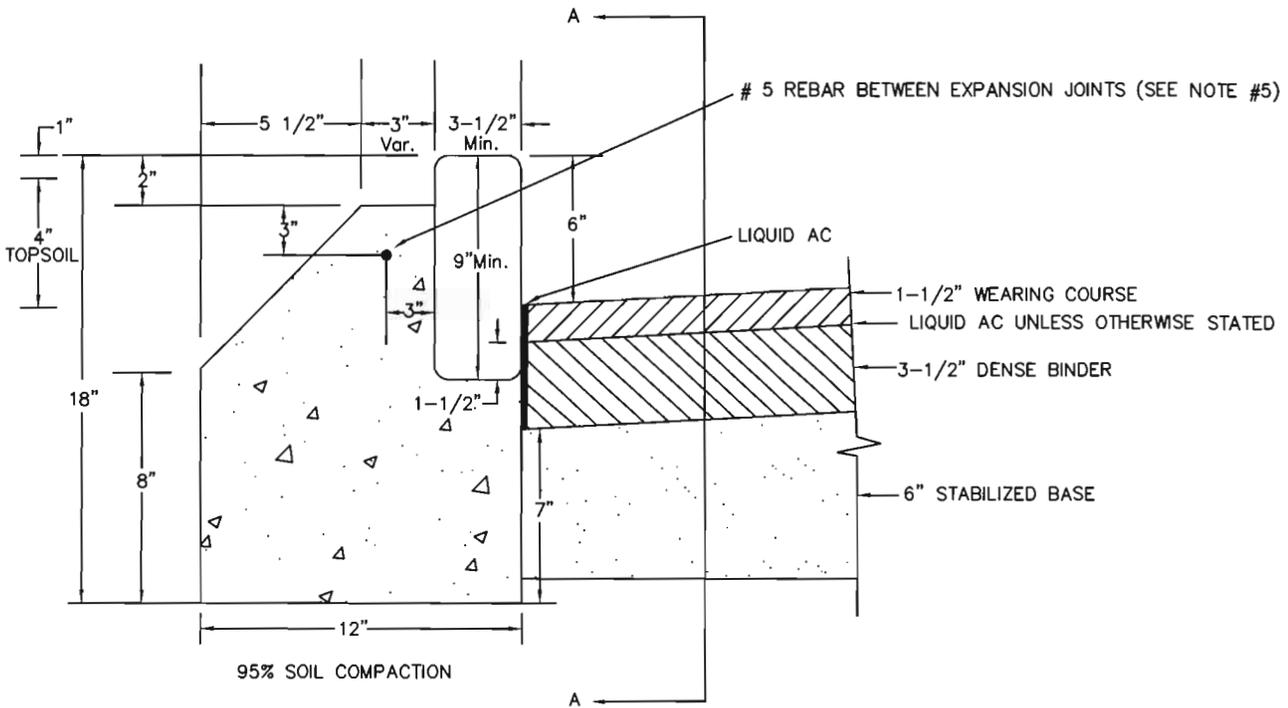
**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**CONCRETE CURB A-2**

RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



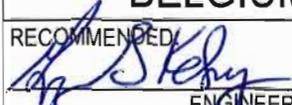
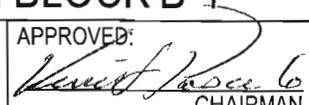
**SECTION A-A**

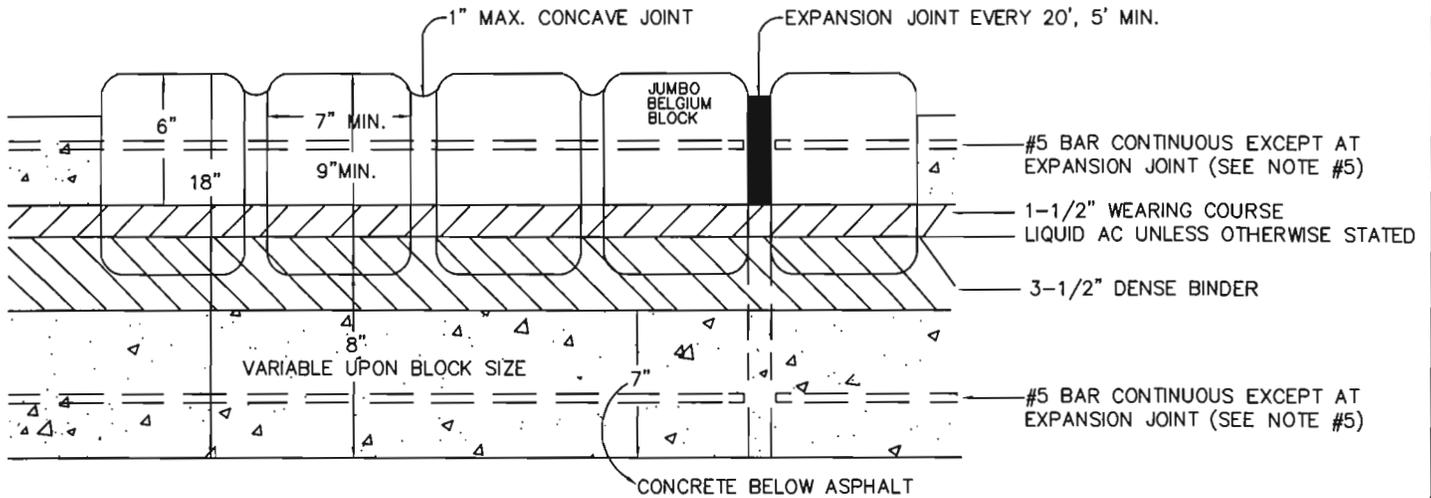


**DETAIL**

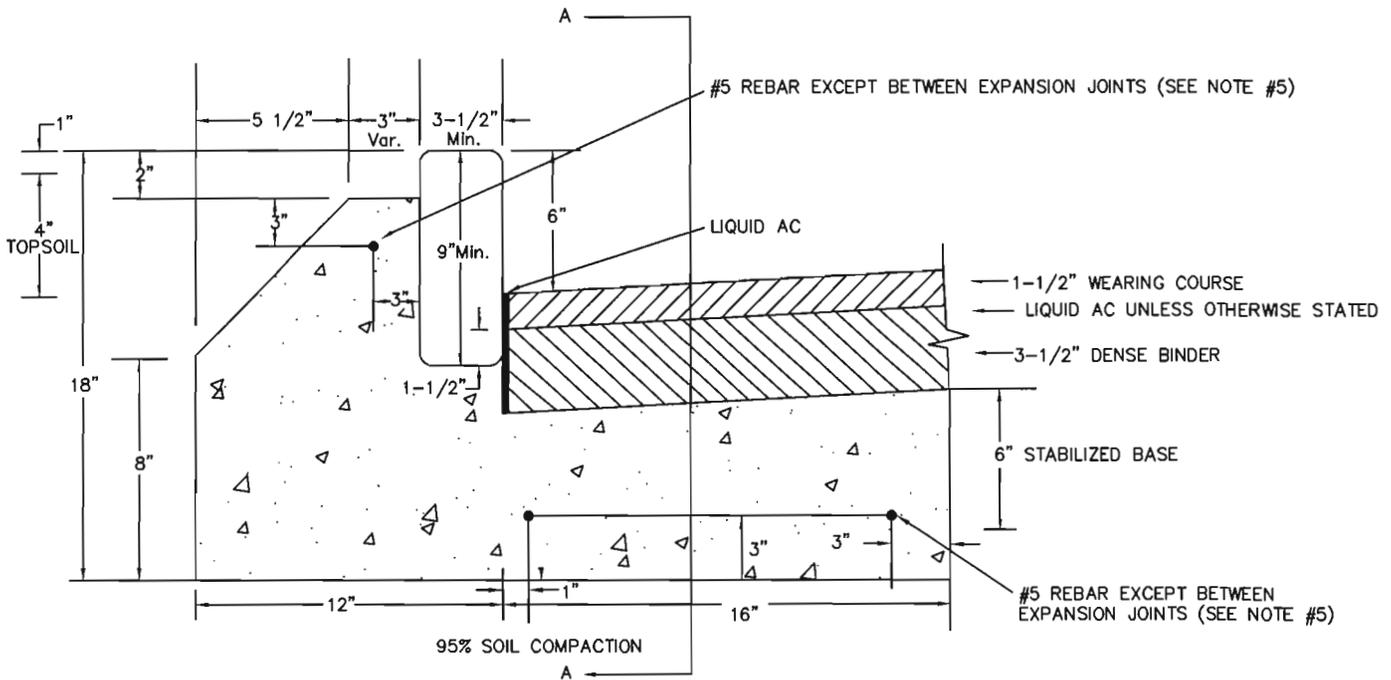
**NOTES:**

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ( TEST CYLINDERS FOR CONCRETE STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER)
2. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
3. CONCRETE MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
4. EXPANSION JOINT TO BE 5' MIN., 20' MAX.
5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

<b>TOWN OF BROOKHAVEN</b>	
SUFFOLK COUNTY	
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING	
<b>BELGIUM BLOCK B-1</b>	
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN
DATE: OCTOBER 7, 2013	SCALE: NONE
DRAFTED BY: G. CASSARA	



**SECTION A-A**



**DETAIL**

REQUIRED WHEN ROADWAY IS GREATER THAN 6% SLOPE

**NOTES:**

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ( TEST CYLINDERS FOR CONCRETE STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER)
2. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
3. CONCRETE MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
4. EXPANSION JOINT TO BE 5' MIN., 20' MAX.
5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

**TOWN OF BROOKHAVEN**

SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**BELGIUM BLOCK B-2**

RECOMMENDED:

*[Signature]*  
ENGINEER

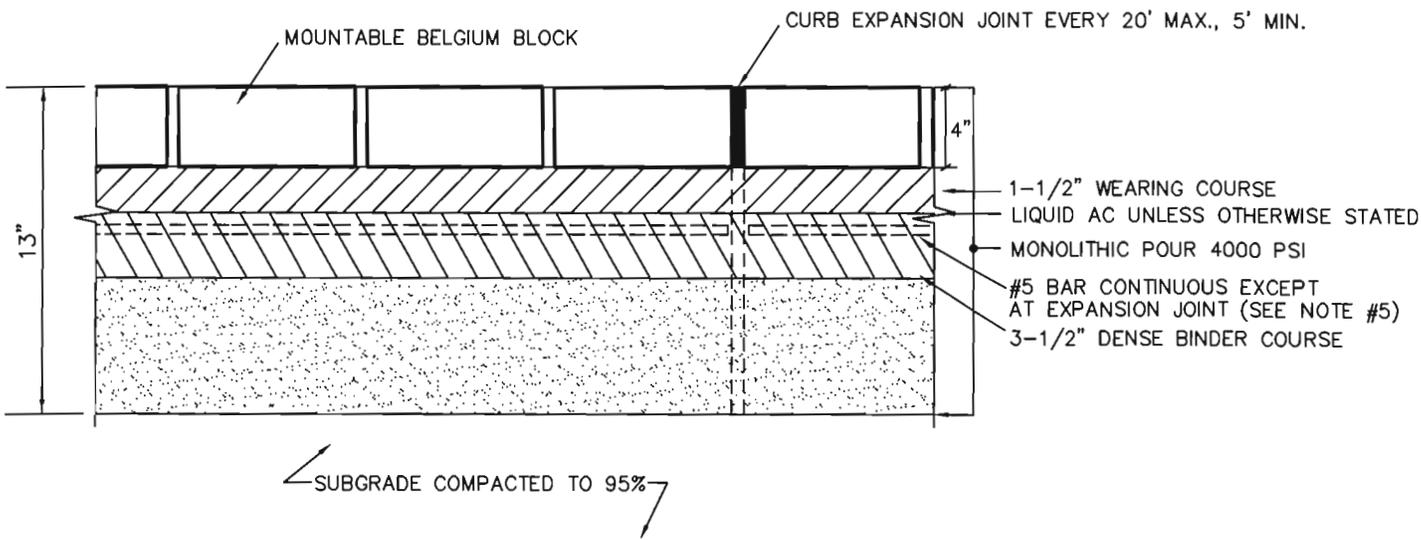
APPROVED:

*[Signature]*  
CHAIRMAN

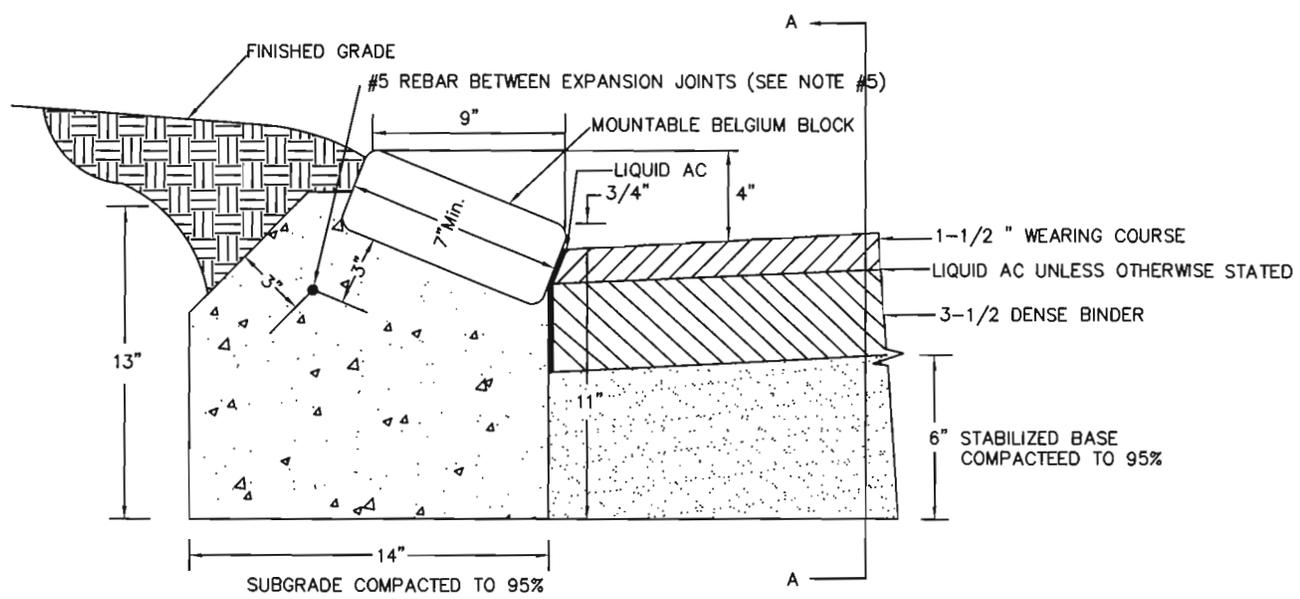
DATE: OCTOBER 7, 2013

SCALE: NONE

DRAFTED BY: G. CASSARA



SECTION A-A



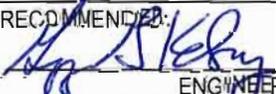
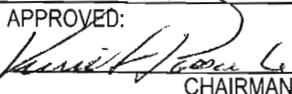
DETAIL

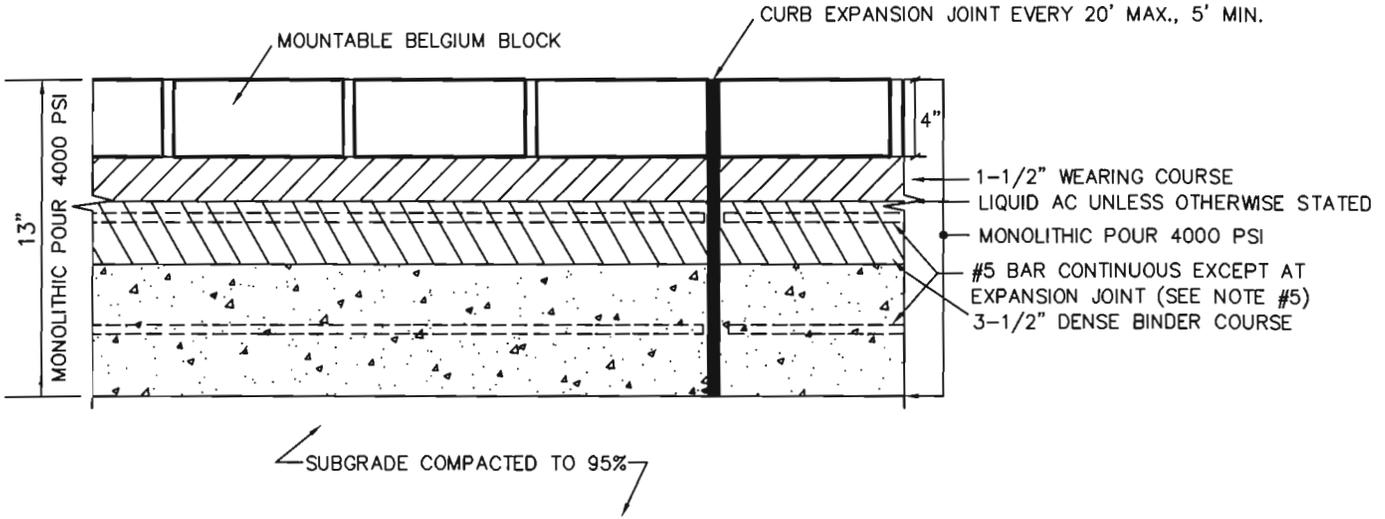
- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS. ( TEST CYLINDERS FOR CONCRETE STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER )
  2. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
  3. MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
  4. EXPANSION JOINTS TO BE 5' MIN., 20' MAX.
  5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

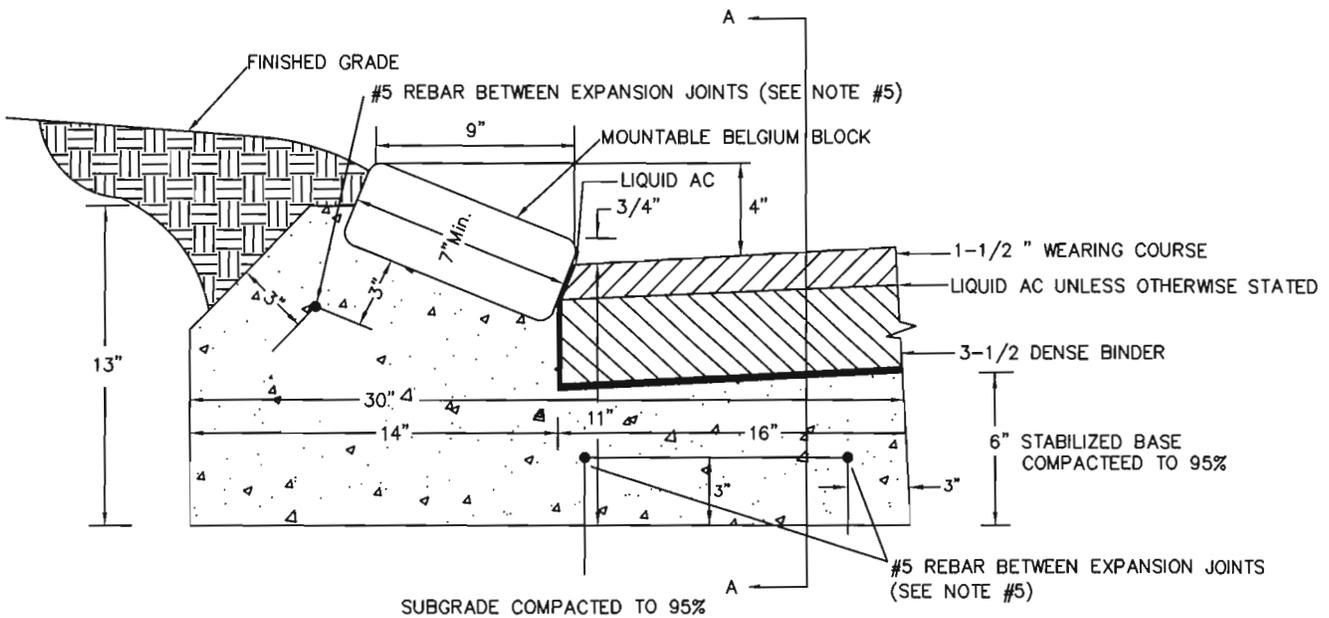
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**BELGIUM BLOCK MB-1**

RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



**SECTION A-A**

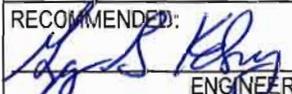
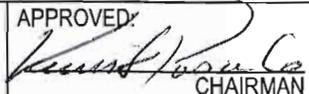


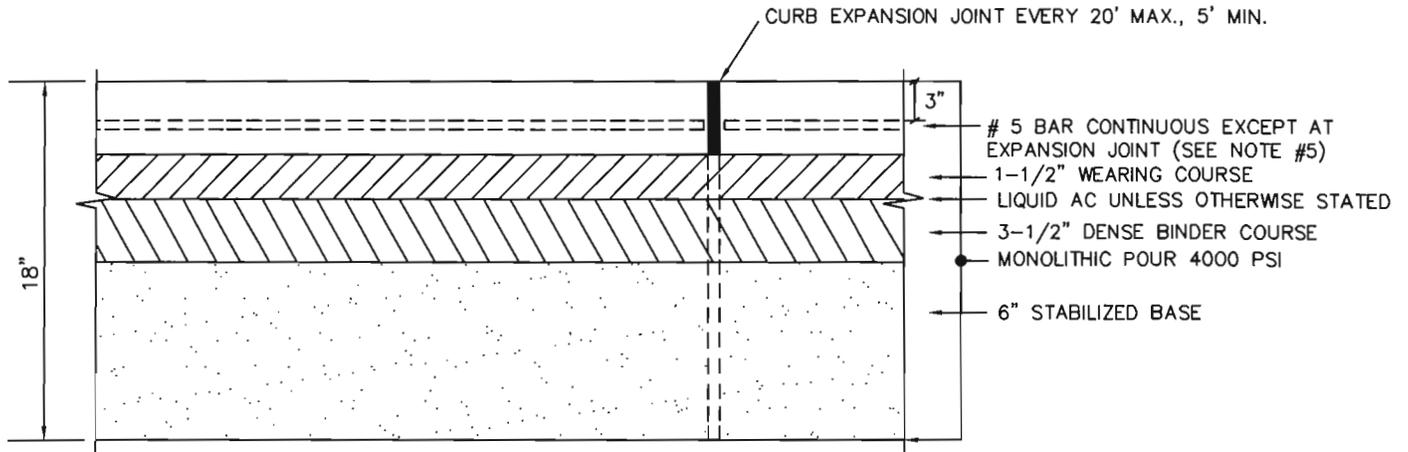
**DETAIL**

REQUIRED WHEN ROADWAY IS GREATER THAN 6% SLOPE

**NOTES:**

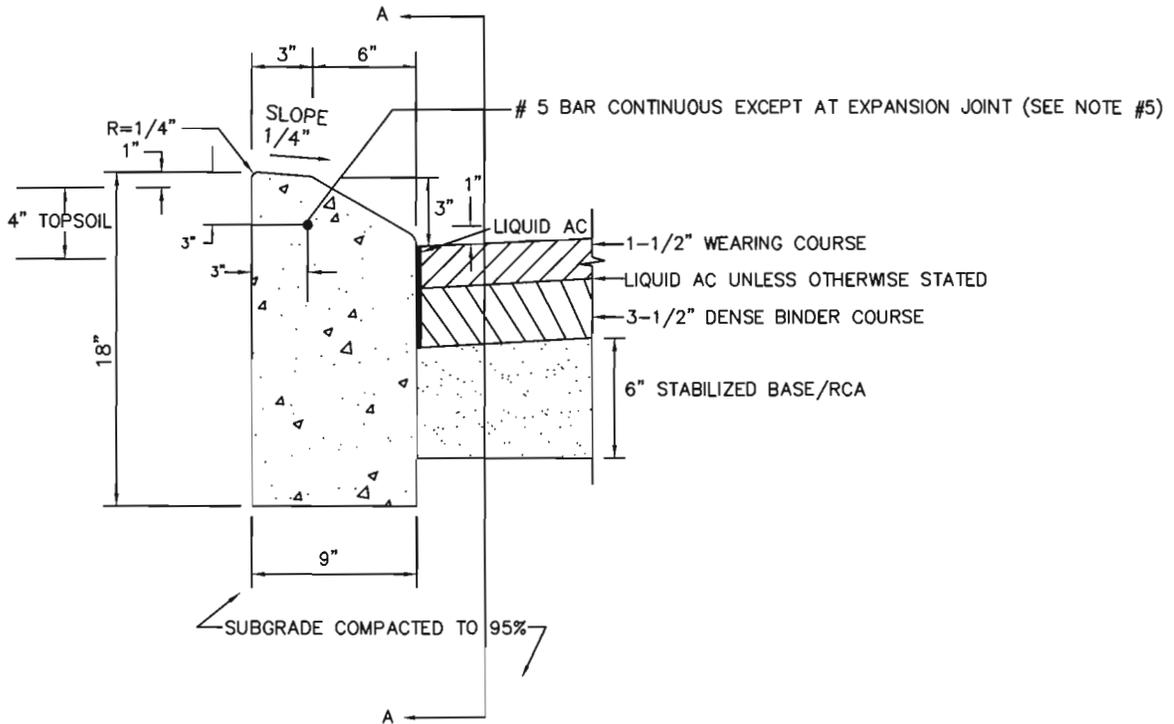
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS. ( TEST CYLINDERS FOR CONCRETE STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER )
2. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
3. MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
4. EXPANSION JOINTS TO BE 5' MIN., 20' MAX.
5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>BELGIUM BLOCK MB-2</b>		
RECOMMENDED:	APPROVED:	
 ENGINEER	 CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



← SUBGRADE COMPACTED TO 95% →

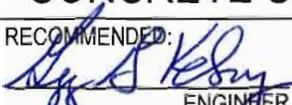
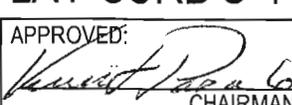
**SECTION A-A**

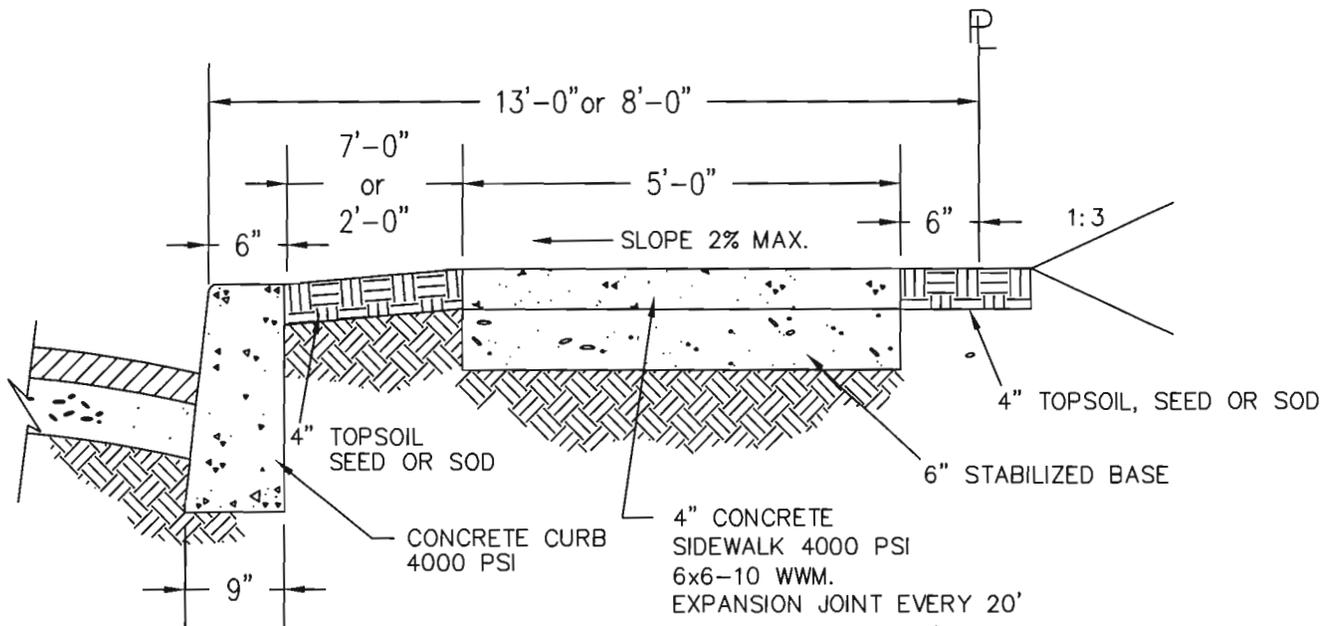


**DETAIL**  
WHEN ROADWAY IS BETWEEN 0-6% SLOPE

**NOTES:**

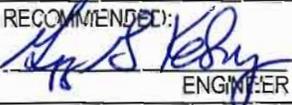
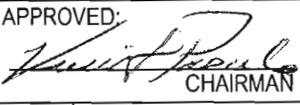
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. ( TEST CYLINDERS FOR CONCRETE STRENGTH MAY BE REQUIRED, AS REQUESTED BY INSPECTOR OR TOWN ENGINEER )
2. CONCRETE TO CURE 14 DAYS MIN. BEFORE ROADWAY PAVING CAN BEGIN.
3. CONCRETE SHALL BE A MONOLITHIC POUR, MUST USE FORMS FRONT AND REAR.
4. EXPANSION JOINTS TO BE A 5' MIN., 20' MAX.
5. REBAR IS OPTIONAL, EXCEPT IS REQUIRED IN INDUSTRIAL & COMMERCIAL ROADWAYS.

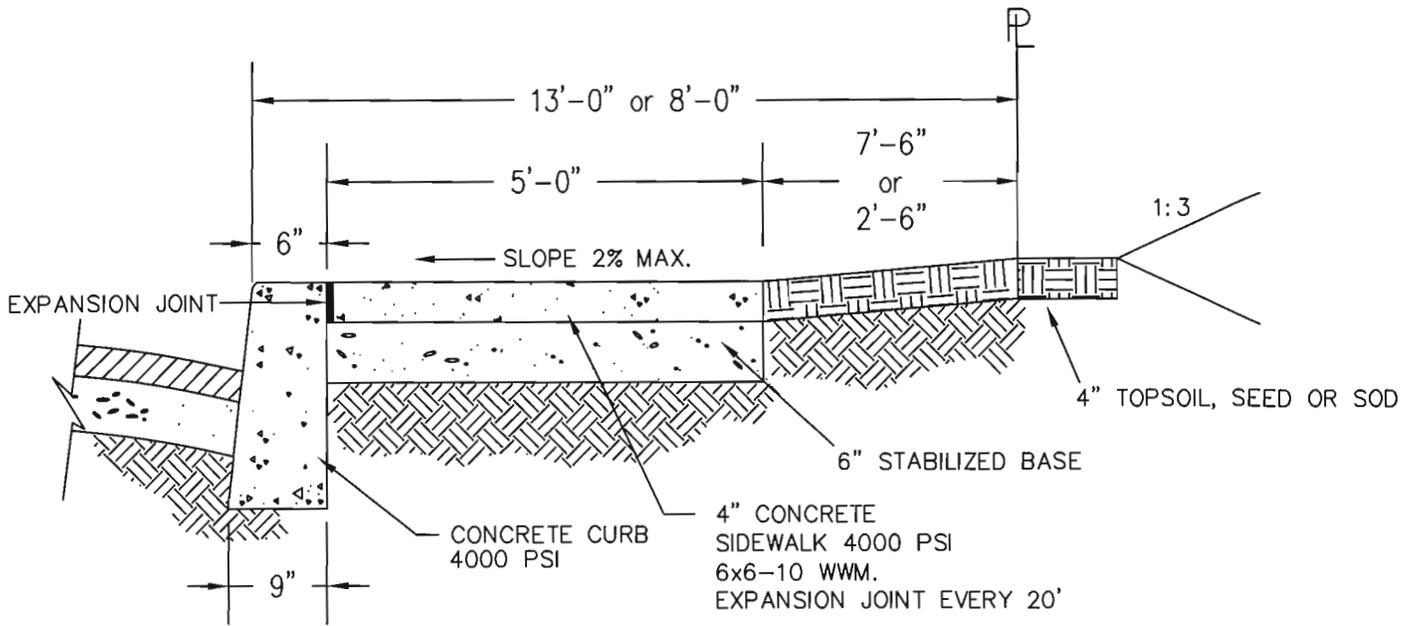
<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>CONCRETE SPLAY CURB S-1</b>		
RECOMMENDED:	APPROVED:	
 ENGINEER	 CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



**NOTES:**

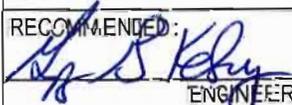
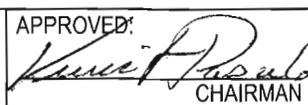
1. CONCRETE SIDEWALK SHALL BE A MONOLITHIC POUR AND HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
2. WHERE SIDEWALKS CROSS DRIVEWAYS OR FOR CURB CUTS, THE CONCRETE SHALL BE SIX (6") IN DEPTH WITH WIRE, 6"x6"-10 WWM.

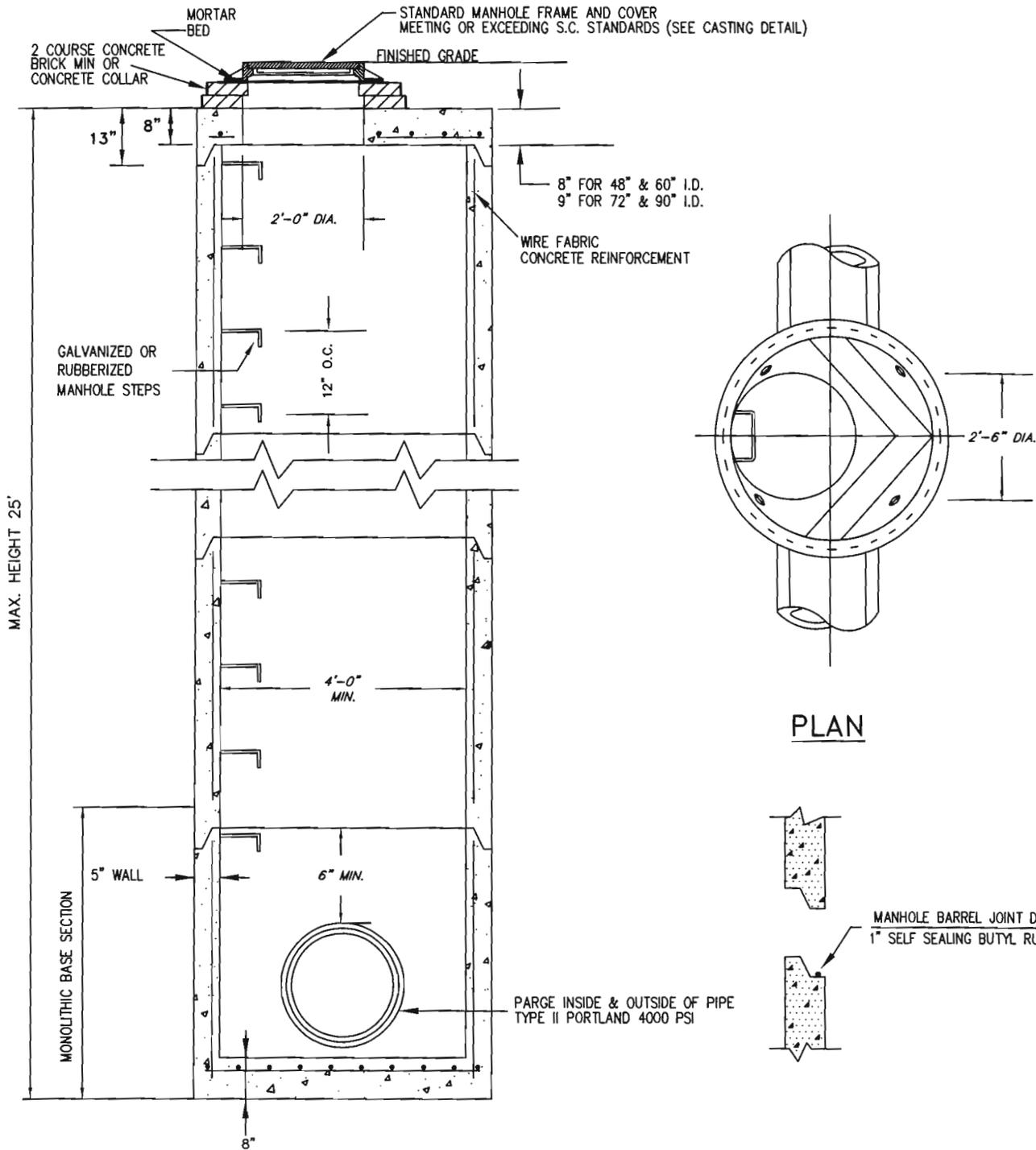
<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>CONCRETE SIDEWALK STANDARD OPTION 1</b>		
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



**NOTES:**

1. CONCRETE SIDEWALK SHALL BE A MONOLITHIC POUR AND HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
2. WHERE SIDEWALKS CROSS DRIVEWAYS OR FOR CURB CUTS, THE CONCRETE SHALL BE SIX (6") IN DEPTH WITH WIRE, 6"x6"-10 WWM.

<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>CONCRETE SIDEWALK STANDARD OPTION 2</b>		
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA

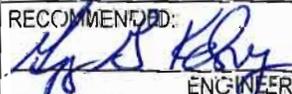
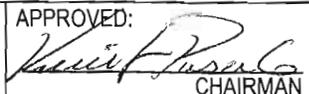


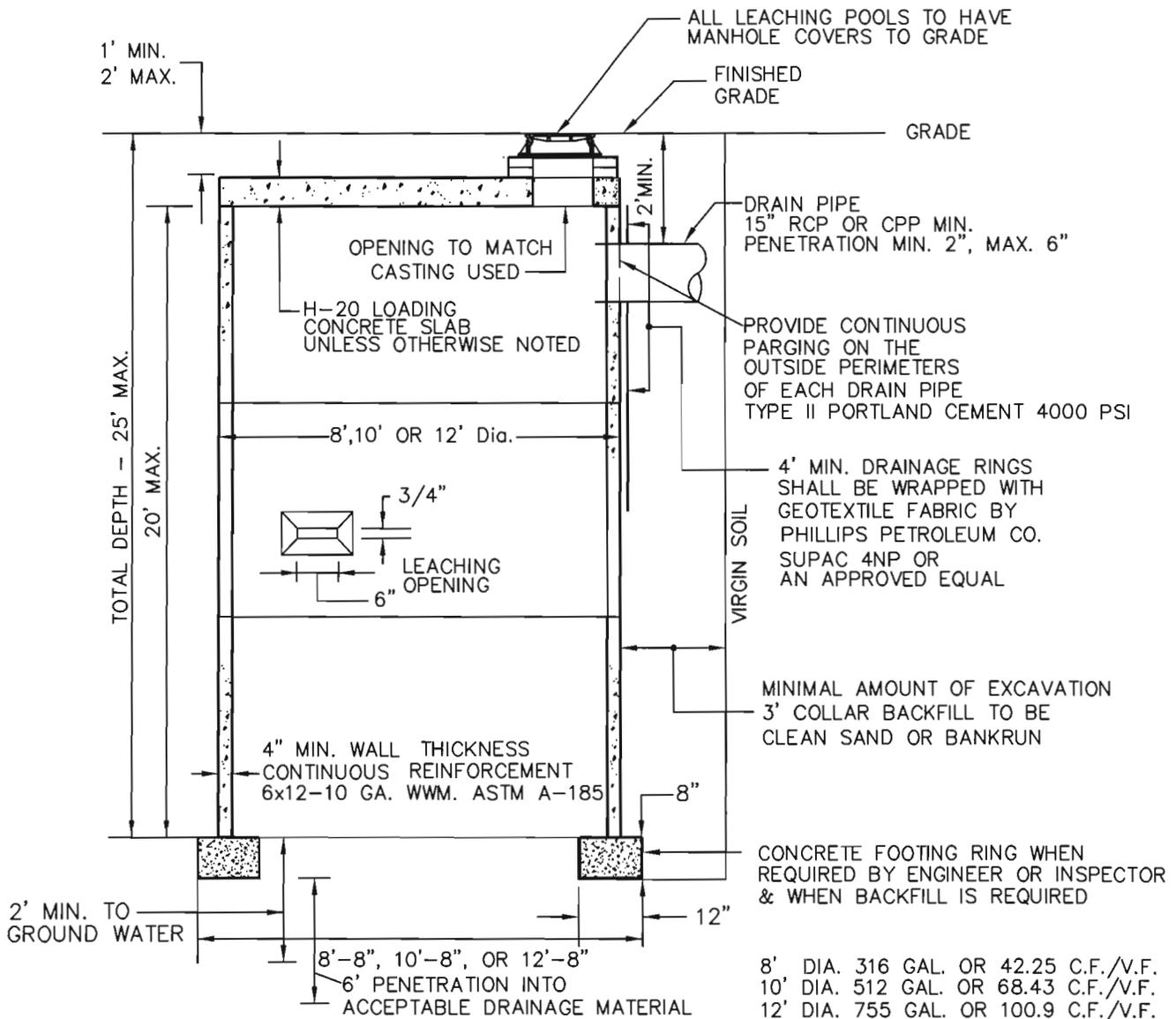
**SECTION**

**PLAN**

**NOTES:**

1. MANHOLE TO SUPPORT AASHTO H-20 TRAFFIC LOADING.
2. CONCRETE 4000 PSI @ 28 DAYS.
3. WELDED WIRE MESH ASTM A185.
4. REBAR ASTM A615 GRADE 60.
5. JOINT SEALANT TO BE 1" BUTYL RUBBER MEETING THE REQUIREMENTS OF FEDERAL SPECIFICATION SS-S-210A AND AASHTO M-198
6. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
7. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.

<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>DRAINAGE MANHOLE 4' DIA.-10'-0" DIA.</b>		
RECOMMENDED:	APPROVED:	
 ENGINEER	 CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



**NOTES:**

1. MAINTAIN 20' SETBACK FROM SANITARY LEACHING POOL.
2. MAINTAIN 10' SETBACK FROM SANITARY SEWER PIPE.
3. MAINTAIN SCDPW SETBACK REQUIREMENTS FROM ALL UTILITIES.
4. MAINTAIN 10' SETBACK FROM BUILDING FOUNDATION.
5. SANITARY RINGS MAY NOT TO BE USED.
6. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
7. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI CONCRETE PRIOR TO INSTALLATION.
8. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.

DIA.	HEIGHT	DRAIN OPENINGS	
		TOTAL	SIZE
8'	2'-0"	60	3/4X6"
8'	3'-0"	103	3/4X6"
8'	3'-6"	132	3/4X6"
8'	4'-0"	156	3/4X6"
8'	4'-6"	180	3/4X6"
10'	3'-0"	90	3/4X6"
10'	4'-0"	120	3/4X6"
10'	5'-0"	150	3/4X6"
12'	3'-0"	72	1/2X6"
12'	4'-0"	108	1/2X6"
12'	5'-0"	144	1/2X6"

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**DRAINAGE LEACHING POOL**

RECOMMENDED:

*[Signature]*  
ENGINEER

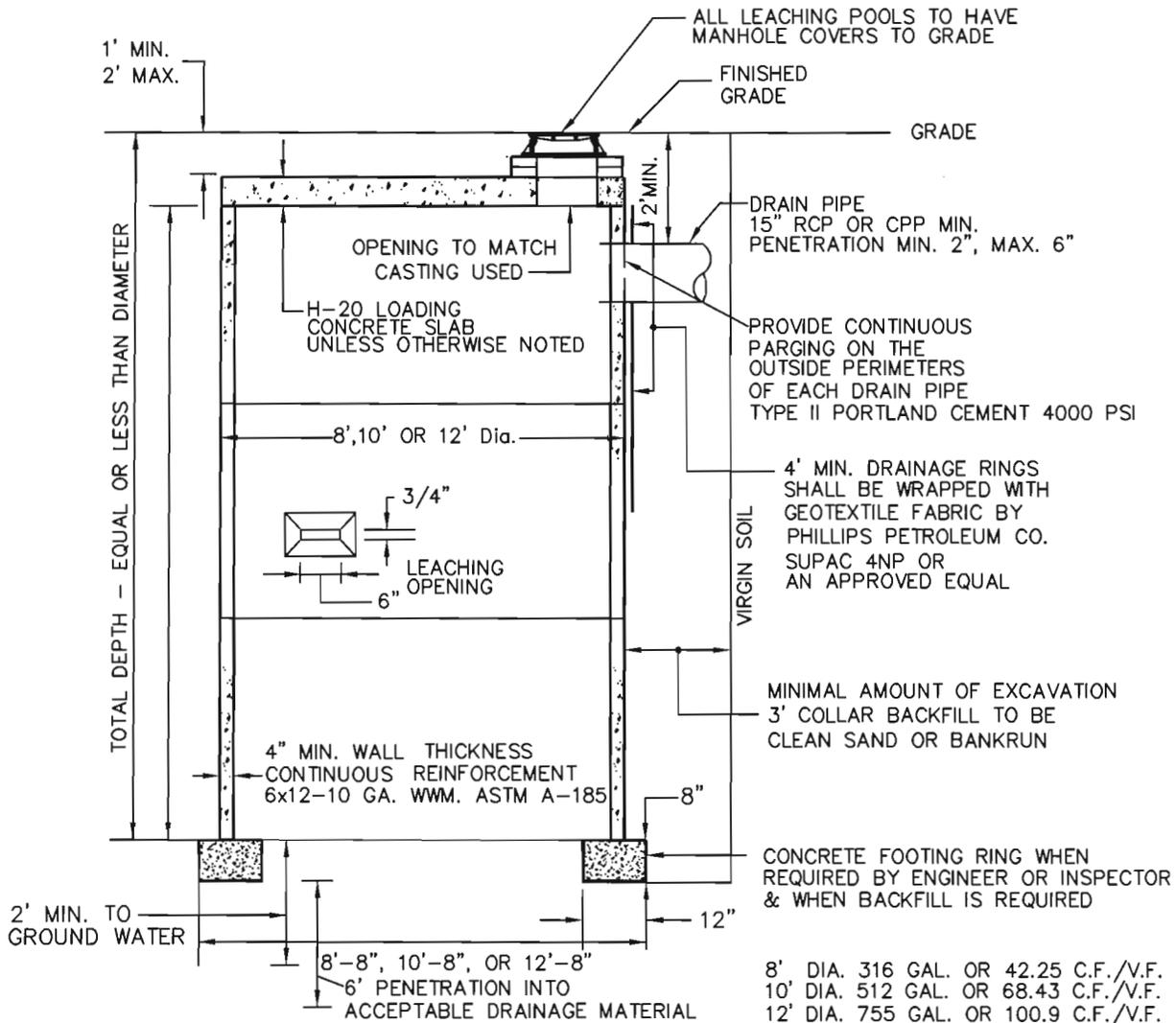
APPROVED:

*[Signature]*  
CHAIRMAN

DATE: OCTOBER 7, 2013

SCALE: NONE

DRAFTED BY: G. CASSARA



**NOTES:**

1. MAINTAIN 20' SETBACK FROM SANITARY LEACHING POOL.
2. MAINTAIN 10' SETBACK FROM SANITARY SEWER PIPE.
3. MAINTAIN SCDPW SETBACK REQUIREMENTS FROM ALL UTILITIES.
4. MAINTAIN 10' SETBACK FROM BUILDING FOUNDATION.
5. SANITARY RINGS MAY NOT TO BE USED.
6. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
7. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI CONCRETE PRIOR TO INSTALLATION.
8. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.
9. DEPTH OF THE STRUCTURE SHALL NOT EXCEED THE DIAMETER OF THE STRUCTURE.
10. FOR USE ON INDUSTRIAL SITES TO ELIMINATE THE NEED TO REGISTER WITH EPA .

DIA.	HEIGHT	DRAIN OPENINGS	
		TOTAL	SIZE
8'	2'-0"	60	3/4X6"
8'	3'-0"	103	3/4X6"
8'	3'-6"	132	3/4X6"
8'	4'-0"	156	3/4X6"
8'	4'-6"	180	3/4X6"
10'	3'-0"	90	3/4X6"
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10'	5'-0"	150	3/4X6"
12'	3'-0"	72	1/2X6"
12'	4'-0"	108	1/2X6"
12'	5'-0"	144	1/2X6"

**TOWN OF BROOKHAVEN**

SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**DRAINAGE LEACHING POOL - EPA**

RECOMMENDED:

*[Signature]*  
ENGINEER

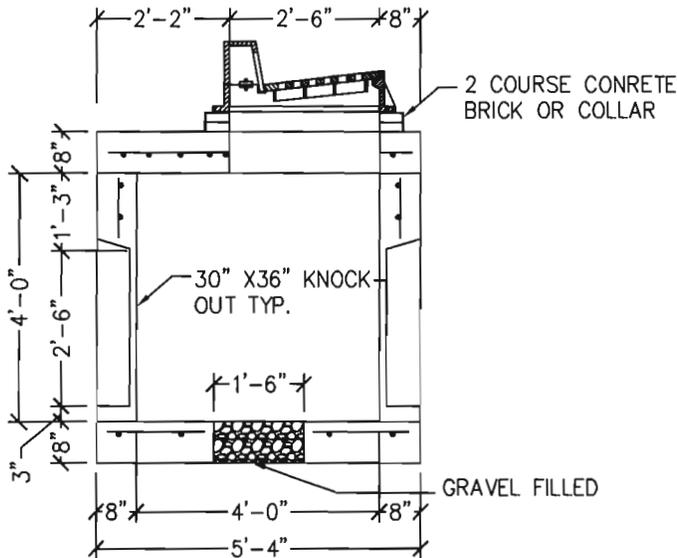
APPROVED:

*[Signature]*  
CHAIRMAN

DATE: OCTOBER 7, 2013

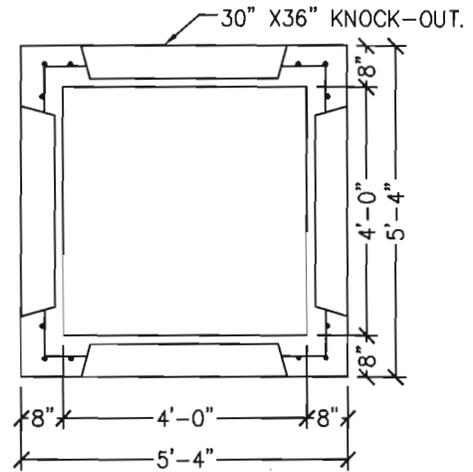
SCALE: NONE

DRAFTED BY: G. CASSARA

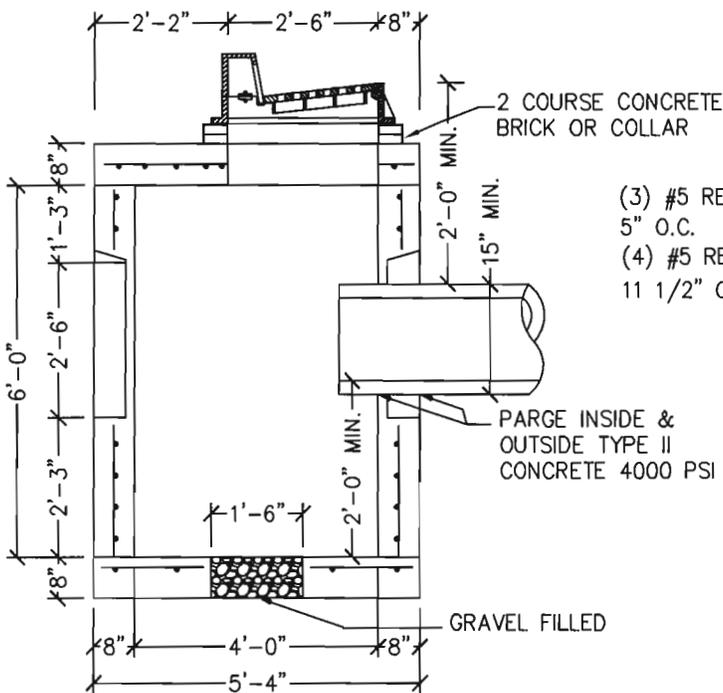


SECTION

4'-0" x 4'-0" x 4'-0"  
HIGH STANDARD CATCH BASIN



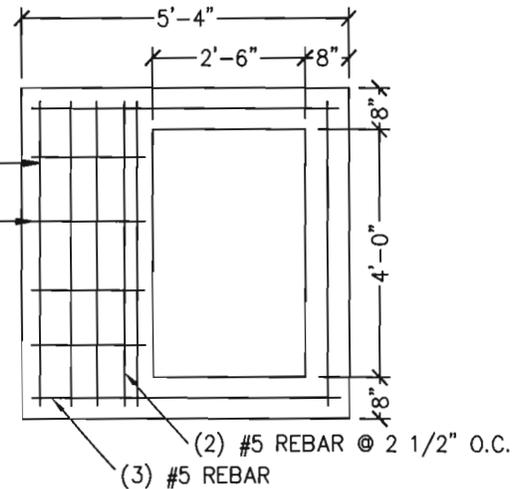
PLAN



SECTION

4'-0" x 4'-0" x 6'-0"  
HIGH KNOCK-OUT CATCH BASIN

(3) #5 REBAR @  
5" O.C.  
(4) #5 REBAR @  
11 1/2" O.C.



PLAN - TOP SLAB - H-20 LOADING

NOTES:

1. TOP SLAB TO SUPPORT AASHTO H-20 TRAFFIC LOADING.
2. CONCRETE STRENGTH TO BE 4000 PSI @ 28 DAYS.
3. WELDED WIRE MESH ASTM A185.
4. REBAR ASTM A615 GRADE 60.
5. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
6. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.

TOWN OF BROOKHAVEN  
SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

CATCH BASIN STANDARD

RECOMMENDED:

*[Signature]*  
ENGINEER

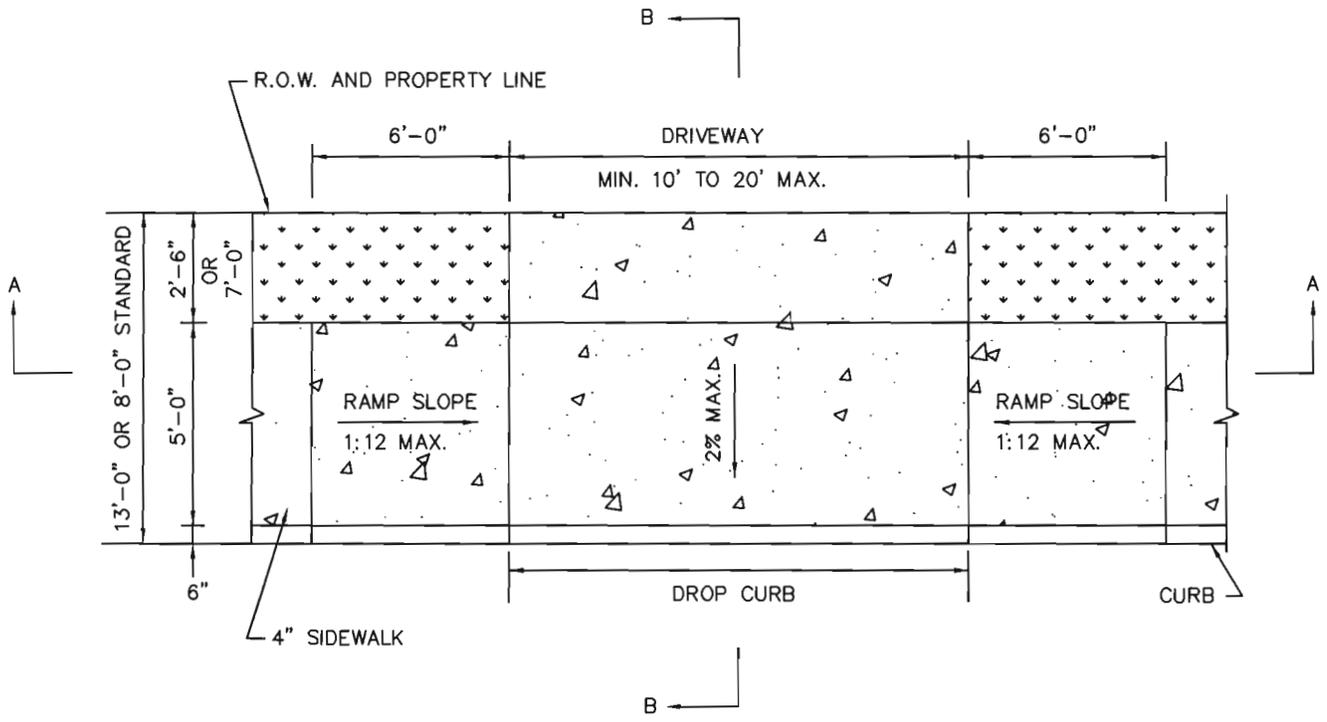
APPROVED:

*[Signature]*  
CHAIRMAN

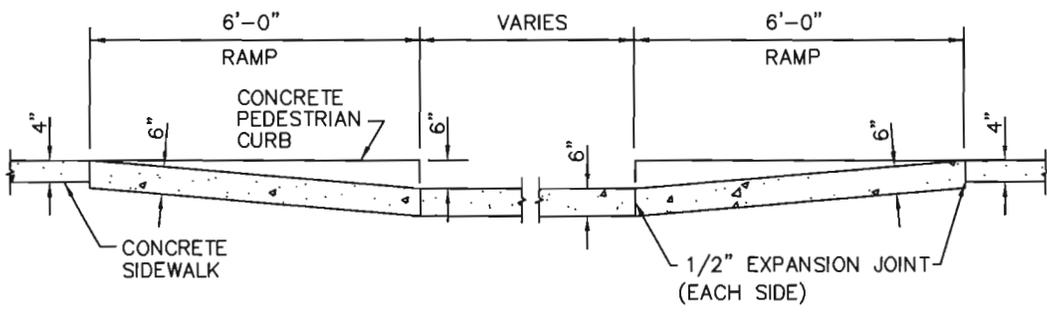
DATE: OCTOBER 7, 2013

SCALE: NONE

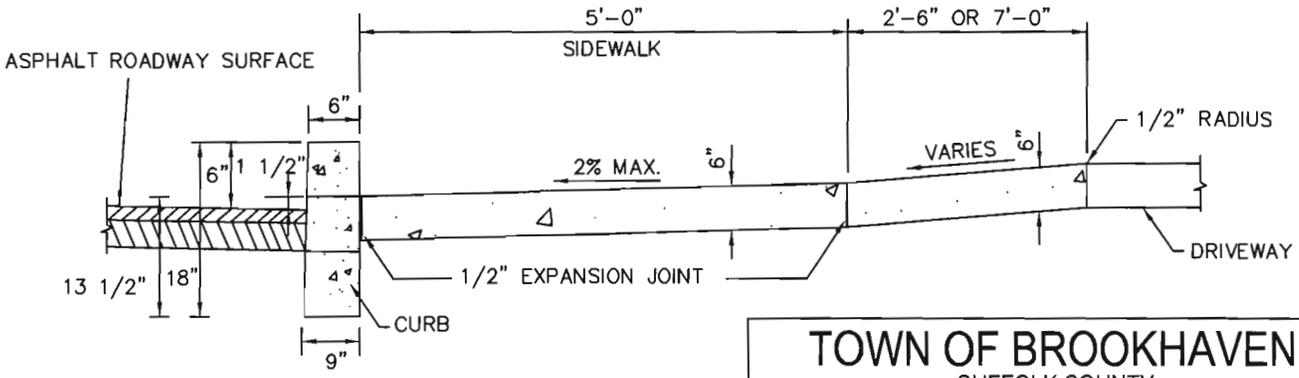
DRAFTED BY: G. CASSARA



PLAN



SECTION A-A



SECTION B-B

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

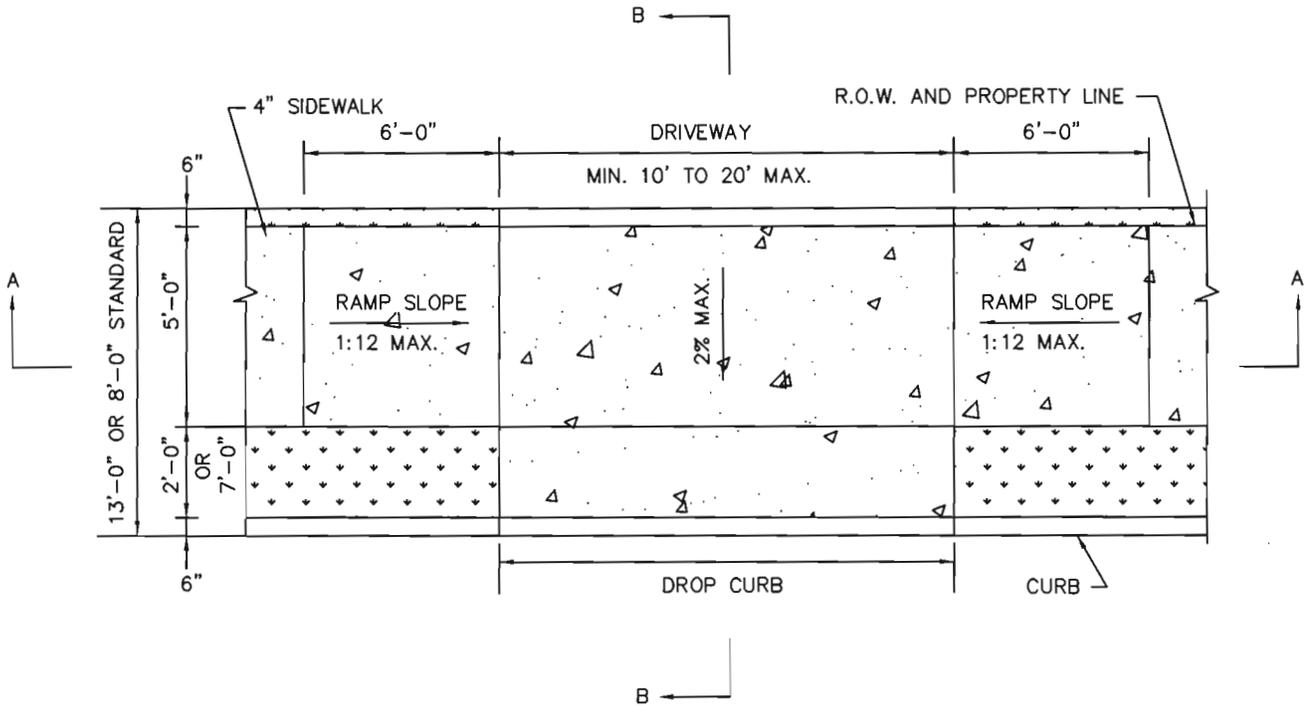
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RESIDENTIAL APRON TYPE 1**

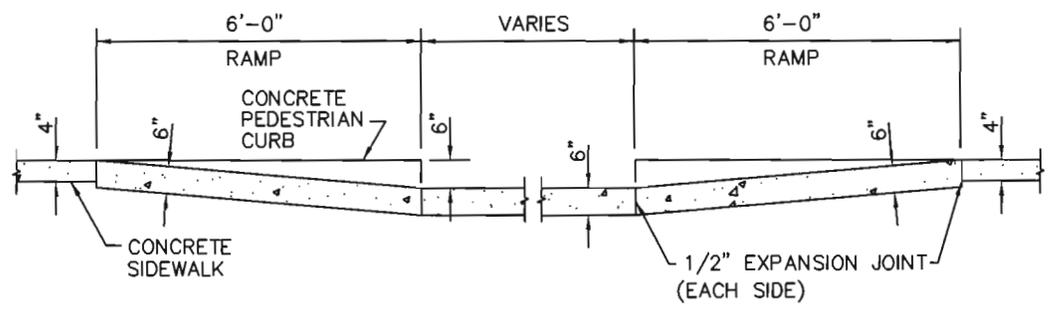
RECOMMENDED: *[Signature]*  
ENGINEER

APPROVED: *[Signature]*  
CHAIRMAN

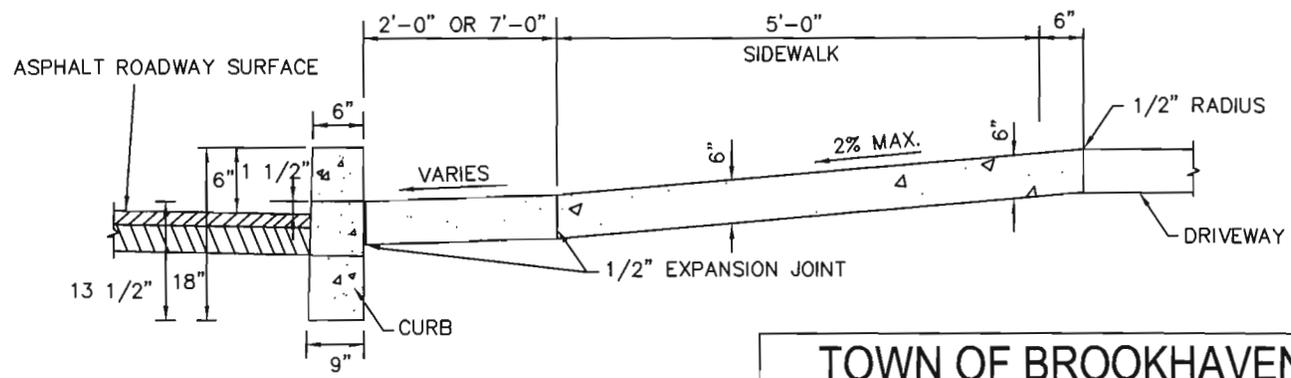
DATE: OCTOBER 7, 2013    SCALE: NONE    DRAFTED BY: G. CASSARA



PLAN



SECTION A-A

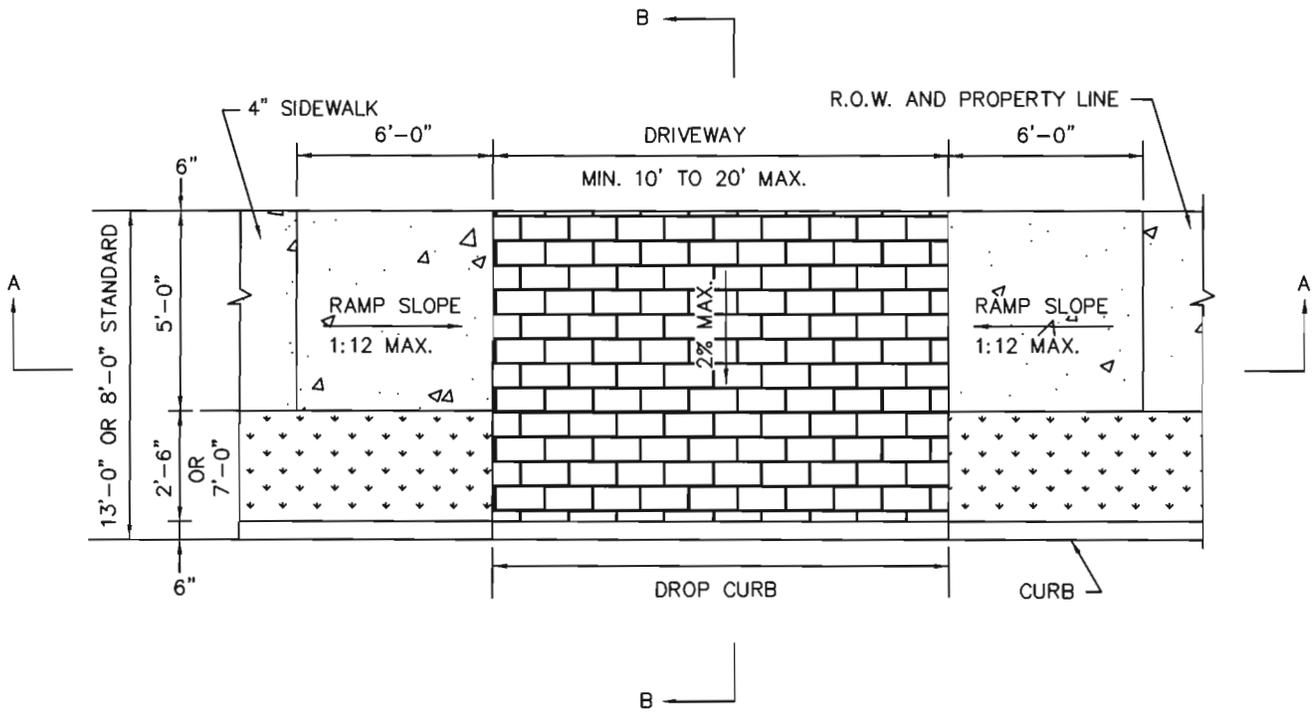


SECTION B-B

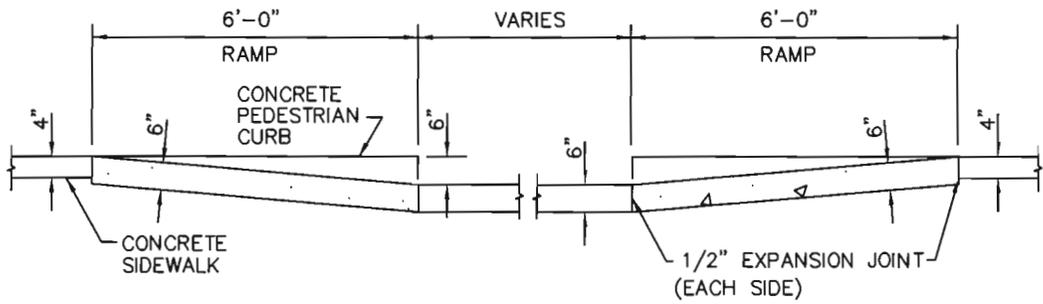
**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RESIDENTIAL APRON TYPE 2**

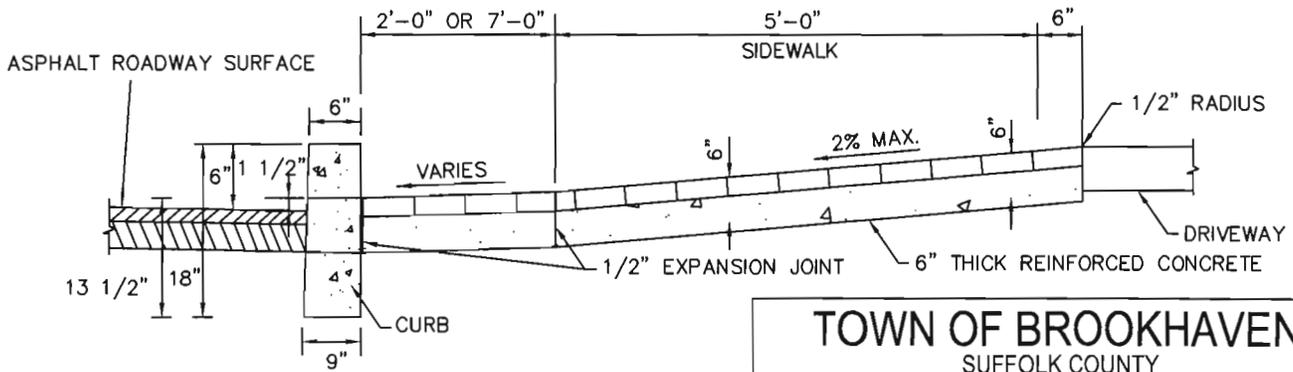
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



PLAN



SECTION A-A



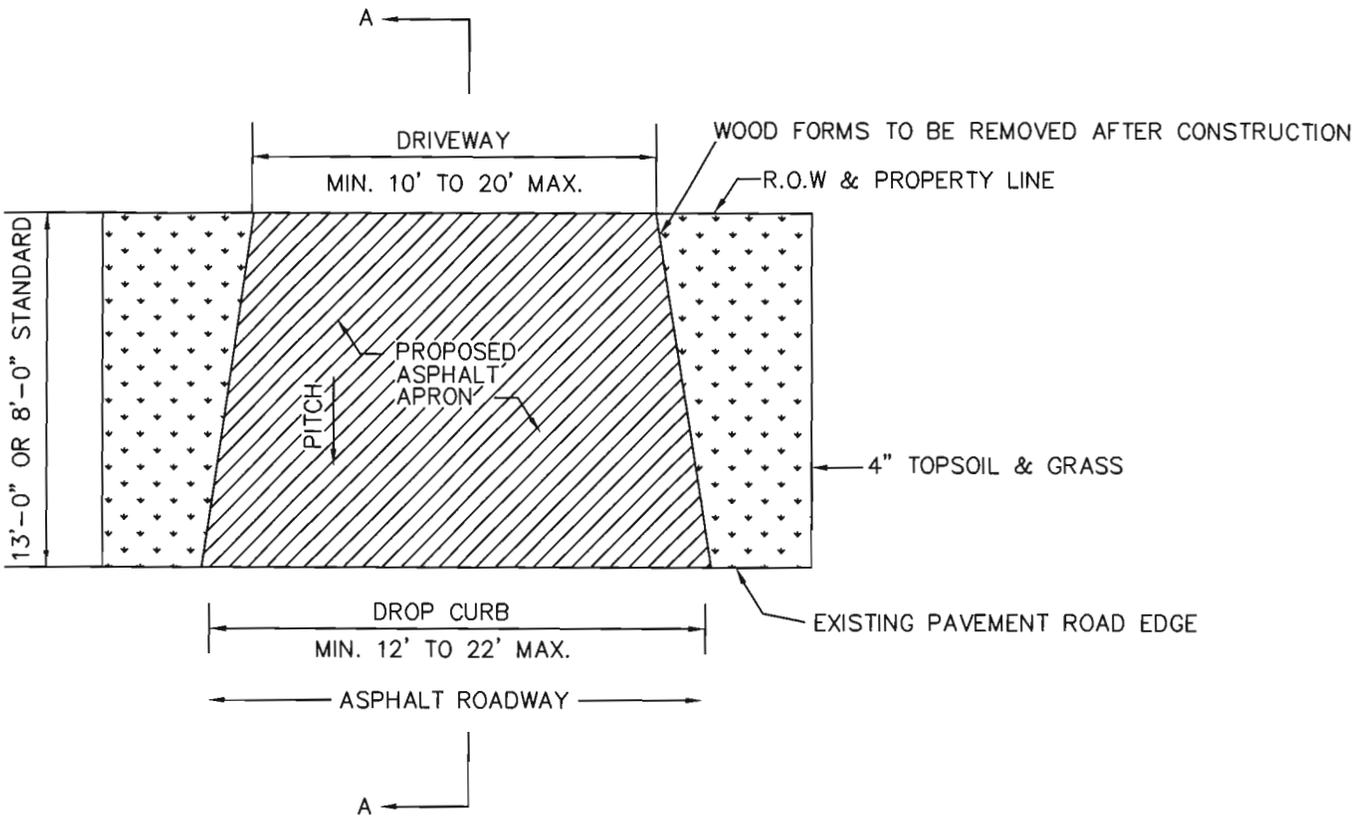
SECTION B-B

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

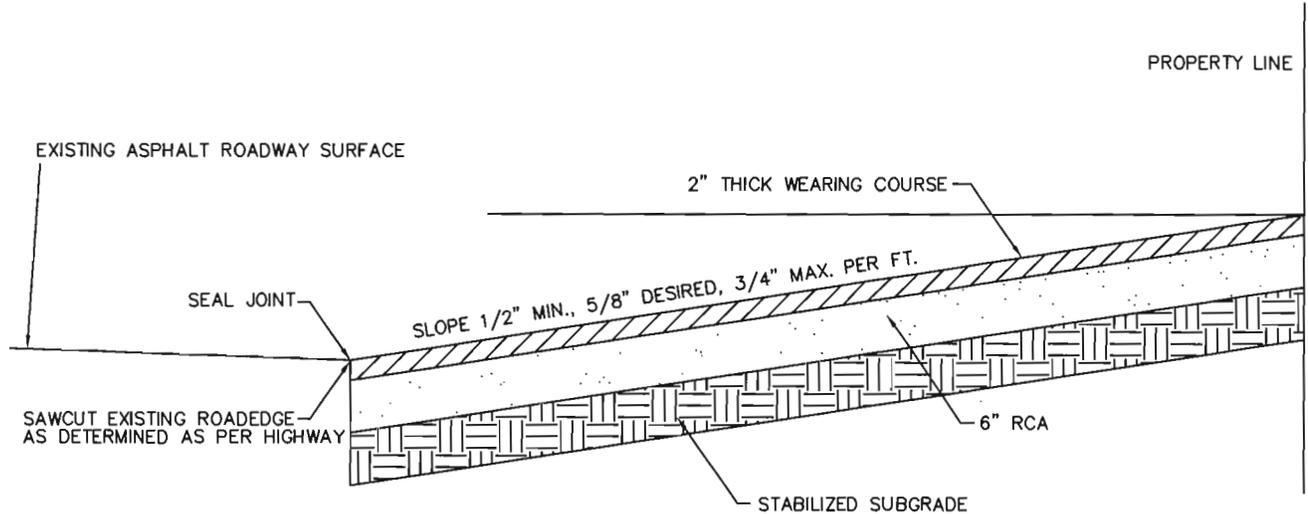
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RESIDENTIAL APRON TYPE 3**

RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



PLAN



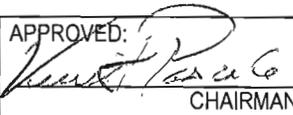
SECTION A-A

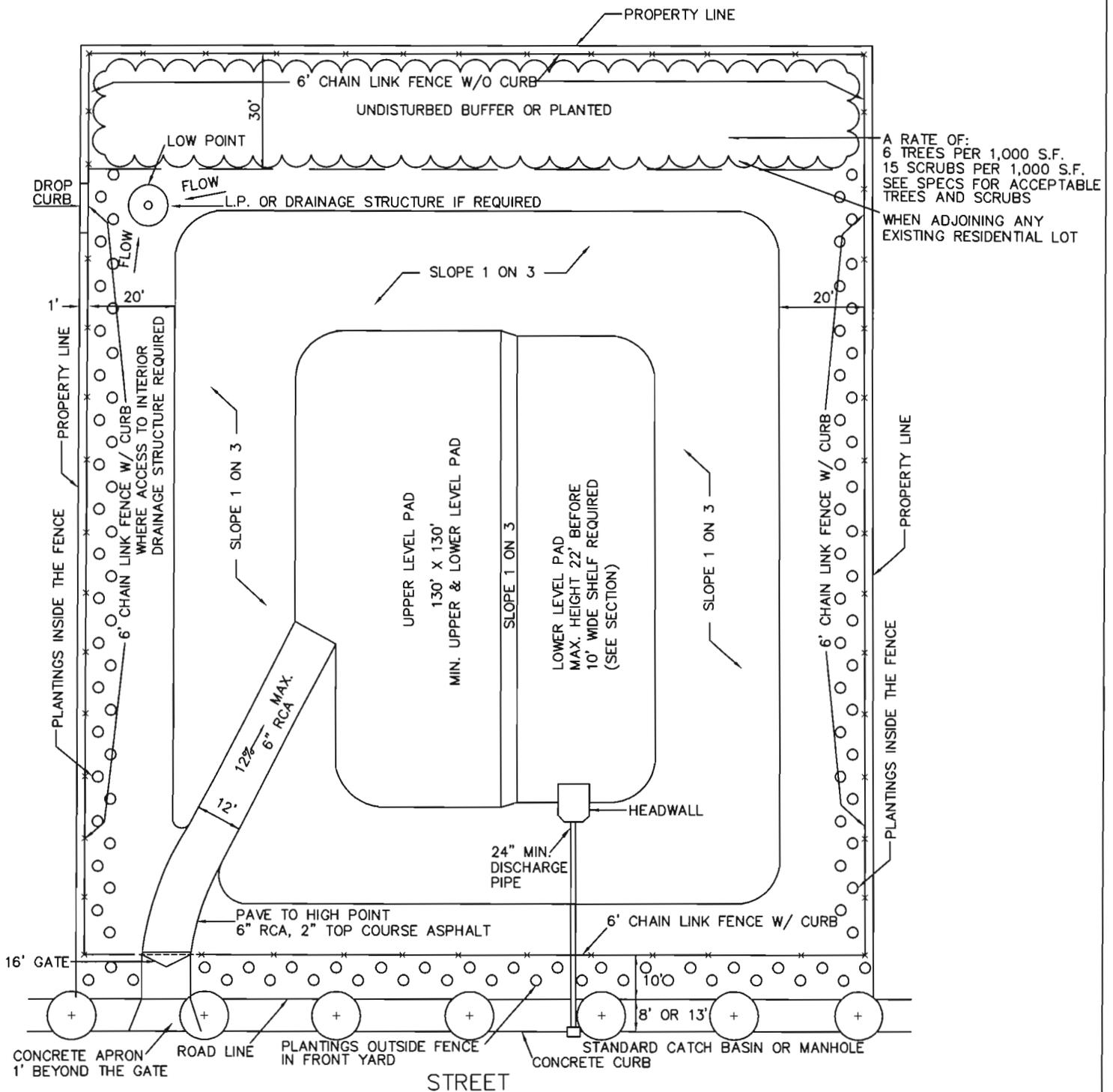
- NOTES:**
1. SAWCUT AND REMOVE ROAD EDGE IN A STRAIGHT LINE RUNNING PARALLEL TO CENTERLINE.
  2. RESTORE ROAD EDGE TO TOB SPECS FIRST, THEN INSTALL NEW APRON.
  3. REPAVED ROAD EDGE MUST MATCH EXISTING PITCH AND FLOW LINE. SEAL WITH 3" MIN. WIDE LIQUID AC.
  4. ASPHALT APRON ACCEPTABLE ONLY WHERE NO SIDEWALK EXISTS.
  5. OVERLAPPING EXISTING ROAD WITH NEW APRON SHALL BE UNACCEPTABLE.

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RESIDENTIAL APRON TYPE 4**

RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



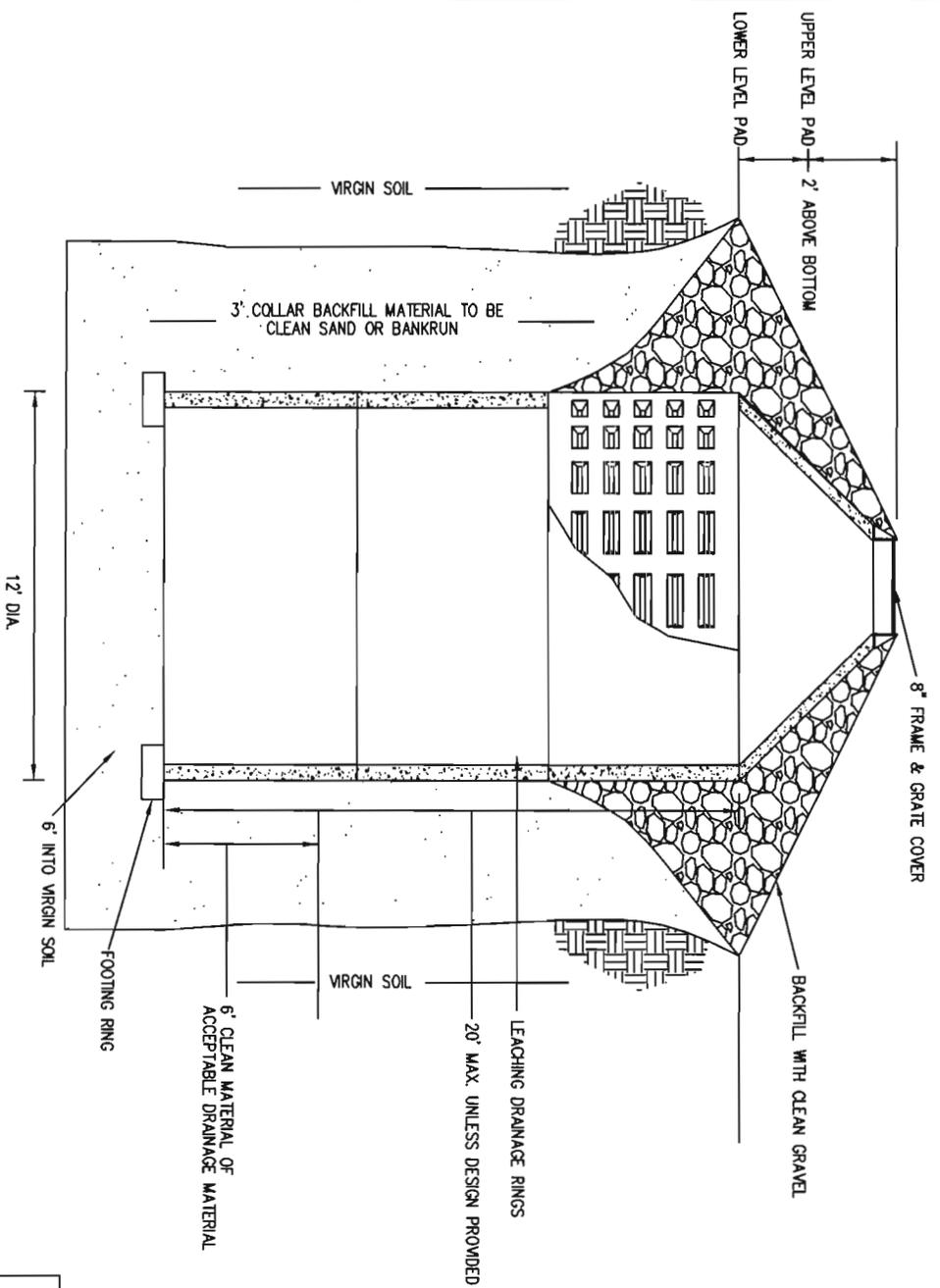
A RATE OF:  
 6 TREES PER 1,000 S.F.  
 15 SCRUBS PER 1,000 S.F.  
 SEE SPECS FOR ACCEPTABLE  
 TREES AND SCRUBS  
 WHEN ADJOINING ANY  
 EXISTING RESIDENTIAL LOT

PLAN

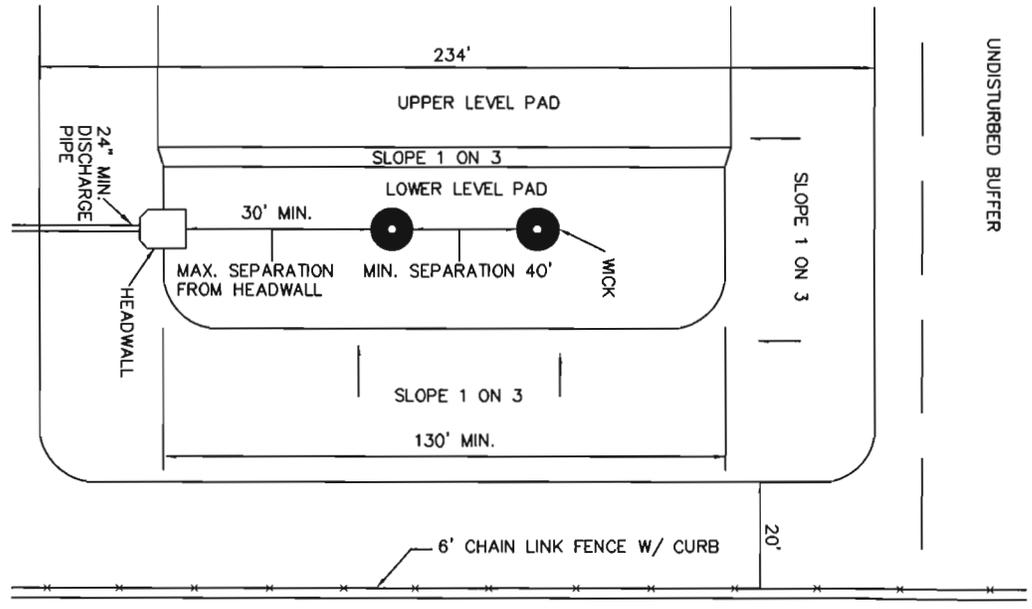
NOTES:

1. SEE SCREEN PLANTING DETAIL FOR RECHARGE BASIN PLANTING SPECIFICATIONS.
2. STREET TREES INSTALLED IN RIGHT-OF-WAY AT 30' O.C. SPACING TO BE APPROVED WITH SUBDIVISION PLAN.

<b>TOWN OF BROOKHAVEN</b>	
SUFFOLK COUNTY	
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING	
<b>RECHARGE BASIN</b>	
RECOMMENDED: <i>[Signature]</i> ENGINEER	APPROVED: <i>[Signature]</i> CHAIRMAN
DATE: OCTOBER 7, 2013	SCALE: NONE
DRAFTED BY: G. CASSARA	

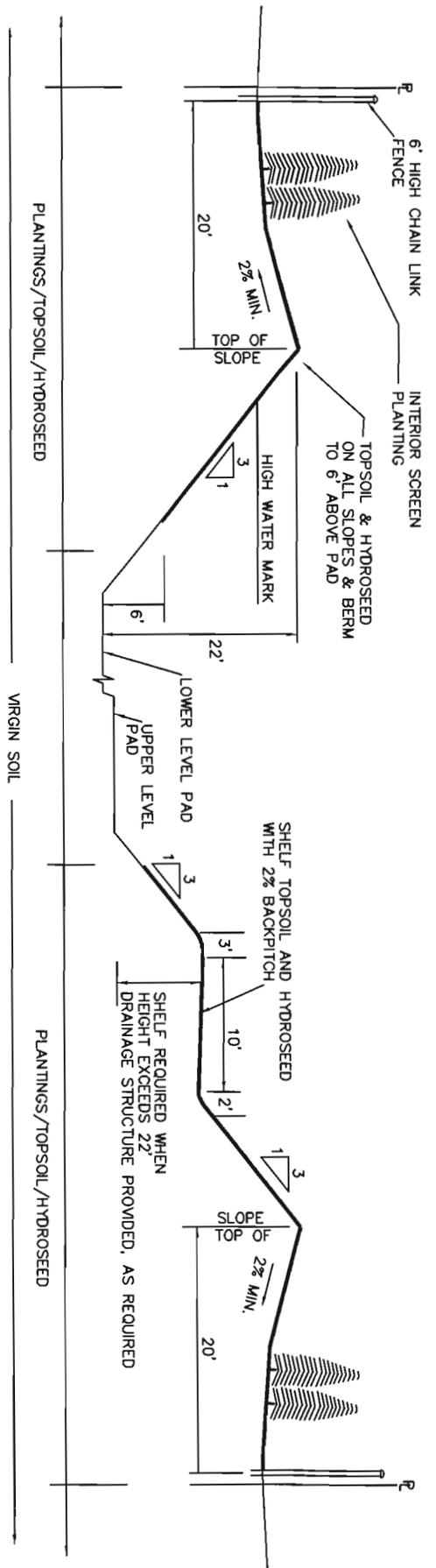


- NOTES:
1. SANITARY RINGS MAY NOT BE USED.
  2. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI CONCRETE PRIOR TO INSTALLATION.
  3. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
  4. ALL STRUCTURES MUST BE MANUFACTURED AT A ACI CERTIFIED PLANT, COPY OF A CERTIFICATION MUST BE ON FILE WITH THE TOWN.



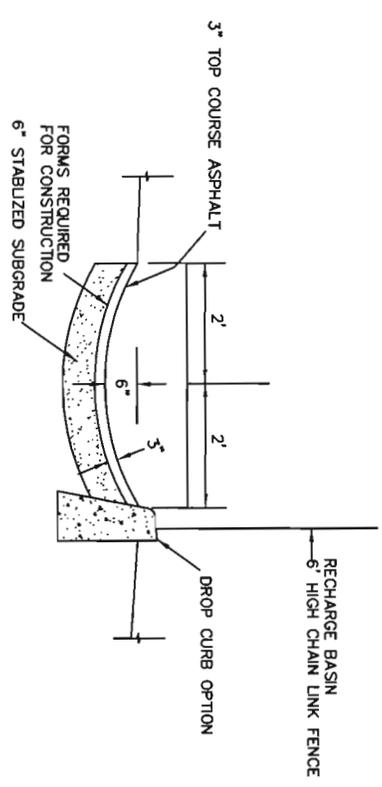
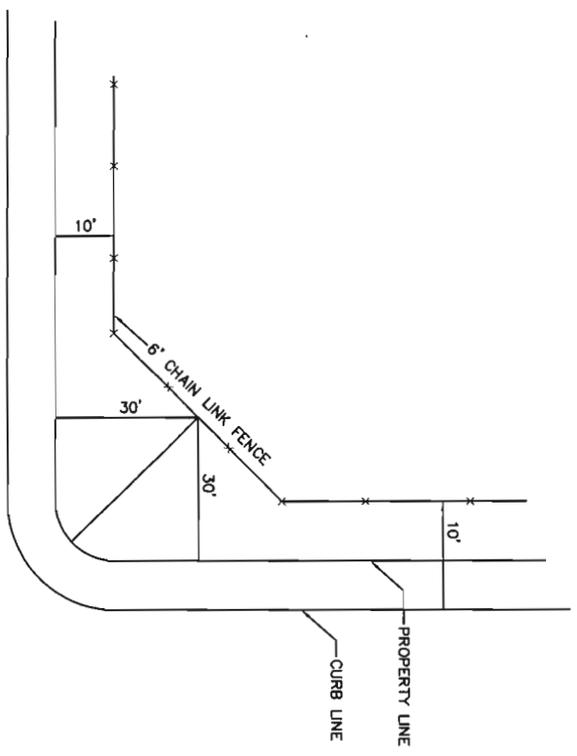
**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**RECHARGE BASIN W/ WICK**

RECOMMENDED:  
 [Signature] ENGINEER  
 APPROVED:  
 [Signature] CHAIRMAN  
 DATE: OCTOBER 7, 2013 SCALE: NONE DRAFTED BY: G. CASSARA



**SECTION**

NOTE:  
1. OVER EXCAVATION OF THE RECHARGE BASIN IS NOT PERMITTED.



ASPHALT CONCRETE GUTTER  
WHEN REQUIRED BY ENGINEER

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RECHARGE BASIN**

RECOMMENDED:  
*[Signature]*  
ENGINEER

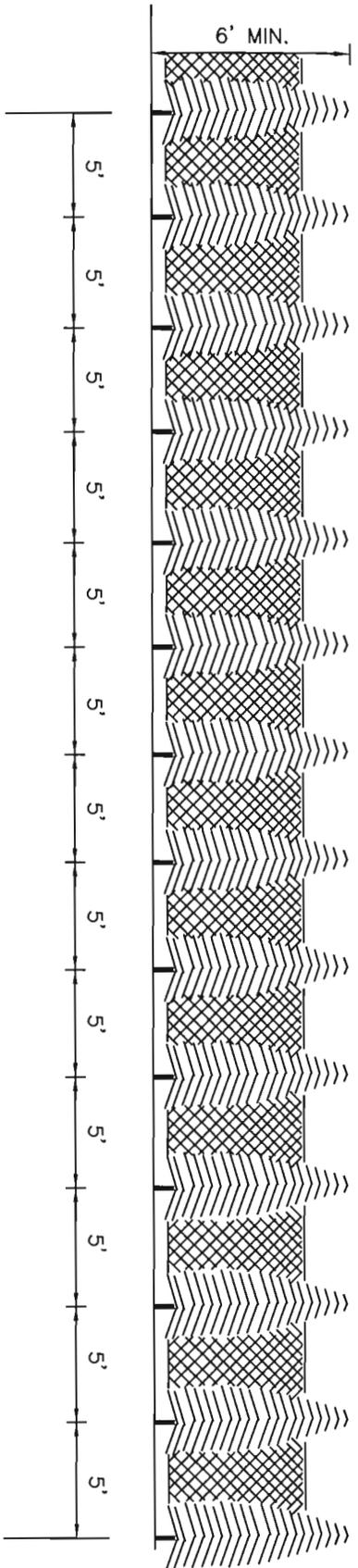
APPROVED:  
*[Signature]*  
CHAIRMAN

DATE: OCTOBER 7, 2013

SCALE: NONE

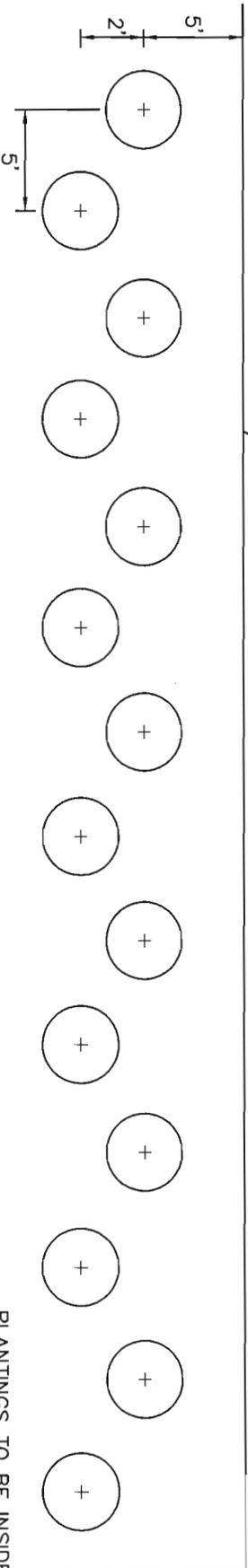
DRAFTED BY: G. CASSARA

FENCE CORNER DETAIL AT STREET INTERSECTION



ELEVATION

FENCE LINE



PLAN

PLANTINGS TO BE INSIDE ON SIDE  
& REAR LINE, OUTSIDE FOR FRONT  
PROPERTY LINE.

- NOTE:
1. EVERGREENS SHALL BE PLACED 5 FEET APART AND 5 FEET FROM AND PARALLEL TO THE FENCE IN A STAGGERED PATTERN IN THE INTERIOR OF THE FENCE. SEE DESIGN STANDARDS FOR DETAILS.
  2. EVERGREENS SHALL BE A MINIMUM 6 FEET IN HEIGHT AT THE TIME OF PLANTING.
  3. SEE PLANTING SPECIFICATIONS FOR PERMITTED SPECIES.

**TOWN OF BROOKHAVEN**

SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**RECHARGE BASIN SCREEN PLANTING**

RECOMMENDED:

*Gregory*  
ENGINEER

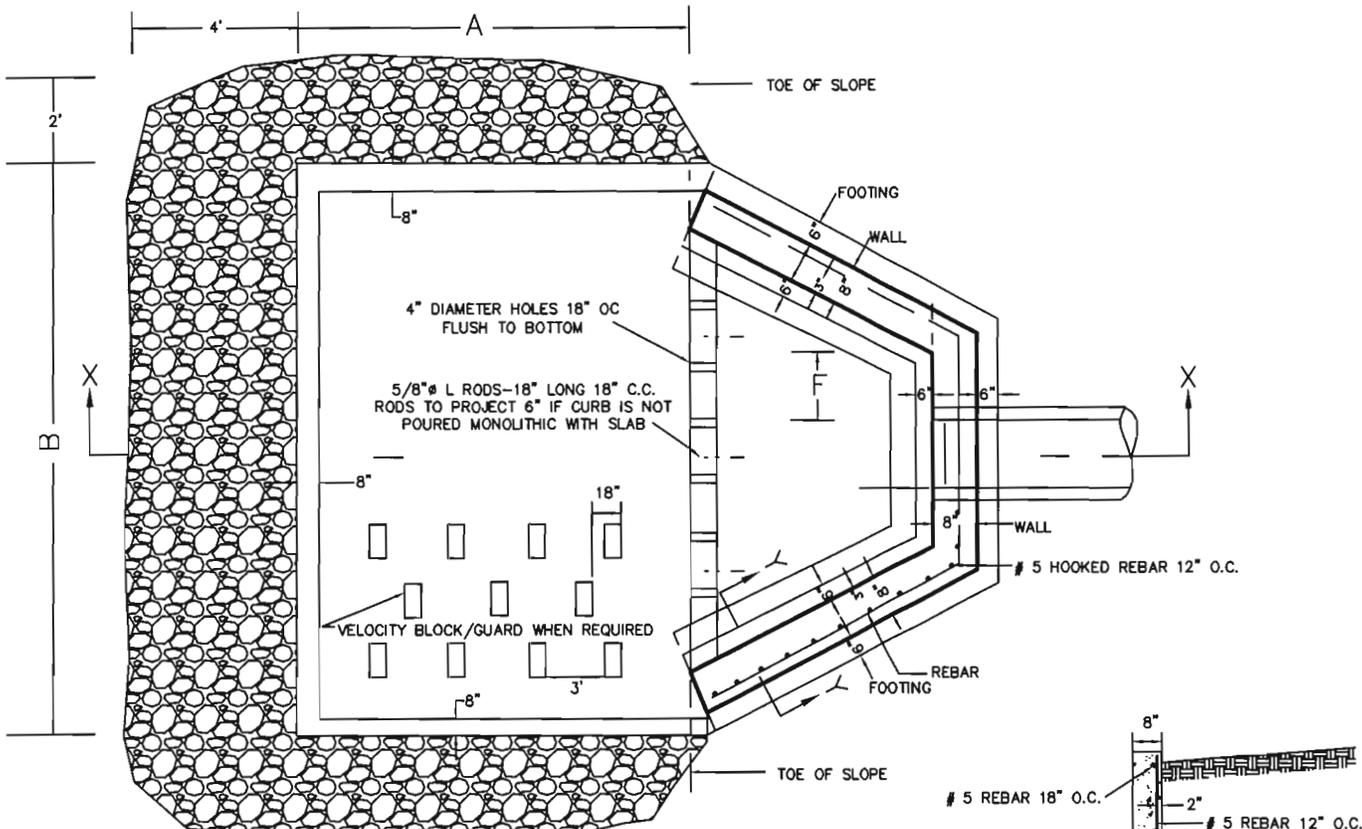
APPROVED:

*Wesley*  
CHAIRMAN

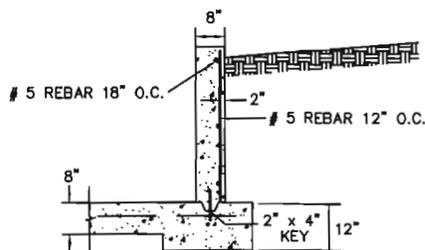
DATE: OCTOBER 7, 2013

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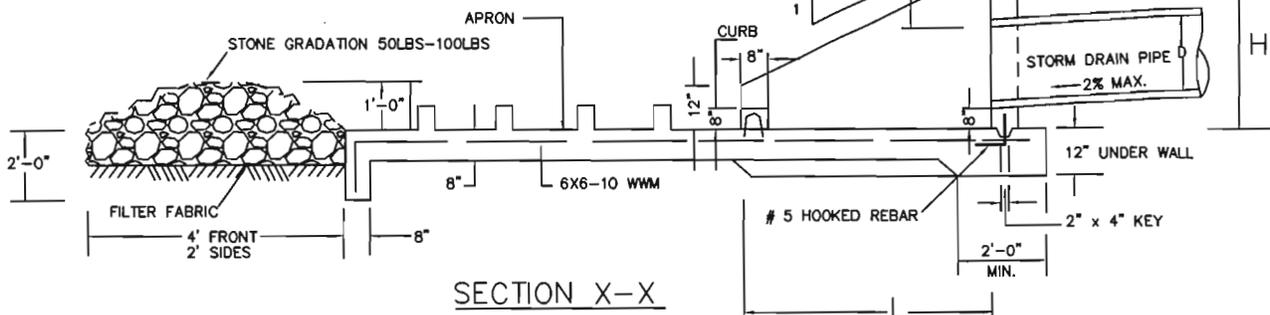
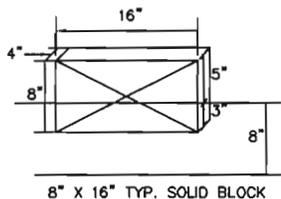
DRAFTED BY: G. CASSARA



PLAN



SECTION Y-Y



SECTION X-X

DIMENSIONS						
D	L	F	B	A	H	RIP-RAP
24"	9'-0"	12"	10'-0"	10'-0"	4'-0"	4'-0"
30"	10'-6"	18"	12'-0"	12'-0"	4'-6"	6'-0"
36"	12'-0"	24"	14'-0"	14'-0"	5'-0"	8'-0"
42"	13'-6"	30"	16'-0"	16'-0"	5'-6"	10'-0"

- NOTES:
1. ALL CONCRETE TO BE 4000 PSI @ 28 DAYS.
  2. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
  3. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF A CERTIFICATION MUST BE ON FILE WITH THE TOWN.

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY

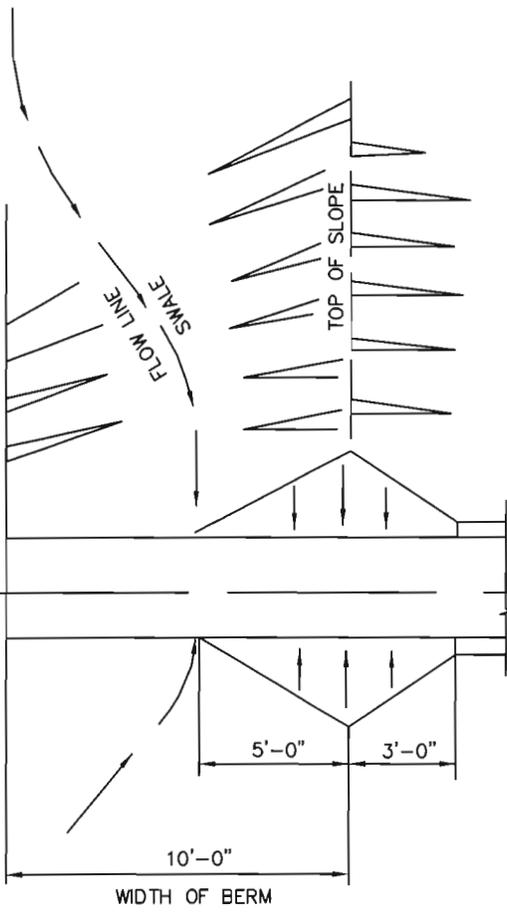
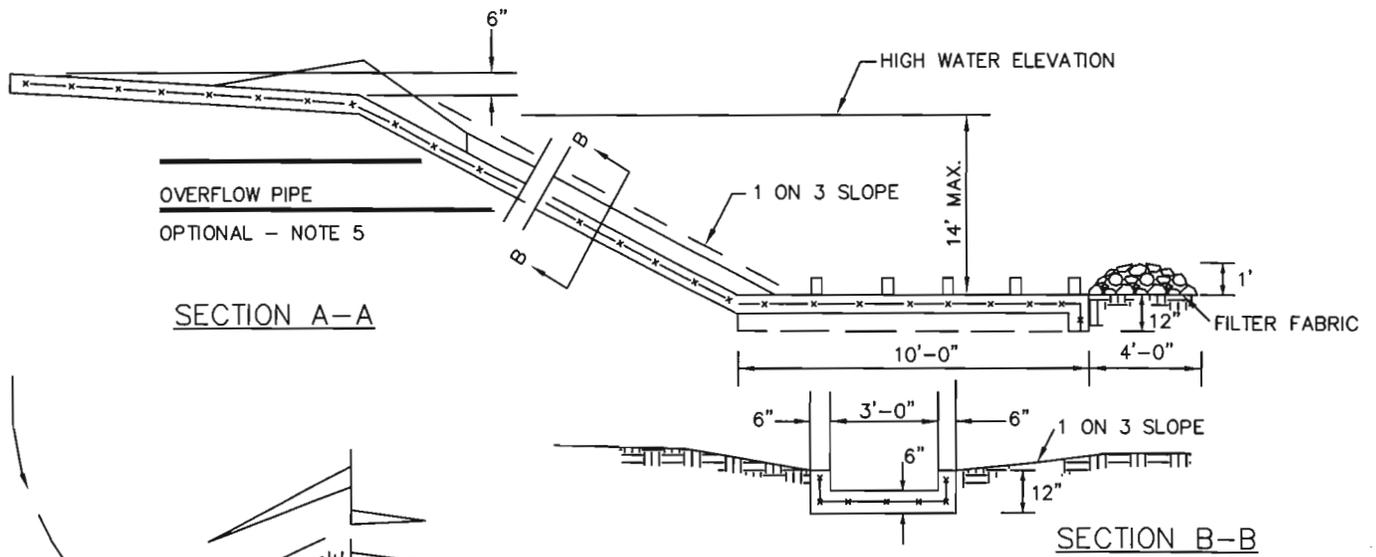
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**CONCRETE HEADWALL**

RECOMMENDED BY: *[Signature]* ENGINEER

APPROVED: *[Signature]* CHAIRMAN

DATE: OCTOBER 7, 2013    SCALE: NONE    DRAFTED BY: G. CASSARA

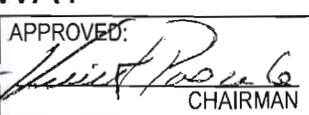


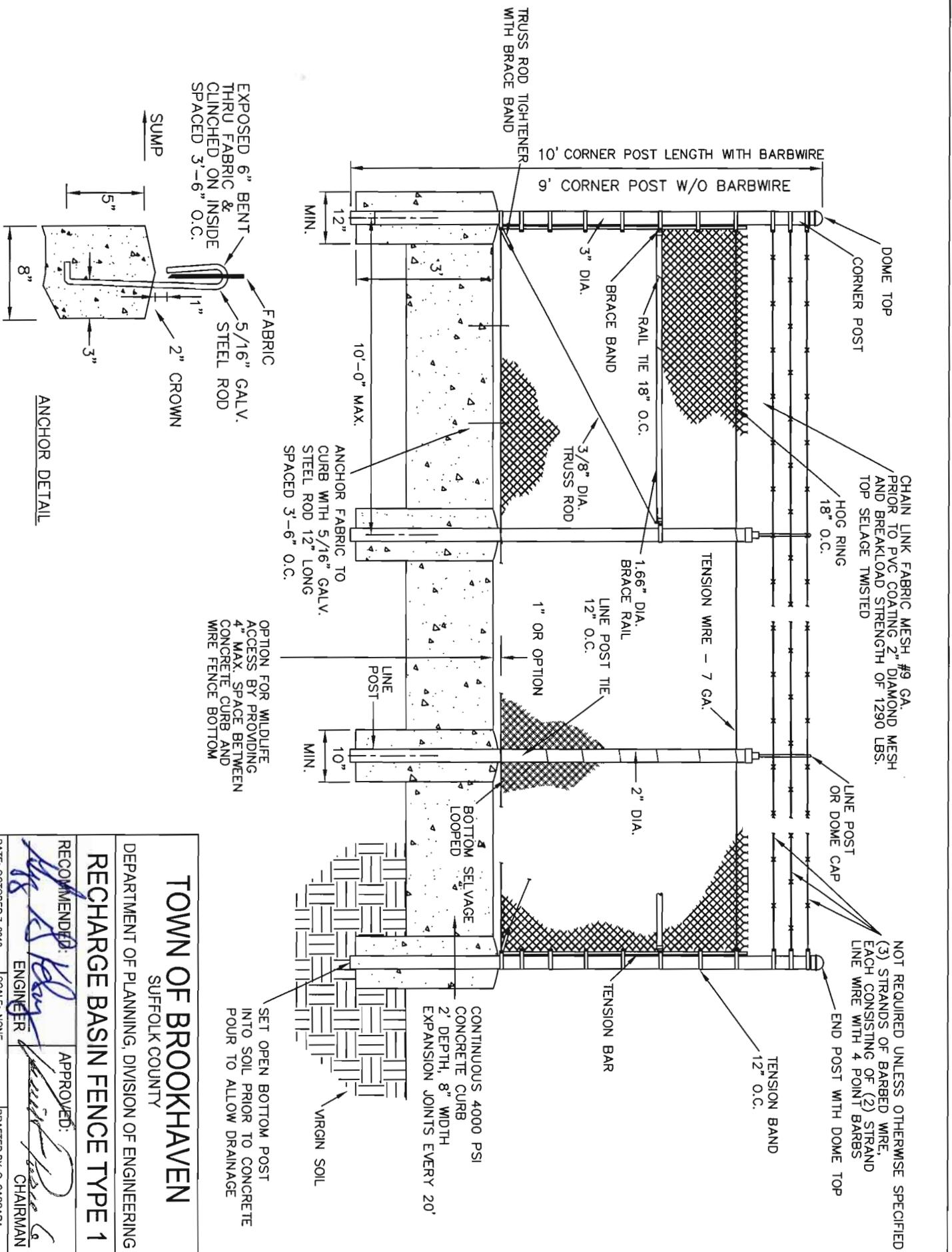
PLAN

- NOTES:**
1. CONCRETE STRENGTH TO BE 4000 PSI @ 28 DAYS.
  2. REINFORCE WITH WWM #6 6"x6".
  3. SUBGRADE SHALL BE COMPACTED TO 95% MAX. DENSITY.
  4. ONLY MONOLITHIC POUR WILL BE PERMITTED.
  5. OVERFLOW MAY BE INCORPORATED INTO SLUICE WHEN APPROVED BY THE TOWN ENGINEER.

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**SLUCEWAY**

RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



CHAIN LINK FABRIC MESH #9 GA. PRIOR TO PVC COATING 2" DIAMOND MESH AND BREAKLOAD STRENGTH OF 1290 LBS. TOP SELVAGE TWISTED

NOT REQUIRED UNLESS OTHERWISE SPECIFIED (3) STRANDS OF BARBED WIRE, EACH CONSISTING OF (2) STRAND LINE WIRE WITH 4 POINT BARBS

OPTION FOR WILDLIFE ACCESS BY PROVIDING 4" MAX. SPACE BETWEEN CONCRETE CURB AND WIRE FENCE BOTTOM

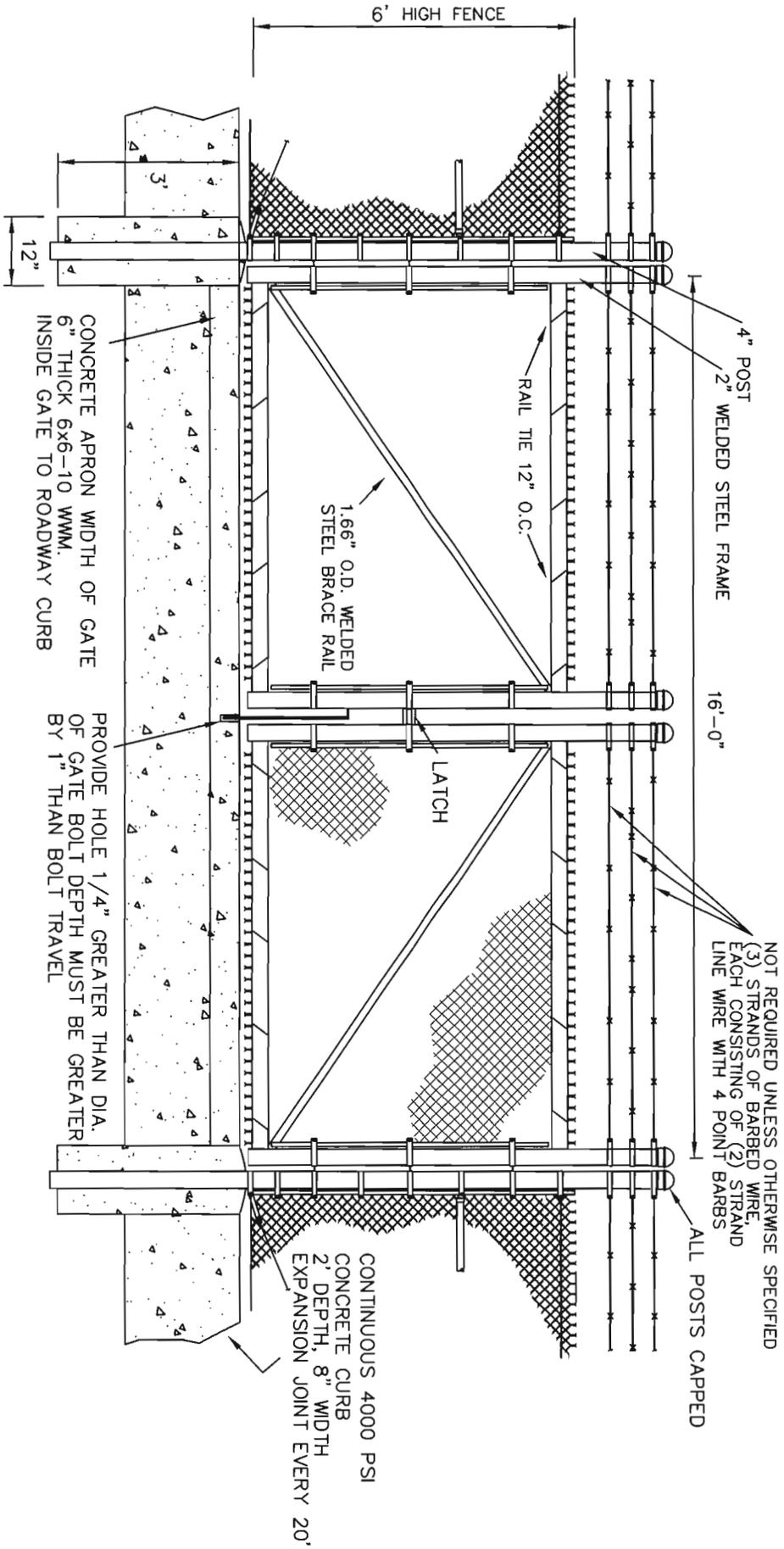
SET OPEN BOTTOM POST INTO SOIL PRIOR TO CONCRETE POUR TO ALLOW DRAINAGE

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**RECHARGE BASIN FENCE TYPE 1**

RECOMMENDED: *[Signature]* ENGINEER  
APPROVED: *[Signature]* CHAIRMAN

DATE: OCTOBER 7, 2013 SCALE: NONE DRAFTED BY: G. CASSARA

ANCHOR DETAIL



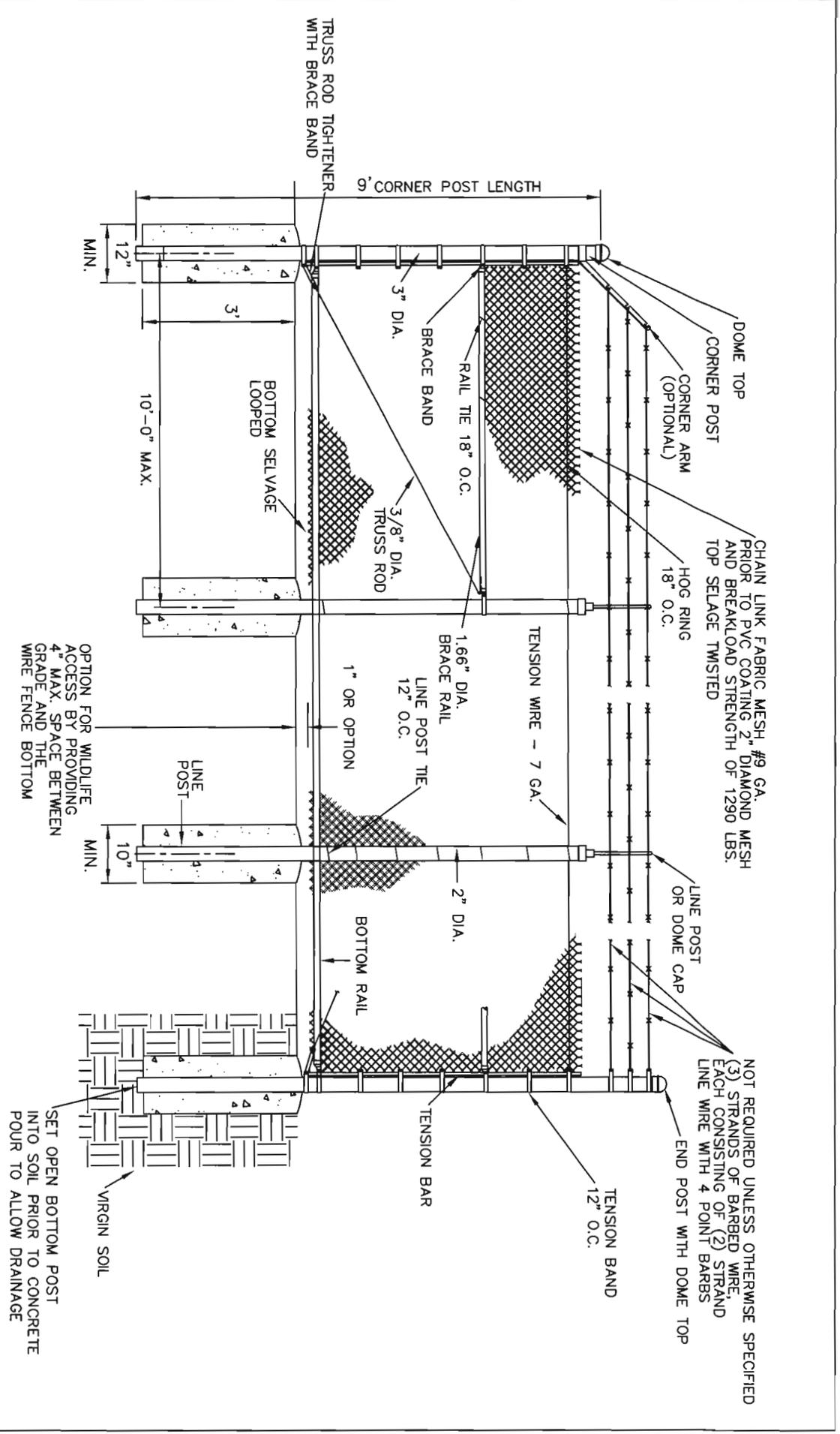
- NOTES:
1. HINGES - STRUCTURALLY CAPABLE OF SUPPORTING GATE AND ALLOW 90 DEGREE OUTWARD PLUS 180 DEGREE INWARD SWING. ONO-LIFT-OFF HINGE DESIGN
  2. PROVIDE DROP ROD TO HOLD INACTIVE LEAF. PROVIDE GATE STOP PIPE TO ENGAGE CENTER DROP ROD. PROVIDE LOCKING DEVICE AND PADLOCK EYES AS AN INTEGRAL PART OF LATCH, REQUIRING ONE PADLOCK FOR LOCKING BOTH GATES.
  3. STEEL PIPE ASTM F 1083 STANDARD WEIGHT SCHEDULE 40

**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**RECHARGE BASIN GATE TYPE 1**

RECOMMENDED:  
  
 ENGINEER

APPROVED:  
  
 CHAIRMAN

DATE: OCTOBER 7, 2013      SCALE: NONE      DRAFTED BY: G. CASSARA

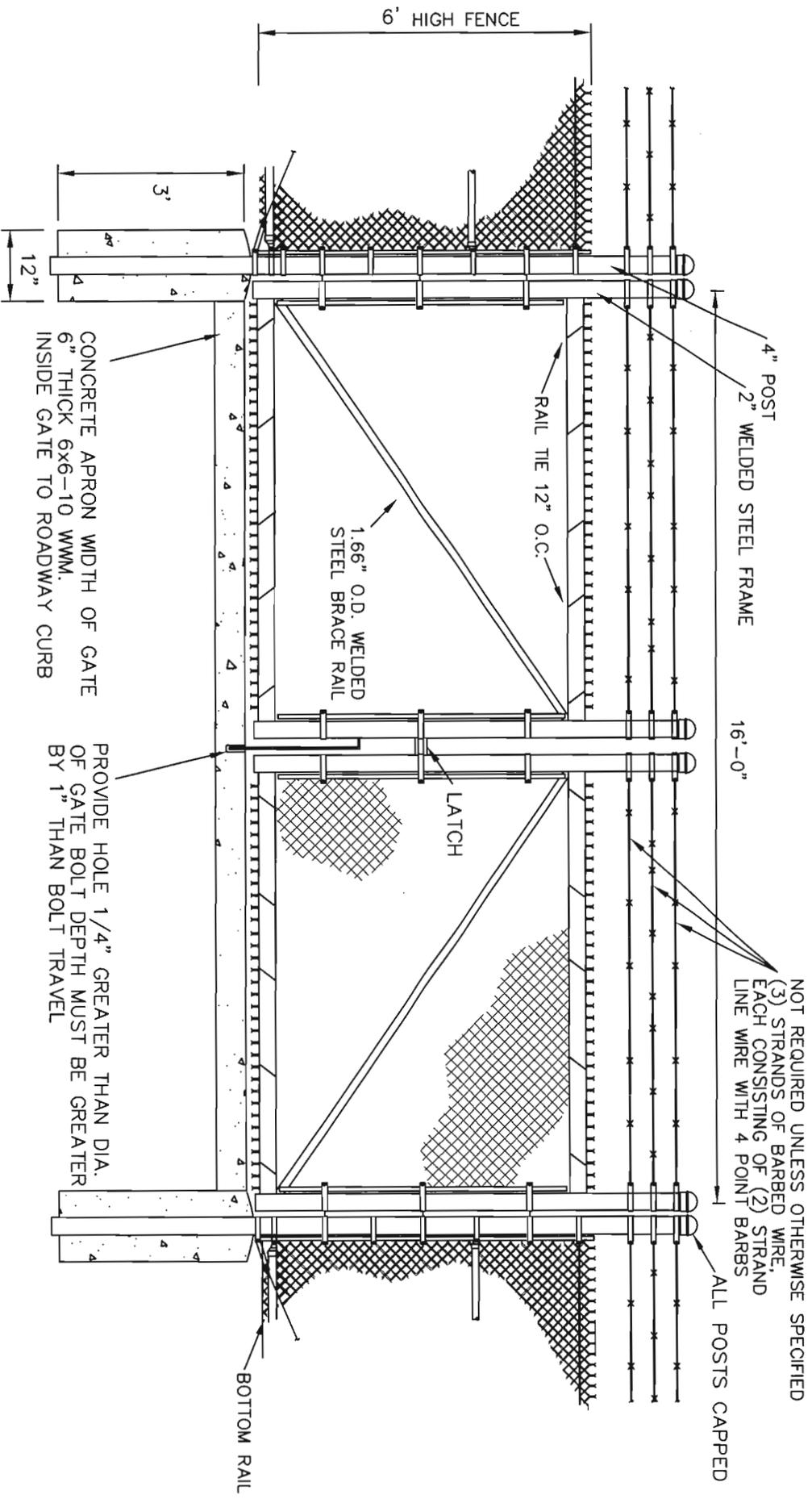


**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**RECHARGE BASIN FENCE TYPE 2**

RECOMMENDED: *[Signature]*  
 ENGINEER

APPROVED: *[Signature]*  
 CHAIRMAN

DATE: OCTOBER 7, 2013 SCALE: NONE DRAFTED BY: G. CASSARA



NOT REQUIRED UNLESS OTHERWISE SPECIFIED  
 (3) STRANDS OF BARBED WIRE,  
 EACH CONSISTING OF (2) STRAND  
 LINE WIRE WITH 4 POINT BARBS

CONCRETE APRON WIDTH OF GATE  
 6" THICK 6x6-10 WMM.  
 INSIDE GATE TO ROADWAY CURB

PROVIDE HOLE 1/4" GREATER THAN DIA.  
 OF GATE BOLT DEPTH MUST BE GREATER  
 BY 1" THAN BOLT TRAVEL

**NOTES:**

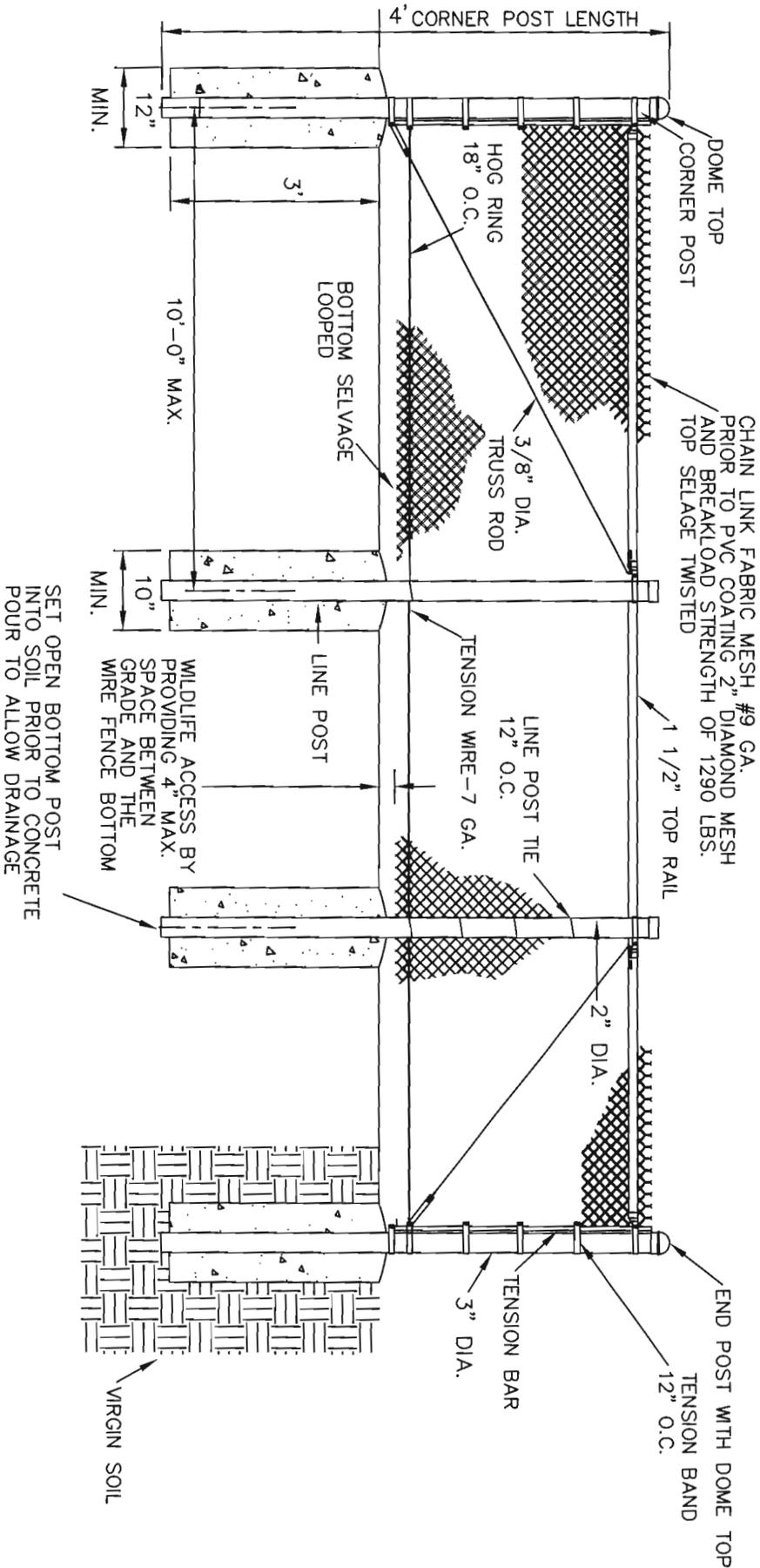
1. HINGES - STRUCTURALLY CAPABLE OF SUPPORTING GATE AND ALLOW 90 DEGREE OUTWARD PLUS 180 DEGREE INWARD SWING. ONO-LIFT-OFF HINGE DESIGN
2. PROVIDE DROP ROD TO HOLD INACTIVE LEAF. PROVIDE GATE STOP PIPE TO ENGAGE CENTER DROP ROD. PROVIDE LOCKING DEVICE AND PADLOCK EYES AS AN INTEGRAL PART OF LATCH, REQUIRING ONE PADLOCK FOR LOCKING BOTH GATES.
3. STEEL PIPE ASTM F 1083 STANDARD WEIGHT SCHEDULE 40

**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**RECHARGE BASIN GATE TYPE 2**

RECOMMENDED BY: *[Signature]*  
 ENGINEER

APPROVED: *[Signature]*  
 CHAIRMAN

DATE: OCTOBER 7, 2013 SCALE: NONE DRAFTED BY: G. CASSARA

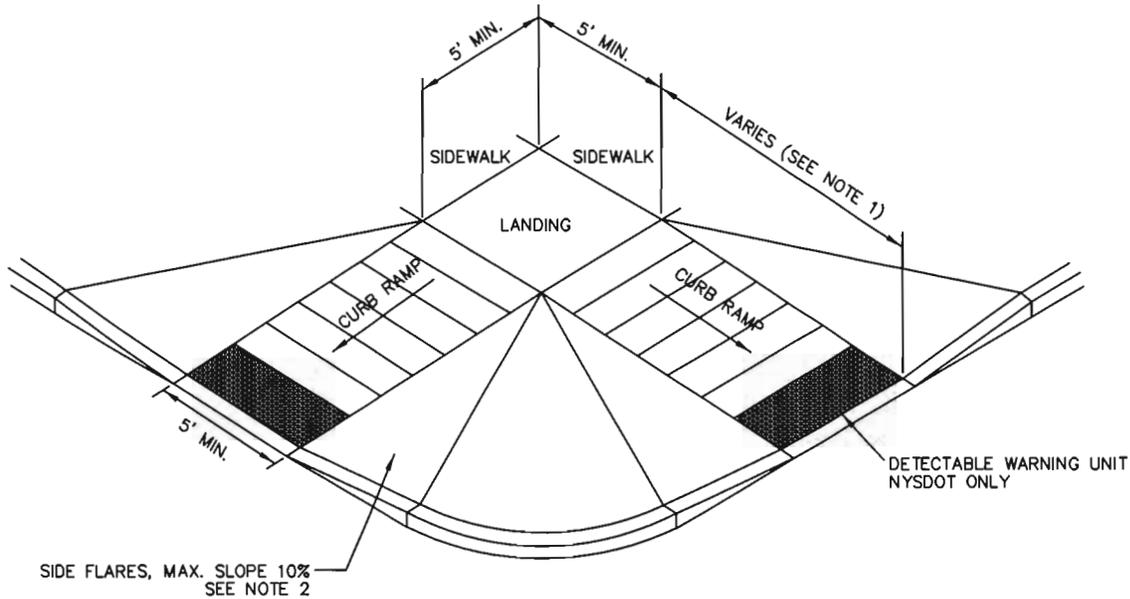


**TOWN OF BROOKHAVEN**  
 SUFFOLK COUNTY  
 DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING  
**OPEN SPACE FENCE**

RECOMMENDED: *[Signature]*  
 ENGINEER

APPROVED: *[Signature]*  
 CHAIRMAN

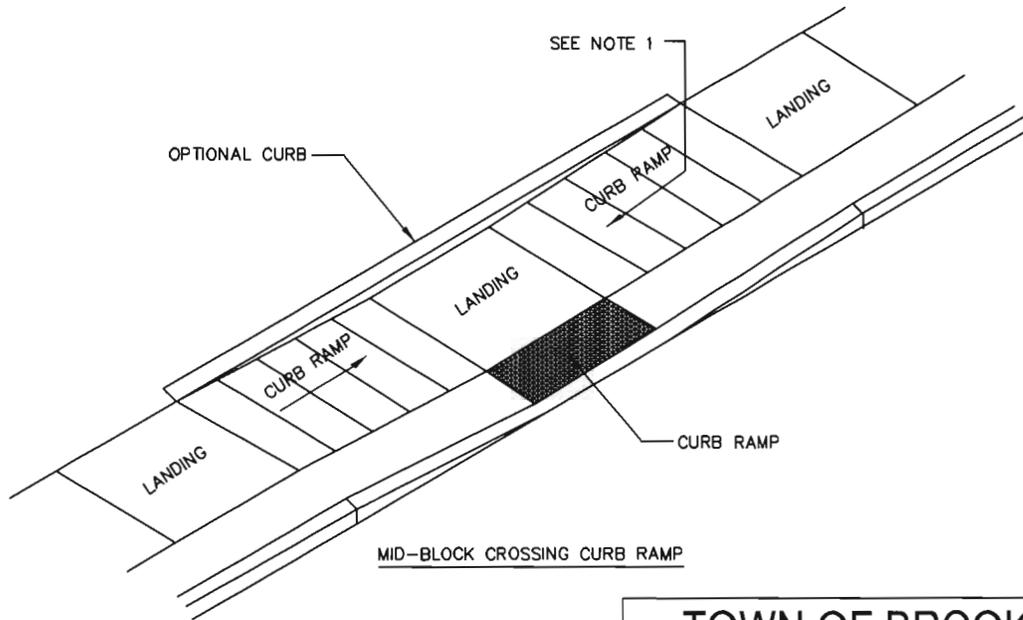
DATE: OCTOBER 1, 2013      SCALE: NONE      DRAFTED BY: G. CASSARA



CURB RAMP WITH SIDE FLARES

NOTES:

1. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 8.33% THE CURB RAMP LENGTH IS THE LENGTH NECESSARY TO MEET THE EXISTING SIDEWALK. IT IS NOT NECESSARY THAT THE RAMP LENGTH EXCEEDS 15'-0".
2. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED PARALLEL TO THE CURB LINE, SHALL BE PROVIDED.  
DETECTABLE WARNING UNIT DIMENSIONS:
3. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OF FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.  
DETECTABLE WARNING LOCATIONS:
4. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE FRONT OF THE CURB OR ROADWAY EDGE. (12" WHERE TRAVERSABLE CURB IS USED).
5. WHERE DETECTABLE WARNINGS ARE NOT REQUIRED A ROUGH, BROOM, OR CROSS SLOPE FINISH SHALL BE APPLIED.



MID-BLOCK CROSSING CURB RAMP

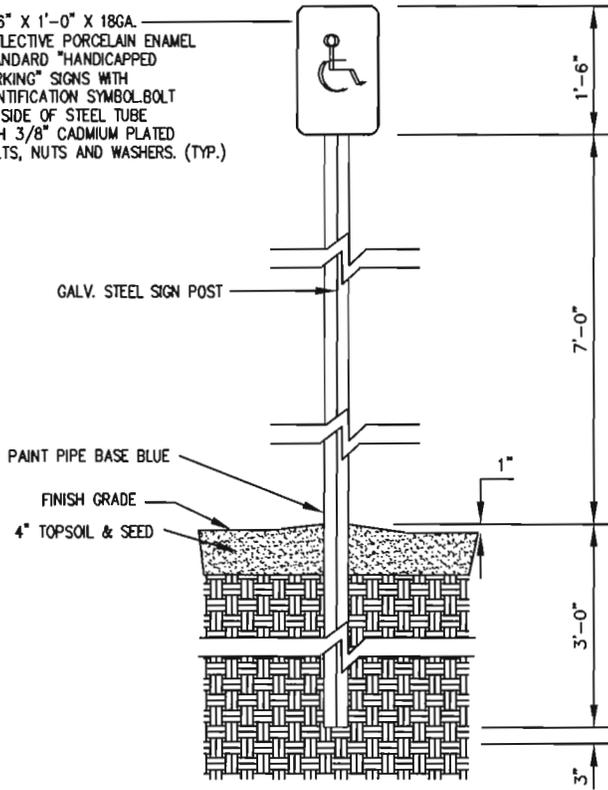
**TOWN OF BROOKHAVEN  
PLANNING BOARD  
SIDEWALK RAMP**

RECOMMENDED: <i>[Signature]</i> ENGINEER	APPROVED: <i>[Signature]</i> CHAIRMAN
--	---

DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA
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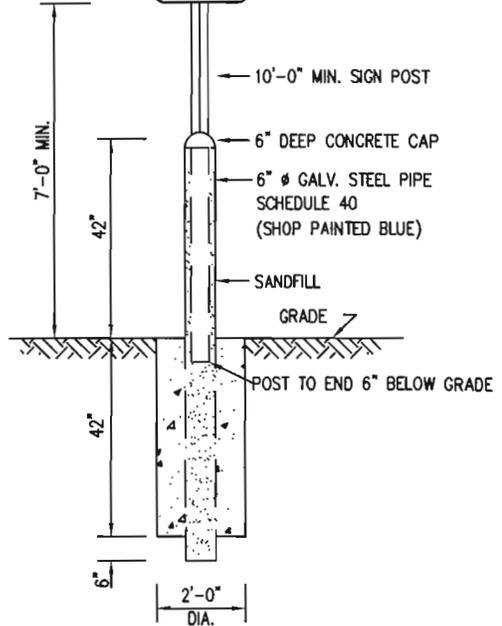
1'-6" X 1'-0" X 18GA.  
REFLECTIVE PORCELAIN ENAMEL  
STANDARD "HANDICAPPED  
PARKING" SIGNS WITH  
IDENTIFICATION SYMBOL. BOLT  
TO SIDE OF STEEL TUBE  
WITH 3/8" CADMIUM PLATED  
BOLTS, NUTS AND WASHERS. (TYP.)



SIGN POST W/ HANDICAP SIGN  
IN LANDSCAPE AREAS @  
HANDICAP PARKING SPACE

RESERVED  
PARKING

VAN  
ACCESSIBLE



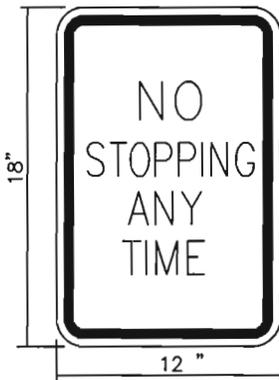
BOLLARD W/ HANDICAP SIGN  
IN PARKING AREAS

SIGN NO. R7-8

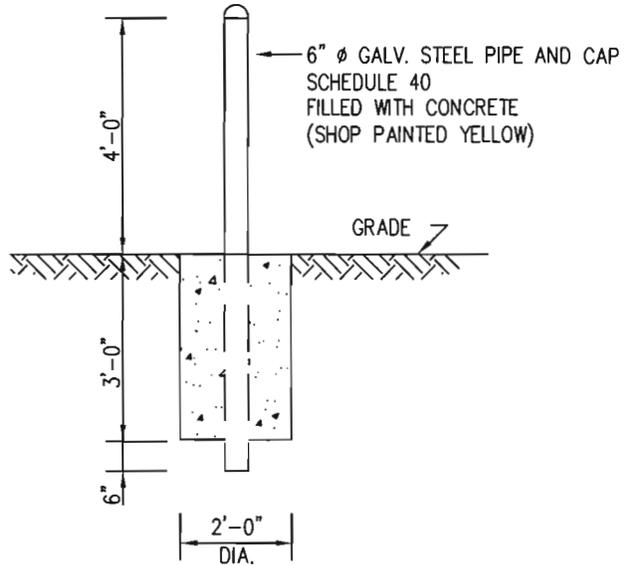


COLORS :  
LEGEND & BORDERS - BLUE  
WHITE SYMBOL ON BLUE BACKGROUND  
SIGN BACKGROUND - WHITE

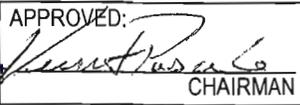
SIGN NO. NYR7-4



COLORS :  
LEGEND & BORDERS - RED  
SIGN BACKGROUND - WHITE

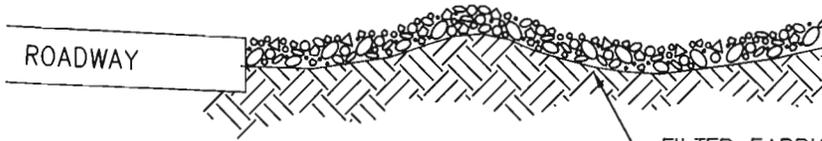


BOLLARD DETAIL

<b>TOWN OF BROOKHAVEN</b> SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>HANDICAP DETAILS</b>		
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA

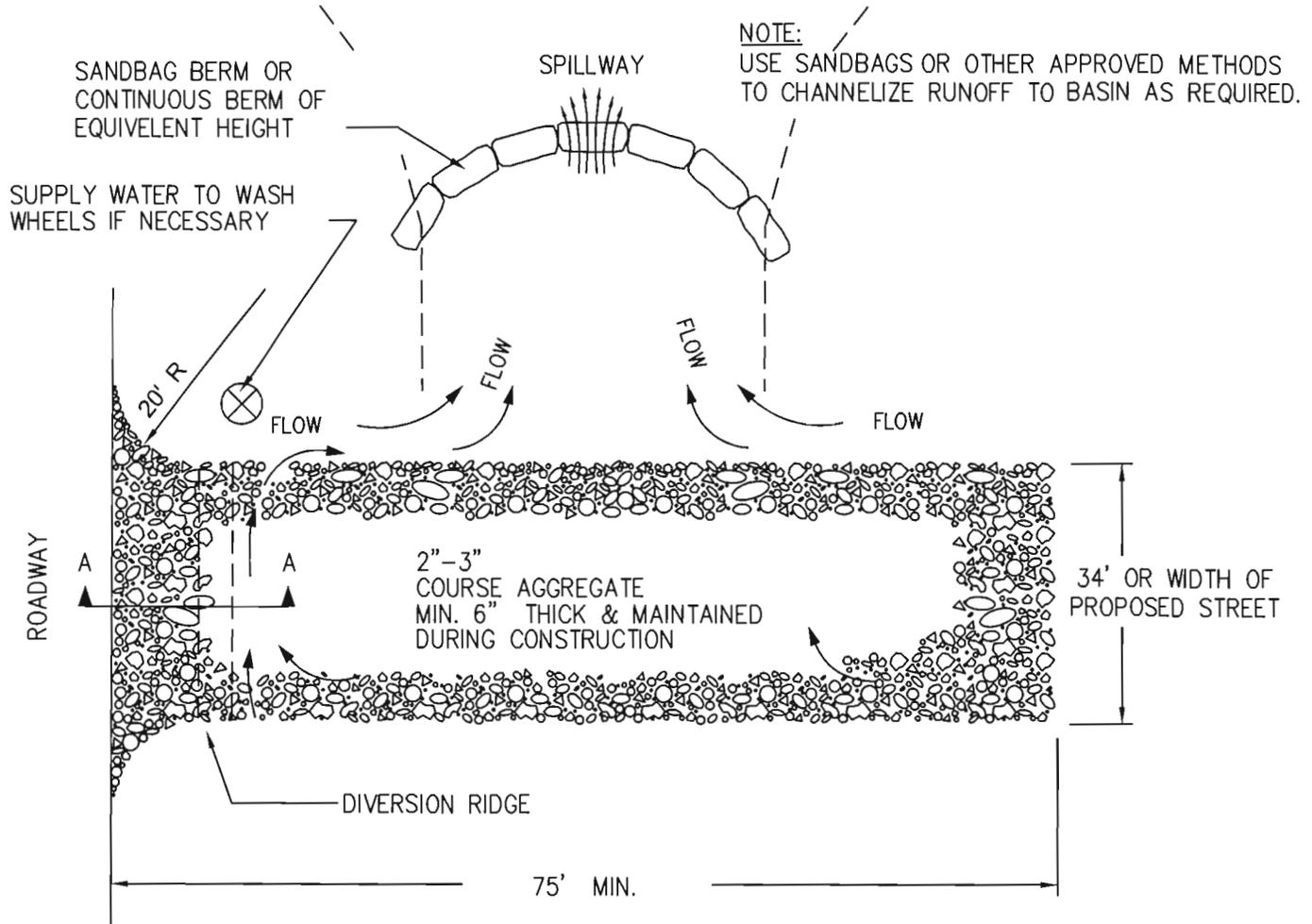
DIVERSION RIDGE REQUIRED  
WHERE GRADE EXCEEDS 2%

2 % OR GREATER



FILTER FABRIC BY  
PHILLIPS PETROLEUM CO. SUPAC 4NP  
OR APPROVED EQUAL.

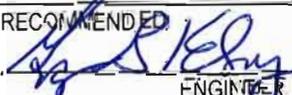
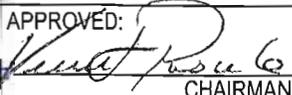
SECTION A - A



PLAN

**NOTES:**

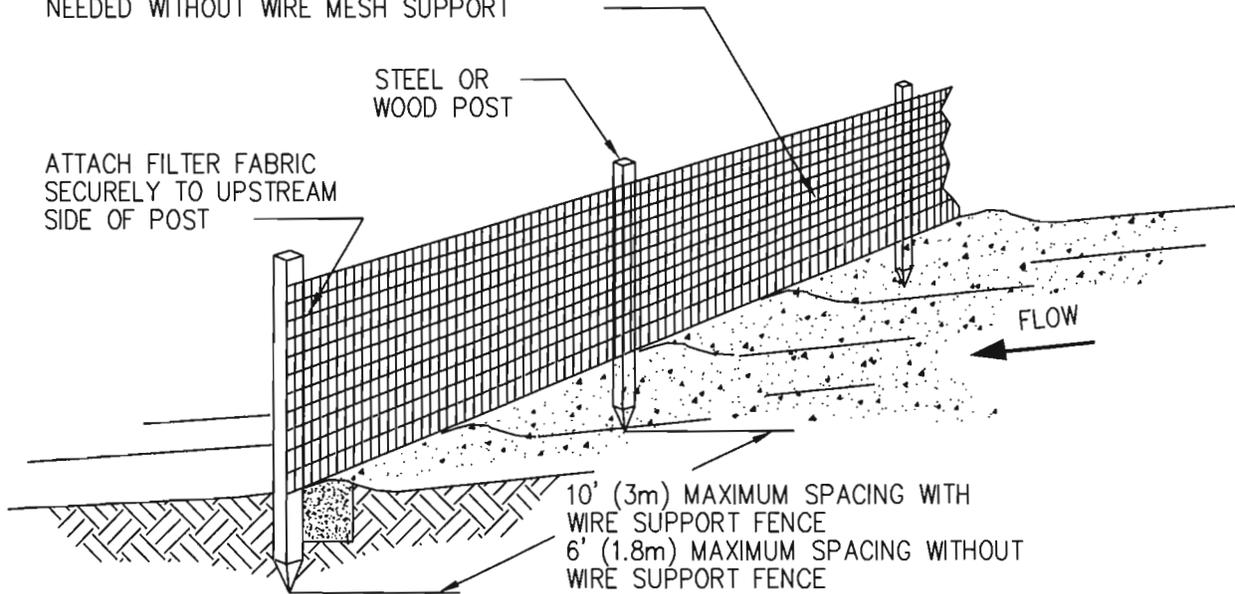
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.

<b>TOWN OF BROOKHAVEN</b>	
SUFFOLK COUNTY	
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING	
<b>CONSTRUCTION ENTRANCE</b>	
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN
DATE: OCTOBER 7, 2013	SCALE: 1:30
DRAFTED BY: G. CASSARA	

EXTRA STRENGTH FILTER FABRIC  
NEEDED WITHOUT WIRE MESH SUPPORT

STEEL OR  
WOOD POST

ATTACH FILTER FABRIC  
SECURELY TO UPSTREAM  
SIDE OF POST



STEEL OR WOOD POST  
36" (1m) HIGH MAX.

PONDING HEIGHT

FLOW

12" MIN.  
(300mm)

4" x 6" (100 X 150mm)  
TRENCH WITH COMPACTED  
BACKFILL

TRENCH DETAIL

NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

TOWN OF BROOKHAVEN  
SUFFOLK COUNTY

DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

SILT FENCE

RECOMMENDED:

*[Signature]*  
ENGINEER

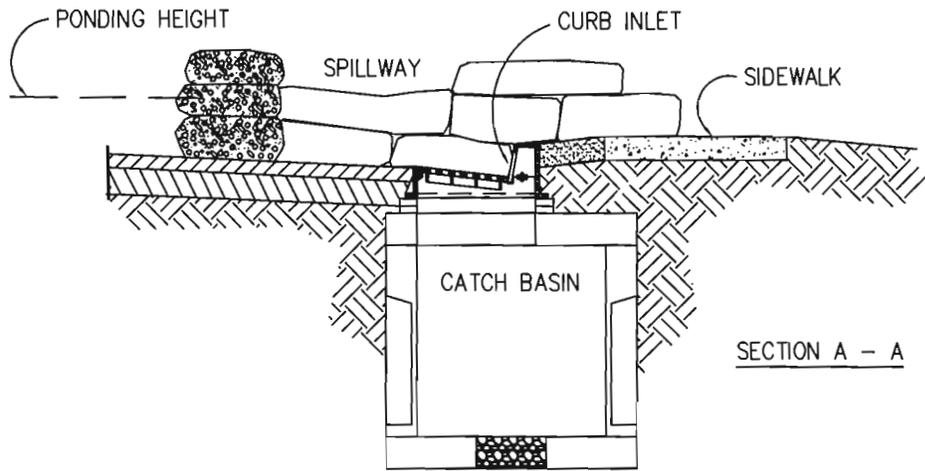
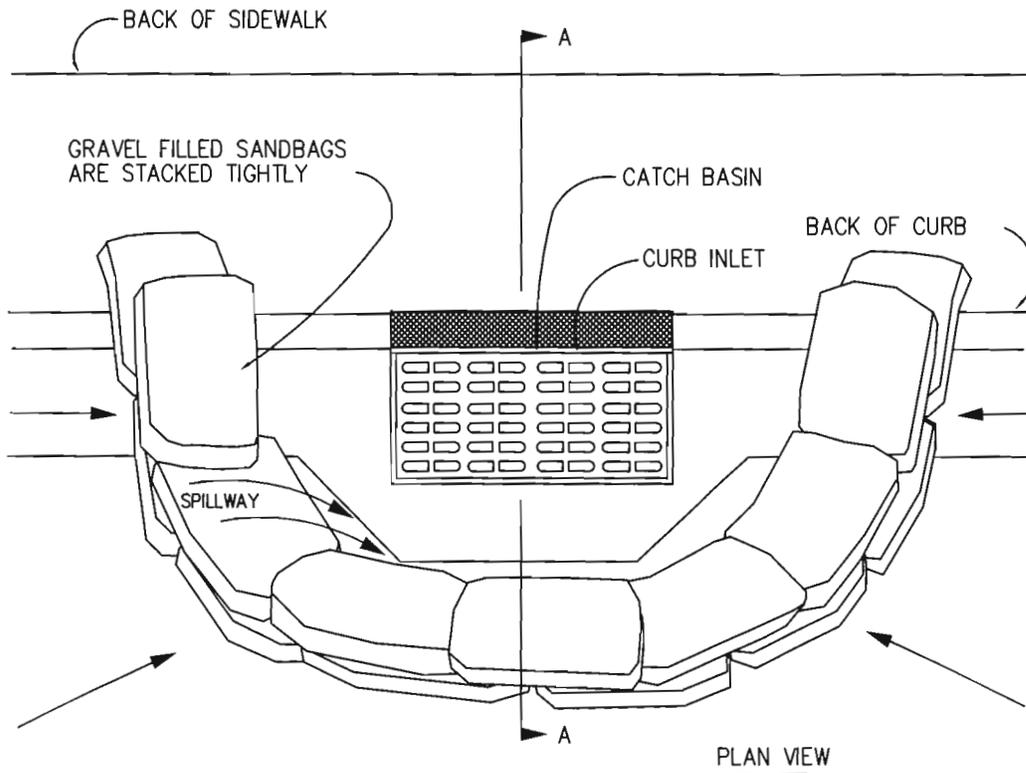
APPROVED:

*[Signature]*  
CHAIRMAN

DATE: OCTOBER 7, 2013

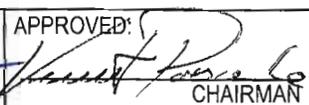
SCALE: NONE

DRAFTED BY: G. CASSARA

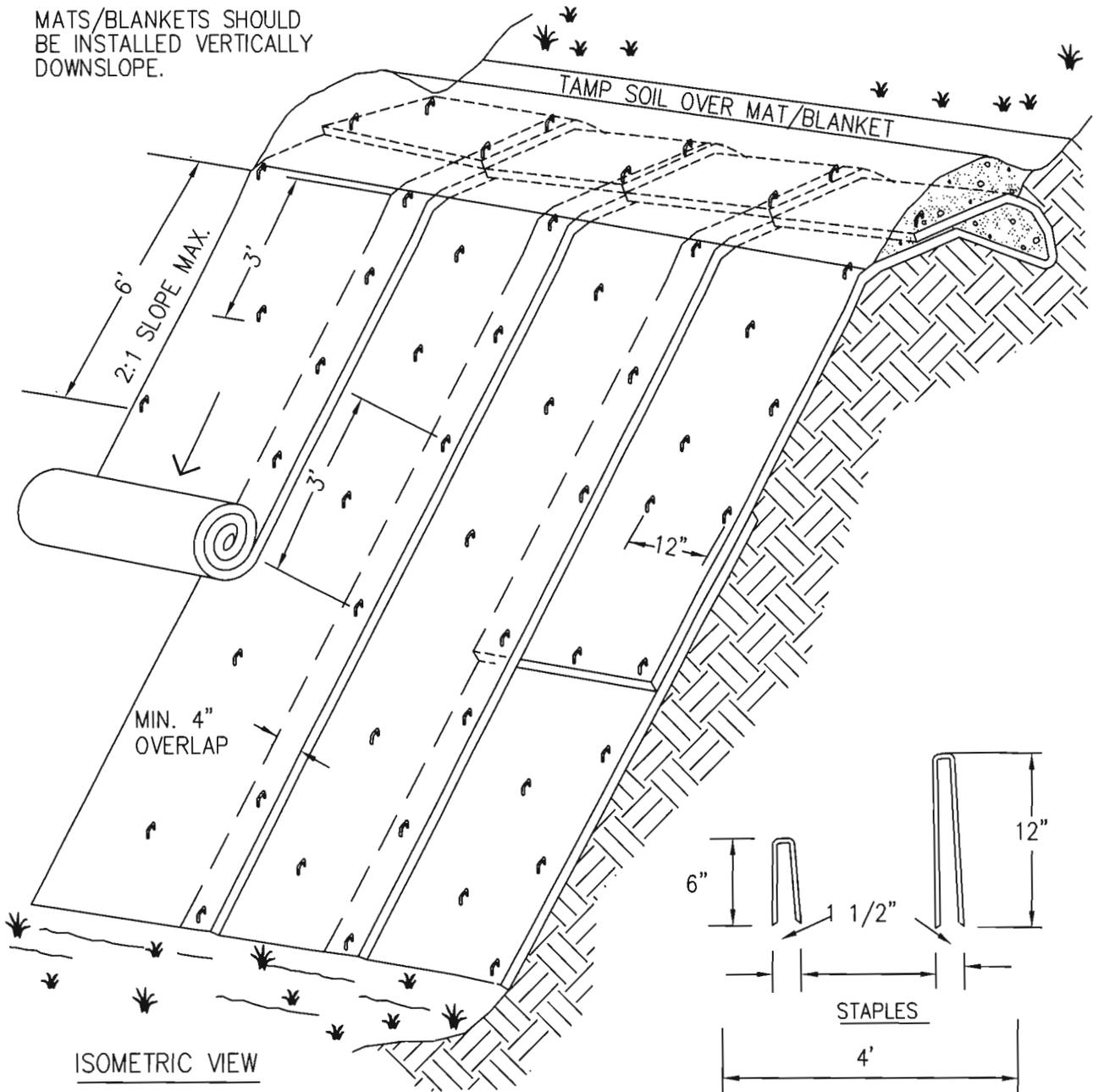


**NOTES:**

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS, OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

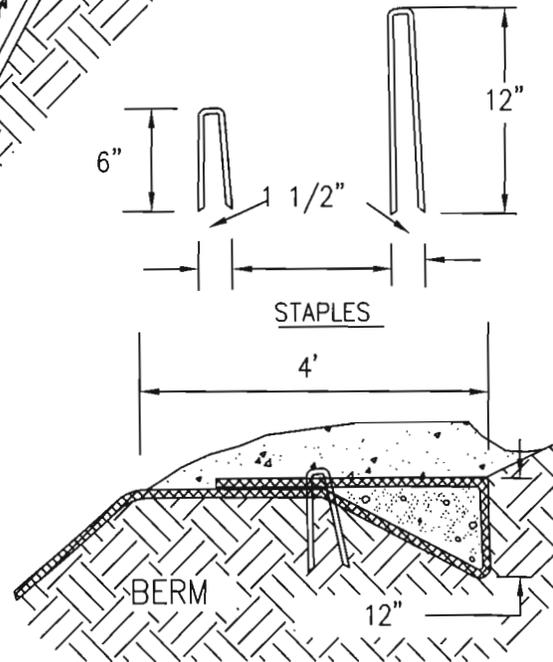
<b>TOWN OF BROOKHAVEN</b>	
SUFFOLK COUNTY	
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING	
<b>SEDIMENT BARRIER</b>	
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN
DATE: OCTOBER 7, 2013	SCALE: NONE
DRAFTED BY: G. CASSARA	

MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.



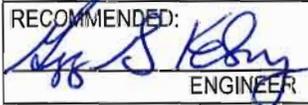
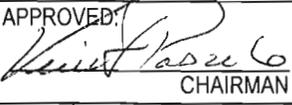
ISOMETRIC VIEW

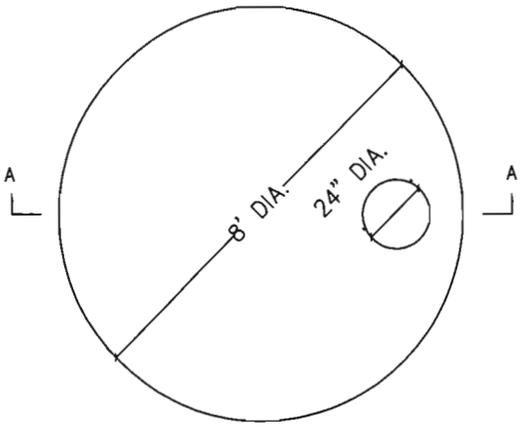
SLOPE SOIL STABILIZATION



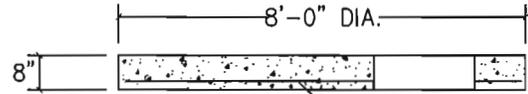
NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>EROSION CONTROL BLANKET</b>		
RECOMMENDED:	APPROVED:	
		
ENGINEER	CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



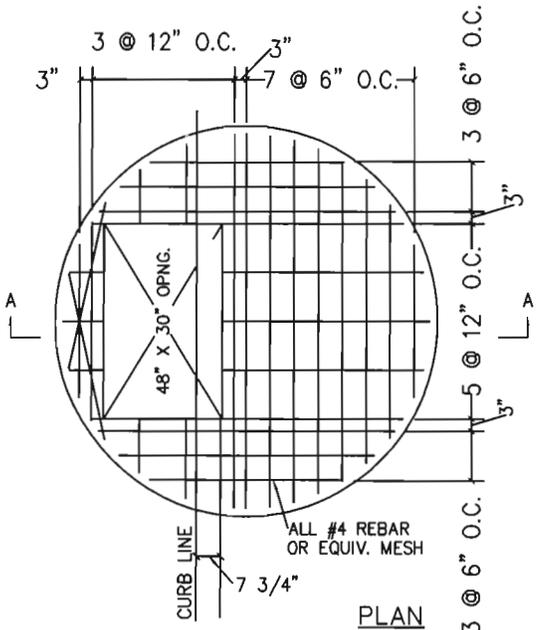
PLAN



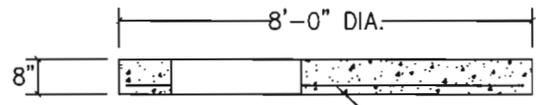
SECTION A-A (6" LAWN TOP - # 4 @ 8" B/W REINF BAR)  
WT. - 3550 LB.

TOP SLAB W/ CIRC. OPENING  
MIN. H-20 LOADING

TRAFFIC TOP - # 4 @ 4" B/W  
WT - 4730 LB.



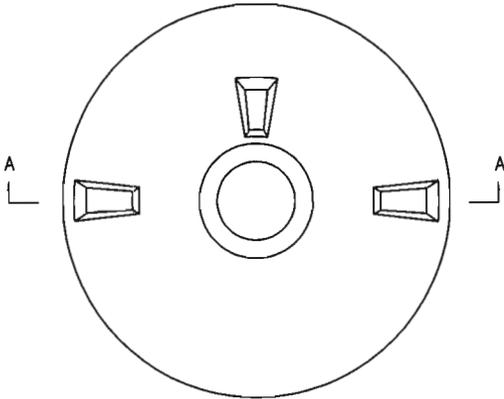
PLAN



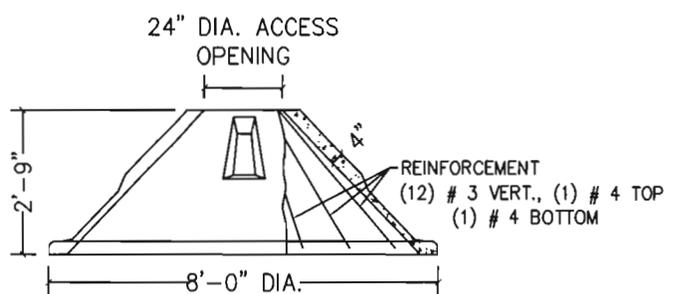
SECTION A-A

TOP SLAB W/ RECT. OPENING  
MIN. H-20 LOADING

WT - 4730 LB.



PLAN

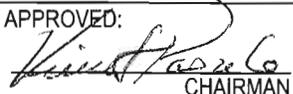


SECTION A-A

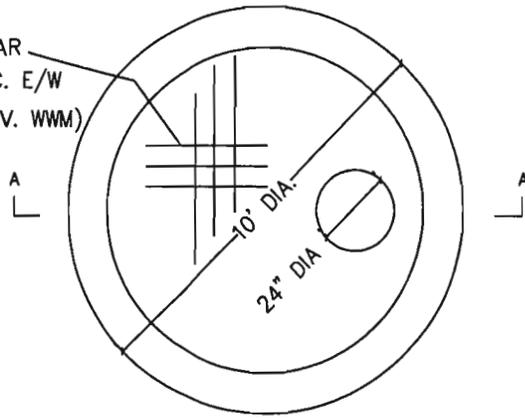
HIGH DOME 405 GAL. STORAGE  
MIN. H-20 LOADING WT - 3,300 LB.

NOTES:

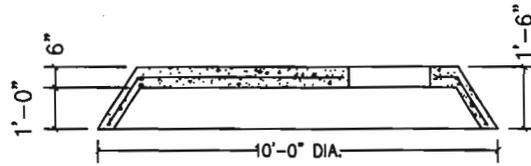
1. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS PRIOR TO INSTALLATION.
2. REBAR DESIGN TO MEET MIN. H-20 LOADING.
3. REBAR TO BE ASTM A-615 GRADE 60.
4. WWM TO BE ASTM A-185.
5. ALL PRECAST STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
6. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.
7. PIPE SHALL NOT PENETRATE THE BOTTOM OF THE DOME.

<b>TOWN OF BROOKHAVEN</b> SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>8' PRECAST COVERS</b>		
RECOMMENDED:	APPROVED:	
 ENGINEER	 CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA

# 4 REBAR  
 @ 6" O.C. E/W  
 (OR EQUIV. WMM)



PLAN



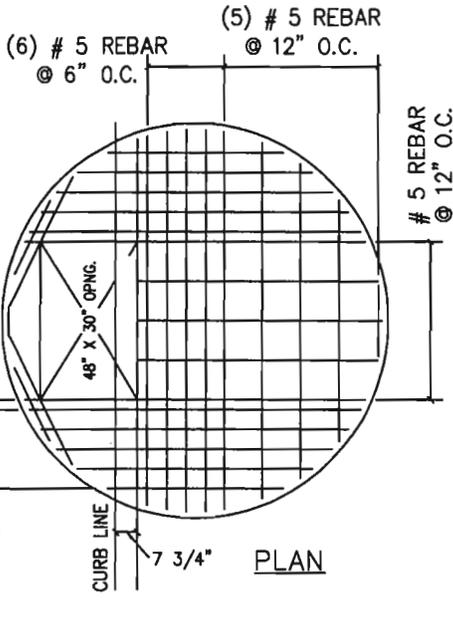
SECTION A-A

LOW DOME

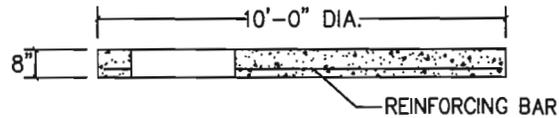
MIN. H-20 LOADING

411 GAL. STORAGE, WT - 5,200 LB.

WALL REINFORCEMENT : TOP REINFORCEMENT :  
 (12) # 2 VERT. # 4 @ 6" O/C B/W  
 (1) # 3 TOP LOOP (OR EQUIV. WMM)  
 (1) # 4 BOTTOM LOOP



PLAN

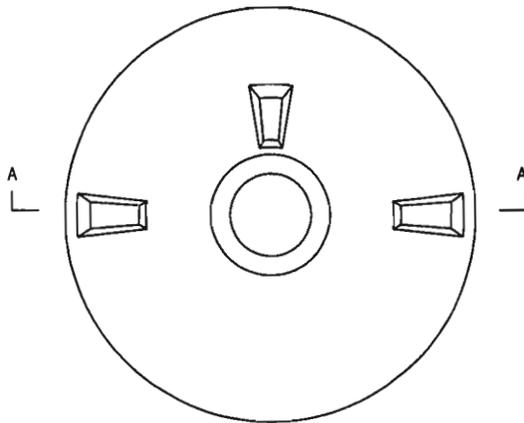


SECTION A-A

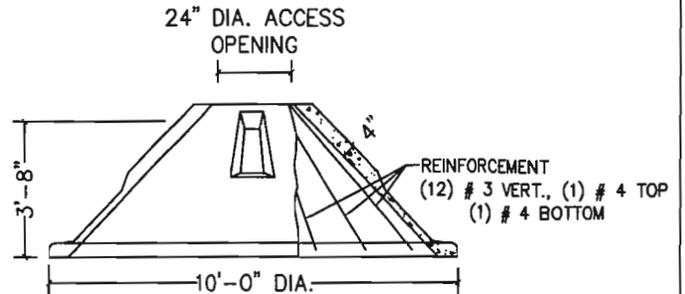
WT. - 6,900 LB.

TOP SLAB W/ RECT. or CIRC. OPENING

MIN. H-20 LOADING



PLAN



SECTION A-A

HIGH DOME

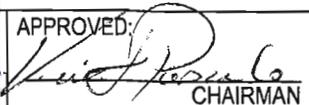
MIN. H-20 LOADING

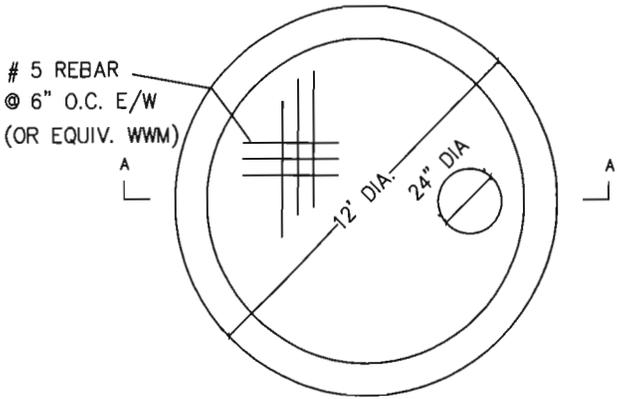
813 GAL. STORAGE

WT. - 5,100 LB.

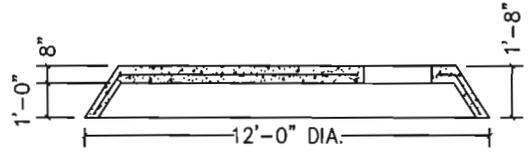
NOTES:

1. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS PRIOR TO INSTALLATION.
2. REBAR DESIGN TO MEET MIN. H-20 LOADING.
3. REBAR TO BE ASTM A-615 GRADE 60.
4. WMM TO BE ASTM A-185.
5. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
6. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.
7. PIPE SHALL NOT PENETRATE THE BOTTOM OF THE DOME.

<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>10' PRECAST COVERS</b>		
RECOMMENDED:	APPROVED:	
		
ENGINEER	CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



PLAN



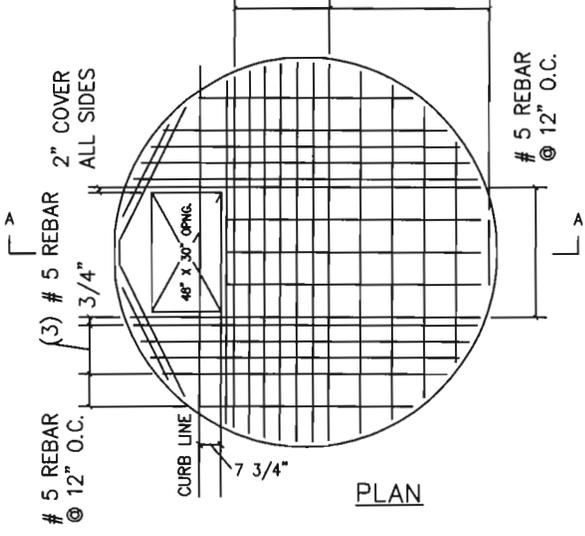
SECTION A-A

**LOW DOME**  
MIN. H-20 LOADING

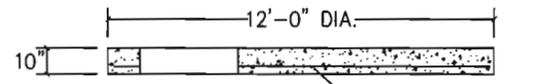
675 GAL. STORAGE, WT. - 8,840 LB.

WALL REINFORCEMENT : TOP REINFORCEMENT :  
 (12) # 2 VERT. # 5 @ 6" O/C B/W  
 (1) # 4 TOP LOOP (OR EQUIV. WWM)  
 (1) # 5 BOTTOM LOOP

(6) # 5 REBAR @ 6" O.C. (5) # 5 REBAR @ 12" O.C.



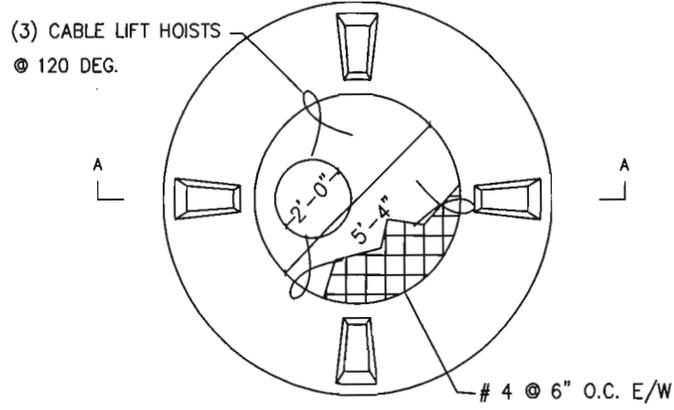
PLAN



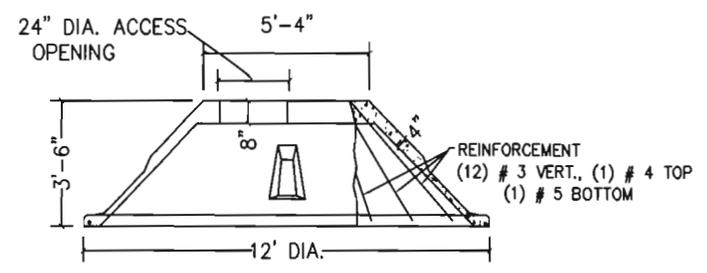
SECTION A-A

WT. - 12,750 LB.

**TOP SLAB W/ RECT. or CIRC. OPENING**  
MIN. H-20 LOADING



PLAN



SECTION A-A

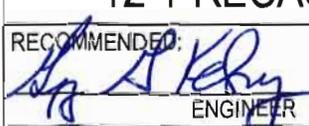
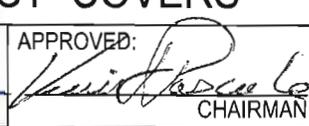
**HIGH DOME**  
MIN. H-20 LOADING  
1,335 GAL. STORAGE  
WT. - 7,300 LB.

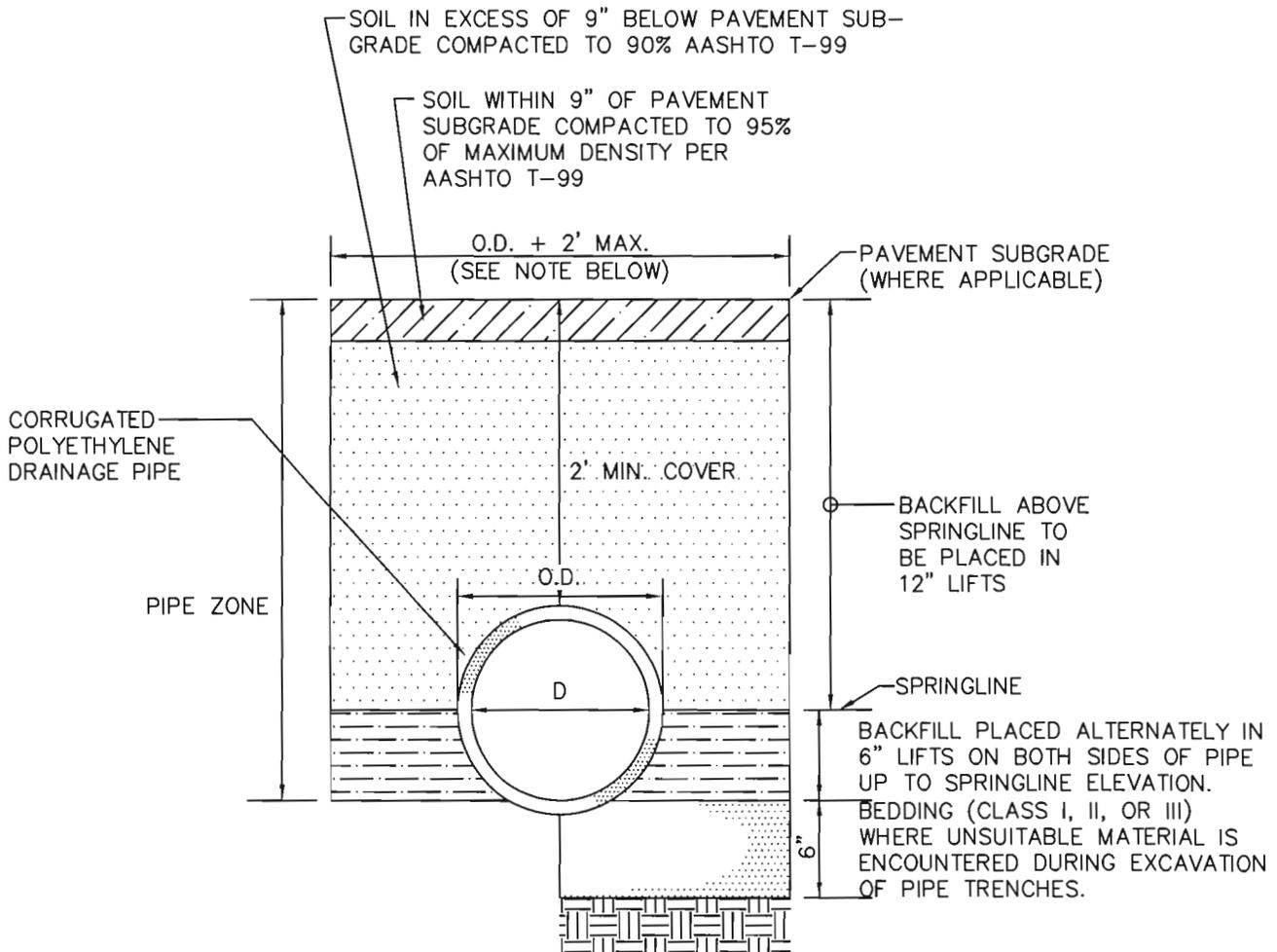
**NOTES:**

1. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS PRIOR TO INSTALLATION.
2. REBAR DESIGN TO MEET MIN. H-20 LOADING.
3. REBAR TO BE ASTM A-615 GRADE 60.
4. WWM TO BE ASTM A-185.
5. ALL PRECAST CONCRETE STRUCTURES MUST MEET ACI CODE AND SPECIFICATIONS.
6. ALL STRUCTURES MUST BE MANUFACTURED AT AN ACI CERTIFIED PLANT, A COPY OF CERTIFICATION MUST BE ON FILE WITH THE TOWN.
7. PIPE SHALL NOT PENETRATE THE BOTTOM OF THE DOME.

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

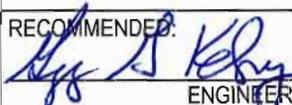
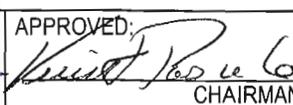
**12' PRECAST COVERS**

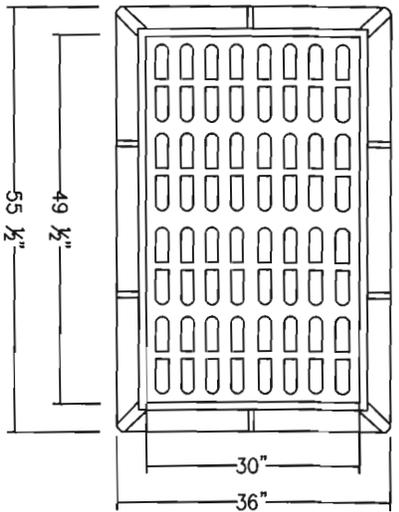
RECOMMENDED:  ENGINEER	APPROVED:  CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA



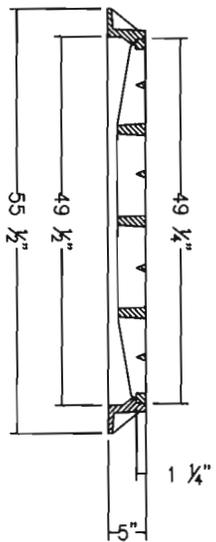
**NOTES:**

1. CLASS I, II, OR III COMPACTED BACKFILL MATERIAL REQUIRED IN ALL PIPE ZONES, PER USCS (UNIFIED SOIL CLASSIFICATIONS SYSTEM).
2. IF DEPTH OF TRENCH EXCEEDS 5', THE CONTRACTOR MUST PROVIDE SHEETING AND BRACING OR A SHEETING BOX IN ACCORDANCE WITH OSHA REGULATIONS. AS AN ALTERNATIVE, IF PERMITTED BY THE ENGINEER, THE TRENCH WALLS MAY BE CUT BACK TO A 1:1 SLOPE OR THE NATURAL ANGLE OF REPOSE FOR THE SOIL, WHICHEVER IS GREATER.
3. WHERE PIPE IS INSTALLED WITH LESS THAN 3' OF COVER WITHIN PAVEMENT AREAS, ALL BACKFILL MATERIAL THROUGHOUT THE PIPE ZONE IS TO BE CLASS I MATERIAL.
4. TESTING REQUIRED PER DISCRETION OF ENGINEER OR INSPECTOR.

<b>TOWN OF BROOKHAVEN</b>		
SUFFOLK COUNTY		
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING		
<b>DRAINAGE PIPE TRENCH</b>		
RECOMMENDED:	APPROVED:	
 ENGINEER	 CHAIRMAN	
DATE: OCTOBER 7, 2013	SCALE: NONE	DRAFTED BY: G. CASSARA

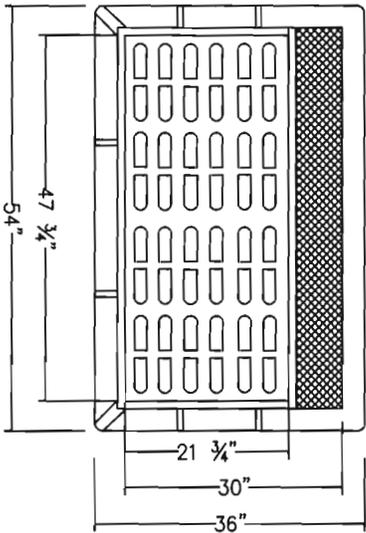


PLAN

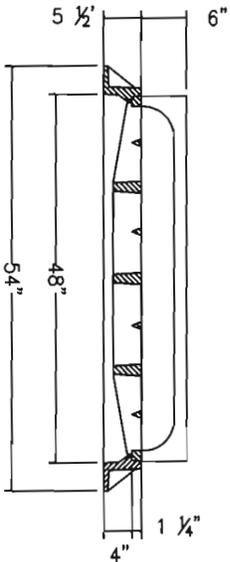


SECTION

CAMPBELL FOUNDRY 3408  
HEAVY DUTY FRAME & GRATE

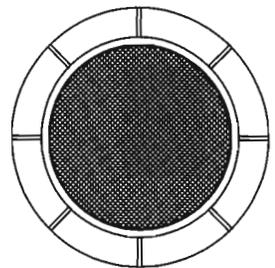


PLAN

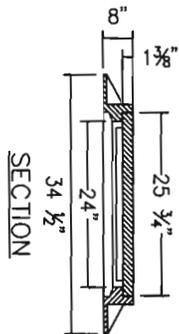


SECTION

CAMPBELL FOUNDRY 2617  
HEAVY DUTY CURB INLET

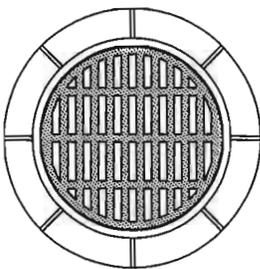


PLAN

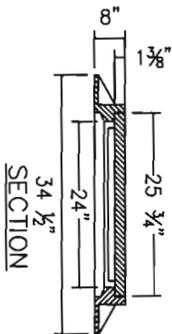


SECTION

CAMPBELL FOUNDRY 1009  
HEAVY DUTY FRAME & COVER



PLAN



SECTION

CAMPBELL FOUNDRY 1184  
HEAVY DUTY FRAME & GRATE

- NOTES:
1. MATERIALS: CONFORMS TO ASTM A48 CLASS 30B OR 35B SPECIFICATIONS
  2. LOAD RATING: FOR AASHTO & H20. CAMPBELL FOUNDRY OR APPROVED EQUAL.
  3. CASTINGS MUST MATCH PRECAST OPENING.
  3. 2 INCHES OF CASTING MUST REST ON CONCRETE PRECAST.

**TOWN OF BROOKHAVEN**  
SUFFOLK COUNTY  
DEPARTMENT OF PLANNING, DIVISION OF ENGINEERING

**CASTINGS**

RECOMMENDED:  
ENGINEER  
DATE: OCTOBER 7, 2013  
SCALE: NONE

APPROVED:  
CHAIRMAN

DRAFTED BY: G. CASSARA