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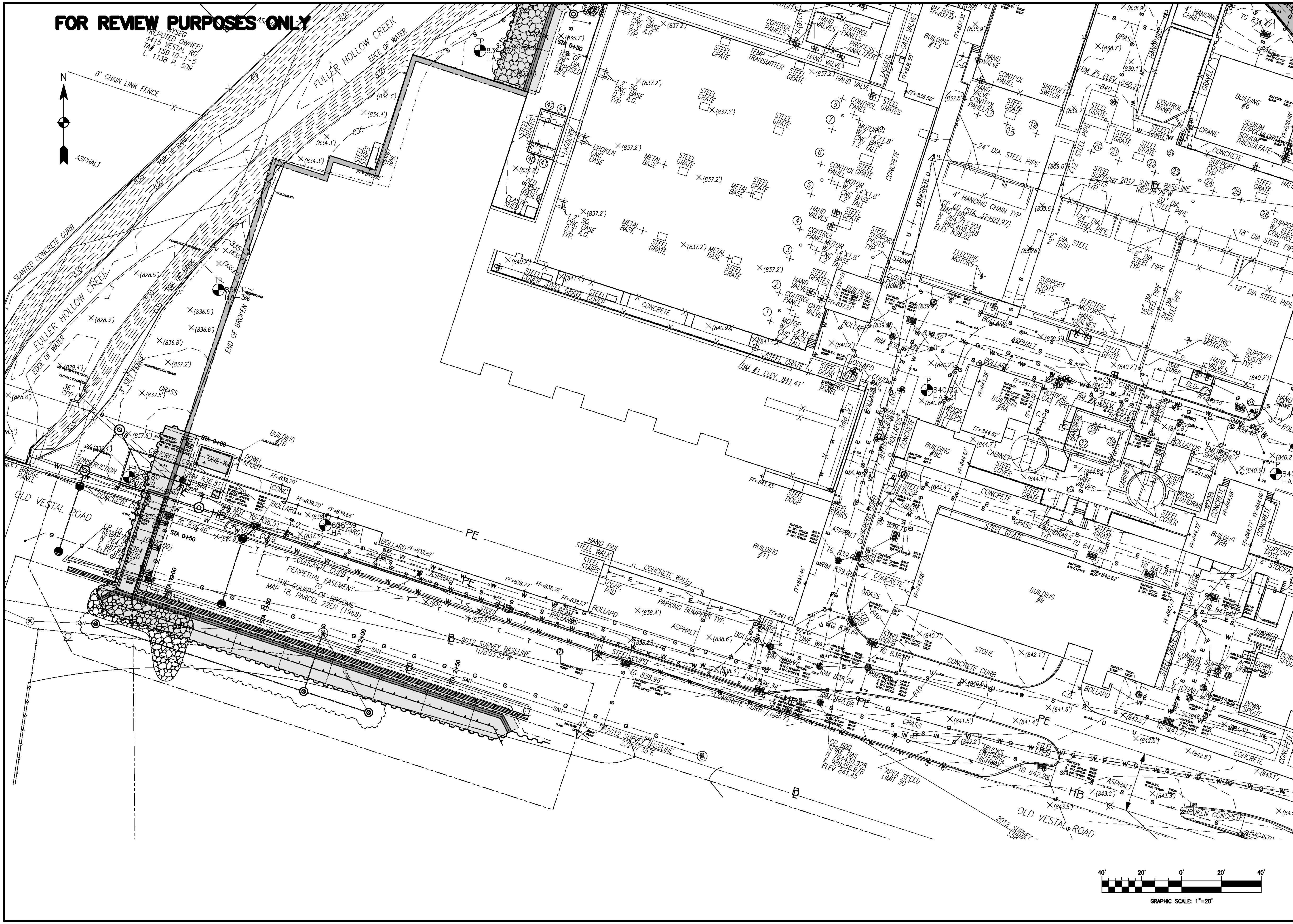

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41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING, LLC

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
Fax (607) 724-2436

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Designed by: GA	Date: 11-12-2014	Rev.#
Drawn by: GA	Ckd by: DG	Project No.: 2012-116
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Drawing Name:
GRADING PLAN-WEST

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJCJSTP FLOOD WALL

Drawing Reference Number:
C-10
X OF X

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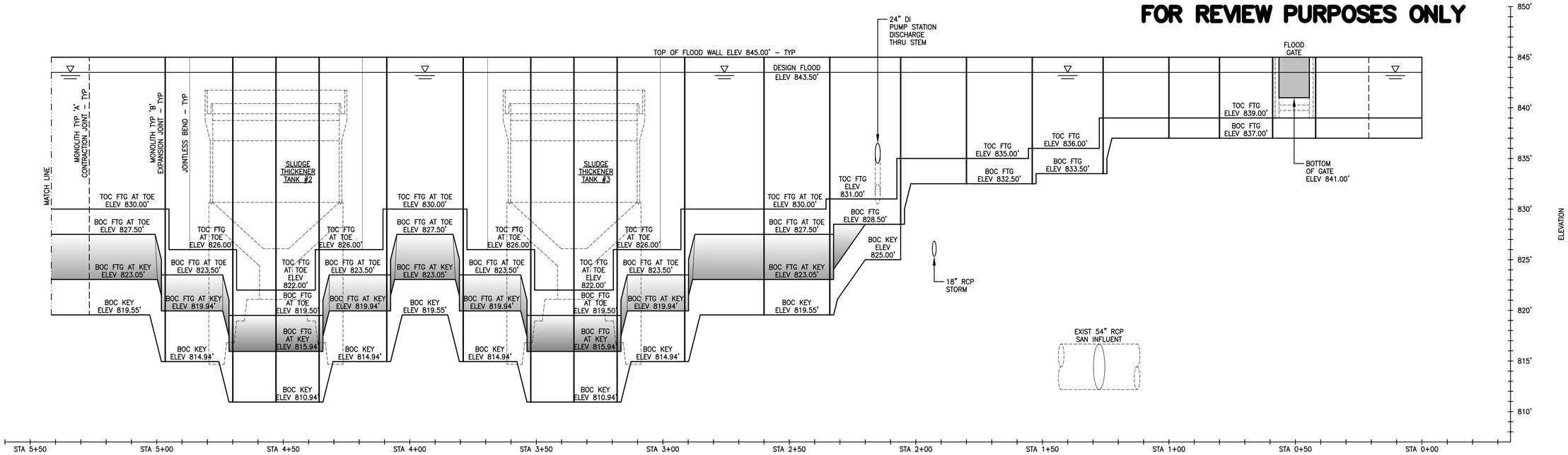
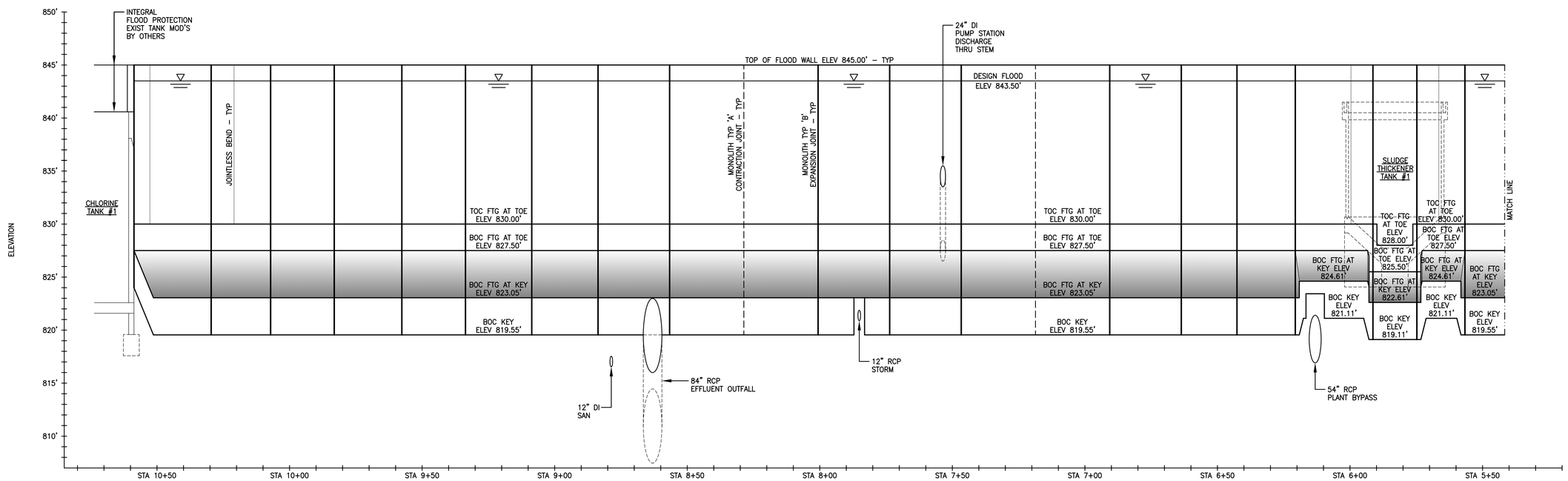


SUSQUEHANNA RIVER FLOOD WALL
VIEWED FROM LAND SIDE OF FLOOD WALL

1 / C-11 FLOOD WALL PROFILE
VERTICAL SCALE: 1"=5'
HORIZONTAL SCALE: 1"=20'



SUSQUEHANNA RIVER FLOOD WALL
VIEWED FROM LAND SIDE OF FLOOD WALL

2 / C-11 FLOOD WALL PROFILE
VERTICAL SCALE: 1"=5'
HORIZONTAL SCALE: 1"=20'

Woidt Engineering
41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
Fax (607) 724-2456

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Designed by: GA	Date: 11-12-2014
Drawn by: GA	Project No: 2012-116
Cad by: DG	Plot Scale: AS NOTED

Rev.#

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Drawing Name: FLOOD WALL PROFILES 1

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJCJSTP FLOOD WALL

Drawing Reference Number: C-11

X OF X

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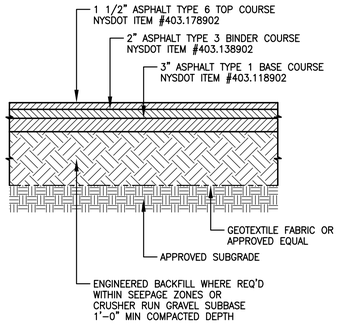
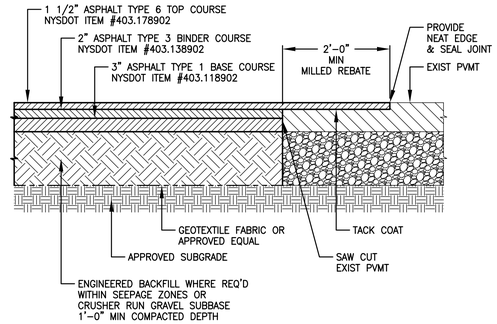


NOTES:

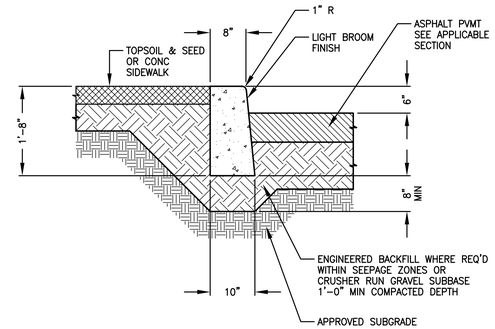
1. SAW CUT EXISTING ASPHALT AT LIMITS OF PAVEMENT REPAIR AREA AS REQUIRED. NO SEPARATE PAYMENT SHALL BE MADE, SAW CUTTING IS INCIDENTAL TO OTHER BID ITEMS.
2. SEE TYPICAL ASPHALT PAVEMENT JOINT DETAIL FOR MILLED REBATE AT TIE-IN TO EXISTING PAVEMENT.

1 / C-13 TYPICAL ROADWAY ASPHALT PAVEMENT SECTION
SCALE: 3/4"=1'-0"

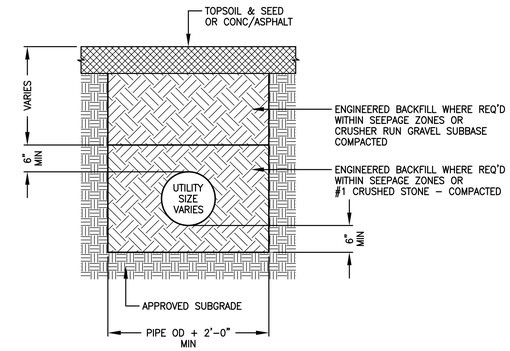


MILLED REBATE AT EXIST PAVEMENT
ROADWAY ASPHALT SECTION SHOWN
PARKING LOT ASPHALT SECTION SIMILAR

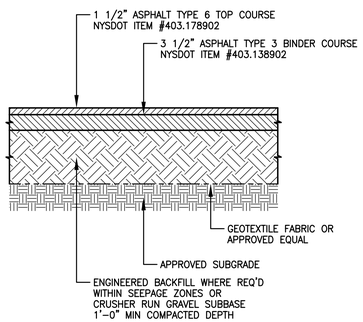
2 / C-13 TYPICAL ASPHALT PAVEMENT JOINT DETAIL
SCALE: 3/4"=1'-0"



3 / C-13 CONCRETE CURB DETAIL
SCALE: 3/4"=1'-0"



4 / C-13 TYPICAL UTILITY TRENCH DETAIL
SCALE: 3/4"=1'-0"

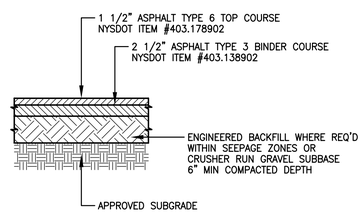


NOTES:

1. SAW CUT EXISTING ASPHALT AT LIMITS OF PAVEMENT REPAIR AREA AS REQUIRED. NO SEPARATE PAYMENT SHALL BE MADE, SAW CUTTING IS INCIDENTAL TO OTHER BID ITEMS.
2. SEE TYPICAL ASPHALT PAVEMENT JOINT DETAIL FOR MILLED REBATE AT TIE-IN TO EXISTING PAVEMENT.

APPLIES TO ROADSIDE ASPHALT APRONS

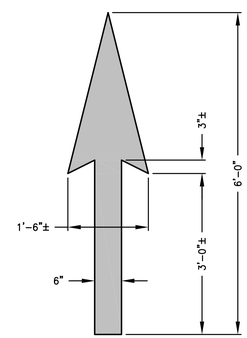
5 / C-13 TYPICAL PARKING LOT ASPHALT PAVEMENT SECTION
SCALE: 3/4"=1'-0"



NOTE:

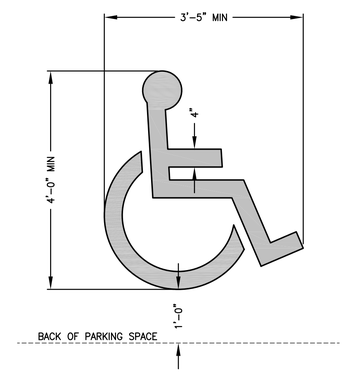
1. PROVIDE 1% MINIMUM CROSS SLOPE.

6 / C-13 ASPHALT SIDEWALK DETAIL
SCALE: 3/4"=1'-0"



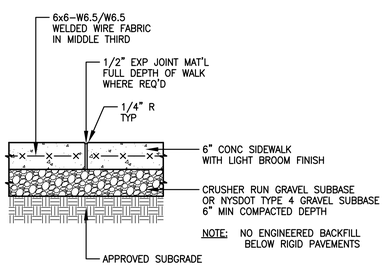
TRAFFIC FLOW ARROW

7 / C-13 PAVEMENT MARKING DETAIL
SCALE: 3/4"=1'-0"



ADA PARKING SYMBOL

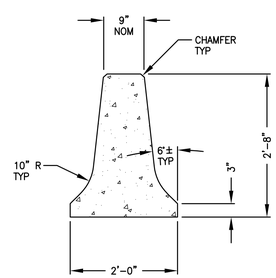
8 / C-13 PAVEMENT MARKING DETAIL
SCALE: 3/4"=1'-0"



NOTE:

1. PROVIDE 1% MINIMUM CROSS SLOPE.

9 / C-13 CONCRETE SIDEWALK DETAIL
SCALE: 3/4"=1'-0"



REPRESENTATIVE DIM'S SHOWN
AN APPROVED ALTERNATE EQUIVALENT SECTION
MAY BE SUBSTITUTED

10 / C-13 PRECAST CONCRETE MEDIAN BARRIER
SCALE: 3/4"=1'-0"

Woidt Engineering
41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
Fax (607) 724-2456

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Drawn by: GA
Cad by: DG
Plot Scale: AS NOTED

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Drawing Name: MISCELLANEOUS DETAILS 1

Project Location: OLD VESTAL ROAD
TOWN OF VESTAL
BROOME COUNTY, NY

Project Name: **BJCSTP FLOOD WALL**

Drawing Reference Number:
C-13
X OF X

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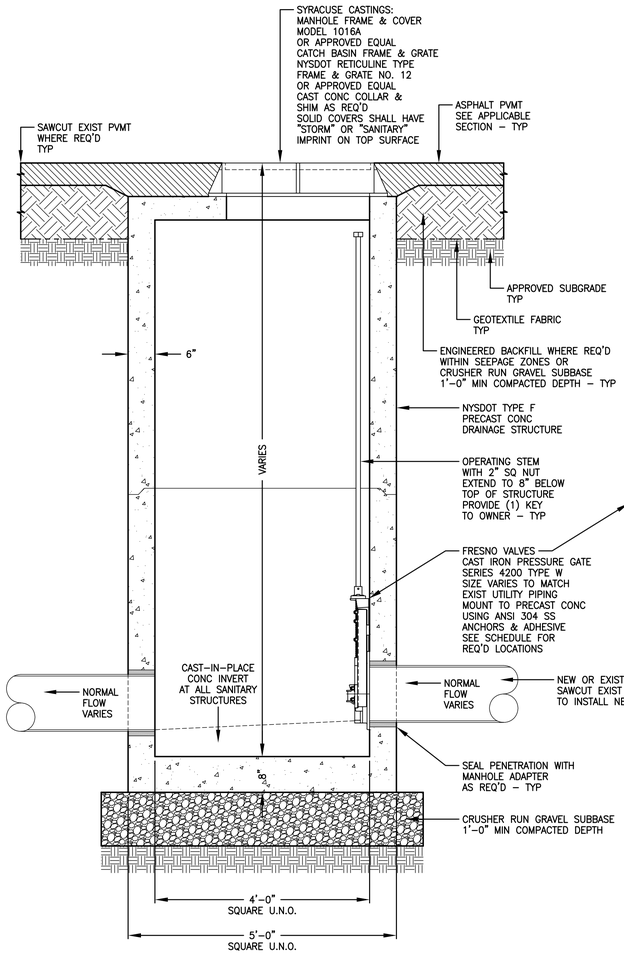
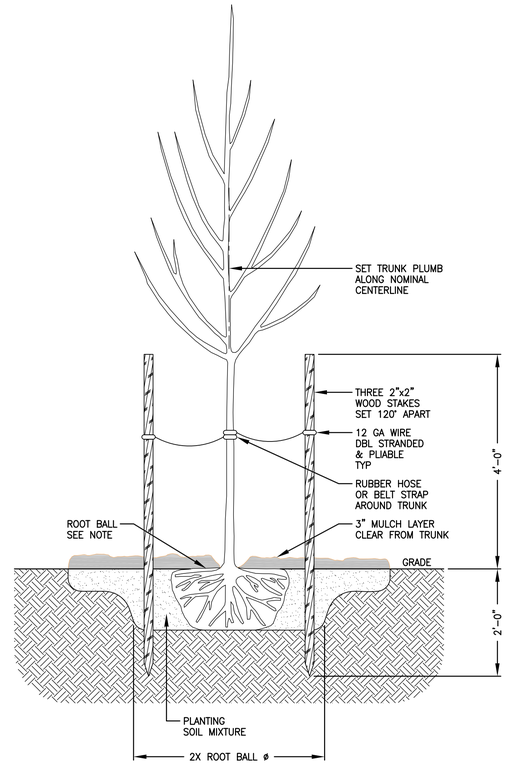


NOTE: ALL NEW STRUCTURES, FRAMES & COVERS SHALL MEET AASHTO HS–25 HIGHWAY LOADING

PRESSURE GATES SHOWN NOT TYPICAL – ONLY WHERE APPLICABLE

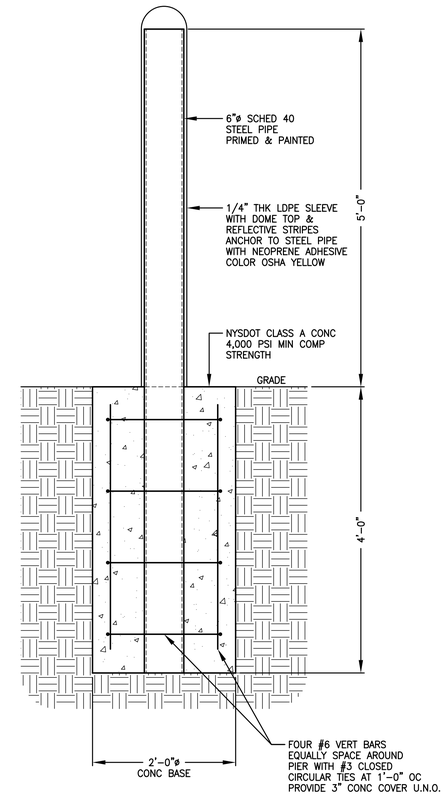
1 / C–14 TYPICAL DRAINAGE STRUCTURE DETAIL
SCALE: 3/4"=1'–0"



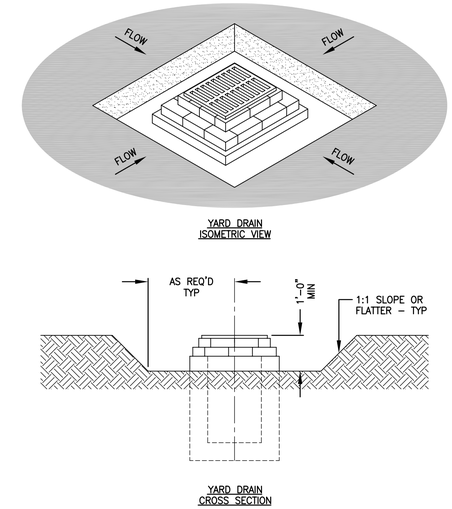
NOTE:

SET TOP OF ROOT BALL 2" ABOVE FINISHED GRADE AND REMOVE ALL BALLING ROPE AND TOP HALF OF WIRE BASKET. REMOVE BURLAP FROM UPPER THIRD OF ROOT BALL.

2 / C–14 TREE PLANTING DETAIL
SCALE: NONE



3 / C–14 TYPICAL BOLLARD DETAIL
SCALE: 1"=1'–0"

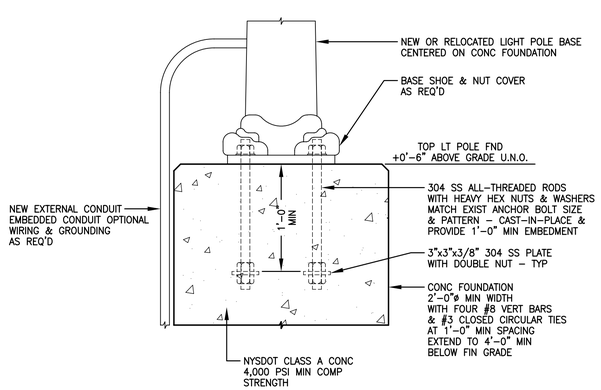


NOTES:

1. SEDIMENT SHALL BE REMOVED AND THE TRAP SHALL BE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. ALL REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CF PER ACRE OF CONTRIBUTORY DRAINAGE.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS SHALL BE MADE AS REQUIRED.
4. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER THAT WILL MINIMIZE EROSION AND WATER POLLUTION.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA SHALL BE STABILIZED WHEN THE CONSTRUCTION DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER SLOPE. DRAINAGE AREA SHALL NOT EXCEED 1 ACRE PER TRAP.

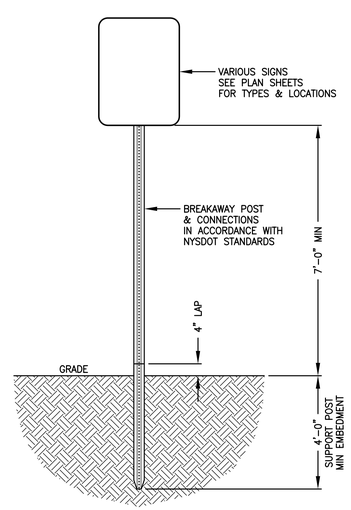
NYSDOT ITEM #209.1403

4 / C–14 CATCH BASIN SEDIMENT TRAP DETAIL
SCALE: NONE

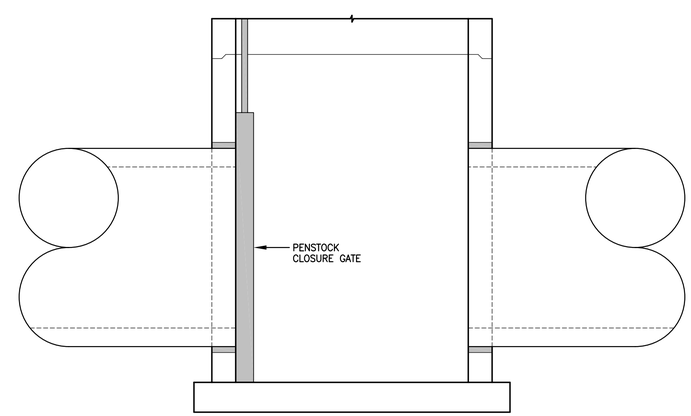


SEE ELEC DWG'S FOR LOCATIONS/CONDUIT/WIRING

5 / C–14 LIGHT POLE BASE DETAIL
SCALE: 1 1/2"=1'–0"



6 / C–14 SIGN INSTALLATION DETAIL
SCALE: NONE



54" PIPE SHOWN – OTHER SIZES SIMILAR

7 / C–14 TYPICAL PENSTOCK GATE DETAIL
SCALE: 1/2"=1'–0"

Woidt Engineering
41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
Fax (607) 724-2456

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Designed by: GA
Drawn by: GA
Chd by: DG
Date: 11–12–2014
Project No.: 2012–116
Rev.#
Plot Scale: AS NOTED

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Drawing Name: MISCELLANEOUS DETAILS 2

Project Location: OLD VESTAL ROAD
TOWN OF VESTAL,
BROOME COUNTY, NY

Project Name: BJCJSTP
FLOOD WALL

Drawing Reference Number:
C–14
X OF X

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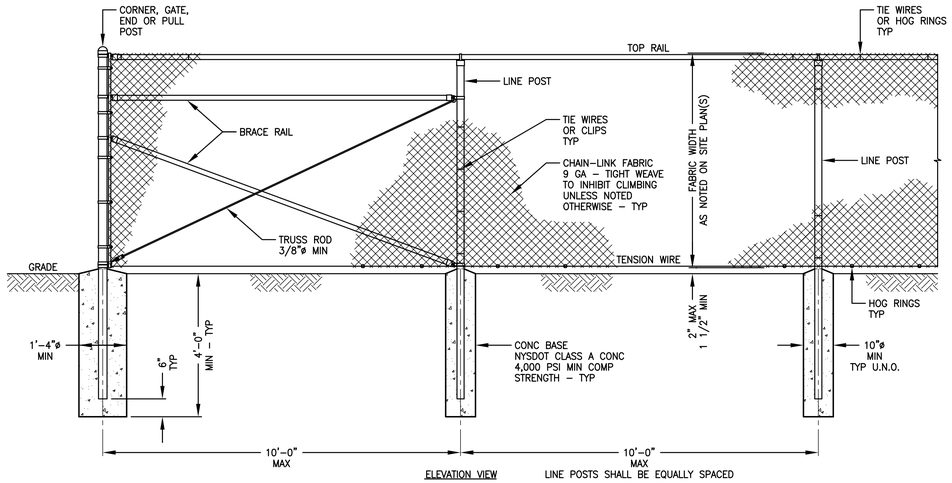
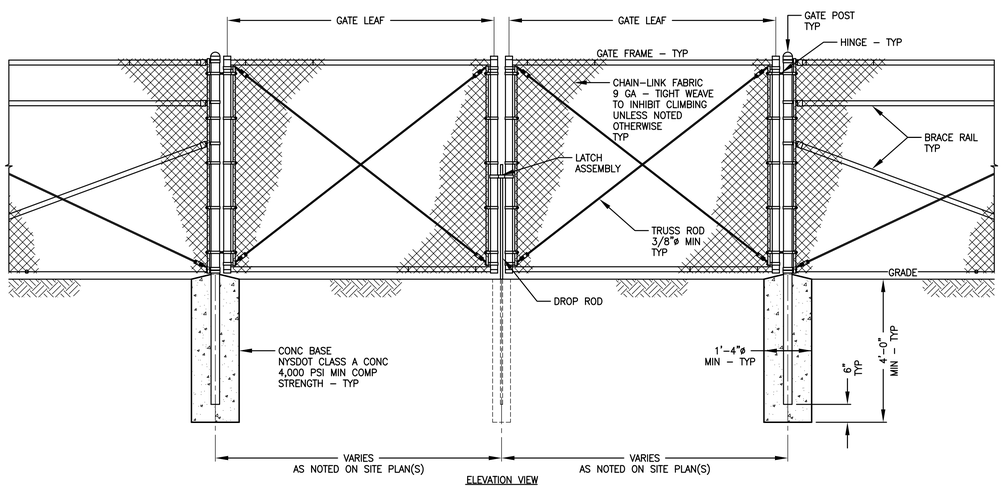


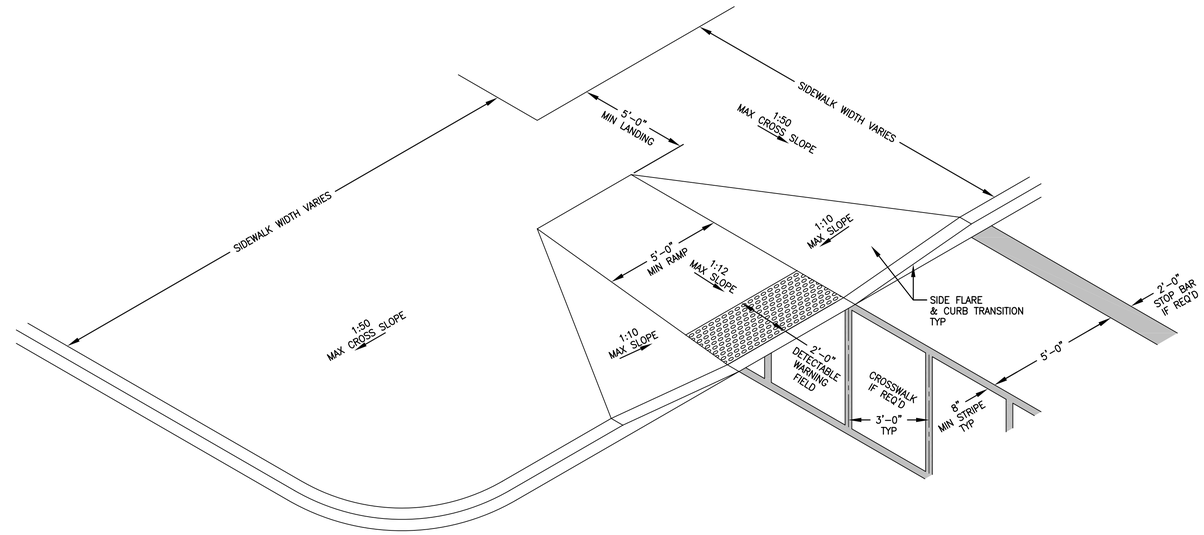
1 / C-15 TYPICAL FENCE DETAIL
SCALE: 1/2"=1'-0"



2 / C-15 TYPICAL FENCE GATE DETAIL
SCALE: 1/2"=1'-0"

CHAIN-LINK FENCE NOTES

1. DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF APPROVED EQUIVALENT FENCE SECTIONS AND METHODS OF INSTALLATION.
2. ALL WIRE TIES, CLIPS, RAILS, POSTS, BRACES AND TRUSS RODS SHALL BE CONSTRUCTED ON THE SECURED SIDE OF THE FENCE ALIGNMENT. ALL CHAIN-LINK FABRIC SHALL BE PLACED ON THE NON-SECURED SIDE OF THE FENCE.
3. ALL NEW CHAIN-LINK FENCE AND GATES SHALL COMPLY WITH NYSDOT STANDARD SPECIFICATIONS SECTION 607.



CURB/SIDEWALK ADA RAMP NOTES:

1. THERE SHALL BE A LANDING AT THE TOP OF EACH CURB RAMP. THERE SHALL BE A LANDING AT THE TOP AND BOTTOM OF EACH PARALLEL AND PARALLEL/PERPENDICULAR RAMP.
2. ALL LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF 5'x5'. THE MAXIMUM CROSS SLOPE AT LANDINGS IS 2% IN ANY DIRECTION. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS, PARALLEL OR PARALLEL/PERPENDICULAR RAMPS. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.
3. THE MAXIMUM CROSS SLOPE OF CURB RAMPS SHALL BE 2%. CURB RAMP SURFACES SHALL GENERALLY LIE IN CONTINUOUS PLANES WITH A MINIMUM OF SURFACE WARP.
4. THE RUNNING GRADE OF CURB RAMPS SHALL BE AS FLAT AS PRACTICABLE. THE MAXIMUM RUNNING GRADE OF ANY PORTION OF CURB RAMPS SHALL BE 8.3% AND CURB RAMPS ARE NOT REQUIRED TO BE LONGER THAN 15.09'
5. CURB RAMPS LOCATED WHERE PEDESTRIANS MAY WALK ACROSS THE CURB RAMP SHALL HAVE FLARED SIDES. THE LENGTH OF THE FLARES SHALL BE AT LEAST TEN (10) TIMES THE CURB HEIGHT, MEASURED ALONG THE CURB LINE. WHERE IT IS NOT PRACTICABLE TO PROVIDE A 5' MINIMUM WIDTH LANDING AT THE TOP OF A CURB RAMP THE LENGTH OF THE SIDE FLARES SHALL BE TWELVE (12) TIMES THE CURB HEIGHT, MEASURED ALONG THE CURB LINE.
6. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES EXCLUSIVE OF THE DETECTABLE WARNING FIELD.
7. RAMP TRANSITIONS BETWEEN WALKS, GUTTERS OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES GREATER THAN 1/4".
8. CROSS SLOPES OR BLENDED TRANSITIONS SHALL NOT BE STEEPER THAN 2% IN ANY DIRECTION.

3 / C-15 TYPICAL CURB/SIDEWALK ADA RAMP & PAVEMENT STRIPING DETAIL
SCALE: NONE

Woidt Engineering
41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
Binghamton, New York
Fax (607) 724-2436

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Plot Scale: AS NOTED

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Drawing Name: MISCELLANEOUS DETAILS 3

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJC/STP FLOOD WALL

Drawing Reference Number: C-15
X OF X

FOR REVIEW PURPOSES ONLY

SUSQUEHANNA RIVER FLOOD WALL CONSTRUCTION JOINT SCHEDULE			
STATION	T-WALL TYPE	MONOLITH JOINT TYPE DETAIL	DESCRIPTION
0+00	1	NONE	BEGIN T-WALL (BF TOE ELEV 837.00')
0+21	1	"A"	CONTRACTION JOINT
0+42	1	"B"	EXPANSION JOINT
0+44.50	1	NONE	BEGIN GATE
0+56.50	1	NONE	END GATE
0+59	1	"B"	EXPANSION JOINT
0+80	1	"B"	EXPANSION JOINT
1+00	1	"B"	EXPANSION JOINT AT BEND
1+26	1 & 2	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 833.50')
1+54	2 & 3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 832.50')
1+80	3	"B"	EXPANSION JOINT AT BEND
2+06	3 & KY-1	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 828.50')
2+15.08	KY-1	NONE	CENTERLINE 24" STEM PENETRATION WITH LINK-SEAL
2+34	KY-1 & KY-2	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 827.50')
2+60	KY-2	"B"	EXPANSION JOINT AT BEND
2+91.34	KY-2 & SLGT-2-3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 823.50')
3+01	SLGT-2-3	NONE	BEGIN CURVED STEM
3+18.06	SLGT-2-3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 819.50')
3+35.12	SLGT-2-3	"B"	EXPANSION JOINT
3+52.18	SLGT-2-3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 823.50')
3+69.24	SLGT-2-3	NONE	END CURVED STEM
3+78.90	SLGT-2-3 & KY-2	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 827.50')
4+09.10	KY-2 & SLGT-2-3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 823.50')
4+18.76	SLGT-2-3	NONE	BEGIN CURVED STEM
4+35.82	SLGT-2-3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 819.50')
4+52.88	SLGT-2-3	"B"	EXPANSION JOINT
4+69.94	SLGT-2-3	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 823.50')
4+87	SLGT-2-3	NONE	END CURVED STEM
4+96.66	SLGT-2-3 & KY-2	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 827.50')
5+26.66	KY-2	"A"	CONTRACTION JOINT
5+56.66	KY-2 & SLGT-1	"B"	EXPANSION JOINT

SUSQUEHANNA RIVER FLOOD WALL CONSTRUCTION JOINT SCHEDULE – CONTINUED			
STATION	T-WALL TYPE	MONOLITH JOINT TYPE DETAIL	DESCRIPTION
5+66.51	SLGT-1	NONE	BEGIN CURVED STEM
5+74.79	SLGT-1	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 825.50')
5+91.36	SLGT-1	"B"	EXPANSION JOINT AT CENTERLINE OF FOOTING STEP (BF TOE ELEV 827.50')
5+99.64	SLGT-1	NONE	END CURVED STEM
6+20.64	SLGT-1 & KY-2	"B"	EXPANSION JOINT
6+42.64	KY-2	"B"	EXPANSION JOINT
6+63.64	KY-2	"B"	EXPANSION JOINT AT BEND
6+90.64	KY-2	"B"	EXPANSION JOINT
7+18.64	KY-2	"A"	CONTRACTION JOINT
7+46.64	KY-2	"B"	EXPANSION JOINT
7+53.56	KY-2	NONE	CENTERLINE 24" STEM PENETRATION WITH LINK-SEAL
7+73.64	KY-2	"B"	EXPANSION JOINT AT BEND
8+00.64	KY-2	"B"	EXPANSION JOINT
8+28.64	KY-2	"A"	CONTRACTION JOINT
8+56.64	KY-2	"B"	EXPANSION JOINT
8+83.64	KY-2	"B"	EXPANSION JOINT AT BEND
9+08.64	KY-2	"B"	EXPANSION JOINT
9+33.64	KY-2	"B"	EXPANSION JOINT AT BEND
9+57.64	KY-2	"B"	EXPANSION JOINT
9+83.14	KY-2	"B"	EXPANSION JOINT
10+07.14	KY-2	"B"	EXPANSION JOINT AT BEND
10+20.93	KY-2	NONE	JOINTLESS BEND
10+29.56	KY-2	"B"	EXPANSION JOINT
10+52.68	KY-2	NONE	JOINTLESS BEND
10+58.68	KY-2	"B"	END T-WALL (BF TOE ELEV 827.50') EXP JT & WATERSTOP AT INTEGRAL

FULLER HOLLOW CREEK FLOOD WALL CONSTRUCTION JOINT SCHEDULE			
STATION	T-WALL TYPE	MONOLITH JOINT TYPE DETAIL	DESCRIPTION
0+00	KY-2B	"B"	BEGIN T-WALL (BF TOE ELEV 827.50') EXP JT & WATERSTOP AT INTEGRAL
0+10	KY-2B	"B"	EXPANSION JOINT AT BEND
0+19.19	KY-2B	NONE	CENTERLINE 4" STEM PENETRATION WITH LINK-SEAL
0+22.19	KY-2B	NONE	CENTERLINE 4" STEM PENETRATION WITH LINK-SEAL
0+34	KY-2B	"B"	EXPANSION JOINT AT BEND
0+56.50	KY-2B	"B"	EXPANSION JOINT
0+79	KY-2B	"B"	END T-WALL (BF TOE ELEV 827.50') EXP JT & WATERSTOP AT INTEGRAL

OLD VESTAL ROAD FLOOD WALL CONSTRUCTION JOINT SCHEDULE			
STATION	T-WALL TYPE	MONOLITH JOINT TYPE DETAIL	DESCRIPTION
0+00	3	"B"	BEGIN T-WALL (BF TOE ELEV 832.50') EXP JT & WATERSTOP AT INTEGRAL
0+31.50	3	"B"	EXPANSION JOINT
0+34	3	NONE	BEGIN GATE
0+53.50	3	"A"	BASE FTG CONTROL JOINT
0+75.50	3	"A"	BASE FTG CONTROL JOINT
0+86	3 & 3-SUR	NONE	END GATE AT JOINTLESS BEND
0+90	3-SUR	"B"	EXPANSION JOINT
1+15	3-SUR	"B"	EXPANSION JOINT
1+40	3-SUR	"A"	CONTRACTION JOINT
1+65	3-SUR	"B"	EXPANSION JOINT
1+90	3-SUR	"A"	CONTRACTION JOINT
2+15	3-SUR	"B"	EXPANSION JOINT
2+40	3-SUR	"A"	CONTRACTION JOINT
2+65	3-SUR	"B"	EXPANSION JOINT
2+79.83	3-SUR	NONE	JOINTLESS BEND
2+88.83	3-SUR	NONE	END T-WALL (BF TOE ELEV 832.50')

SCHEDULE OF T-WALL TYPES						
FLOOD WALL	STATION	T-WALL TYPE	LENGTH	TOTAL LENGTH	BOTTOM OF BASE FOOTING ELEVATION	
					AT TOE	AT HEEL
SUSQUEHANNA RIVER	0+00 TO 1+26	1	126'	1058.68'	837.00'	837.00'
	1+26 TO 1+54	2	28'		833.50'	833.50'
	1+54 TO 2+06	3	52'		832.50'	832.50'
	2+06 TO 2+34	KY-1	28'		828.50'	828.50'
	2+34 TO 2+91.34	KY-2	57.34'		827.50'	823.05'
	2+91.34 TO 3+18.06	KY-2 & SLGT-2-3	26.72'		823.50'	819.94'
	3+18.06 TO 3+52.18	SLGT-2-3	34.12'		819.50'	815.94'
	3+52.18 TO 3+78.90	SLGT-2-3 & KY-2	26.72'		823.50'	819.94'
	3+78.90 TO 4+09.10	KY-2	30.20'		827.50'	823.05'
	4+09.10 TO 4+35.82	KY-2 & SLGT-2-3	26.72'		823.50'	819.94'
	4+35.82 TO 4+69.94	SLGT-2-3	34.12'		819.50'	815.94'
	4+69.94 TO 4+96.66	SLGT-2-3 & KY-2	26.72'		823.50'	819.94'
	4+96.66 TO 5+56.66	KY-2	60'		827.50'	823.05'
	5+56.66 TO 5+74.79	KY-2 & SLGT-1	18.13'		827.50'	824.61'
	5+74.79 TO 5+91.36	SLGT-1	16.57'		825.50'	822.61'
	5+91.36 TO 6+20.64	SLGT-1 & KY-2	29.28'		827.50'	824.61'
	6+20.64 TO 10+58.68	KY-2	438.04'		827.50'	823.05'
FULLER HOLLOW CREEK	0+00 TO 0+79	KY-2B	79'	79'	827.50'	823.05'
OLD VESTAL ROAD	0+00 TO 0+86	3	86'	288.83'	832.50'	832.50'
	0+86 TO 2+88.83	3-SUR	202.83'		832.50'	832.50'

SHEET PILING CUT-OFF WALL/SCOUR PROTECTION ELEVATION SCHEDULE								
SUSQUEHANNA RIVER FLOOD WALL			FULLER HOLLOW CREEK FLOOD WALL			OLD VESTAL ROAD FLOOD WALL		
STATION	ELEVATION		STATION	ELEVATION		STATION	ELEVATION	
	TOP	BOTTOM		TOP	BOTTOM		TOP	BOTTOM
0 MINUS 20 TO 0+00	845.00'	829.00'	0+00 TO 0+79 (END)	833.55'	811.55' (3)	0+00 TO 0+86	835.00'	824.50'
0+00 TO 1+26	839.00'	829.00'				0+86 TO 2+88.83	FIN GRADE MINUS 1.42' (4)	824.50'
1+26 TO 1+54	836.00'	825.50'				2+88.83 TO PLUS 20 (END)	845.00'	824.50'
1+54 TO 2+06	835.00'	824.50'						
2+06 TO 2+34	835.50' (1)	817.00'						
2+34 TO 2+91.34	831.05' (1) (2)	811.55'						
2+91.34 TO 3+18.06	827.33' (1) (2)	806.94'						
3+18.06 TO 3+52.18	823.33' (1) (2)	802.94'						
3+52.18 TO 3+78.90	827.33' (1) (2)	806.94'						
3+78.90 TO 4+09.10	831.05' (1) (2)	811.55'						
4+09.10 TO 4+35.82	827.33' (1) (2)	806.94'						
4+35.82 TO 4+69.94	823.33' (1) (2)	802.94'						
4+69.94 TO 4+96.66	827.33' (1) (2)	806.94'						
4+96.66 TO 5+56.66	831.05' (1) (2)	811.55'						
5+56.66 TO 5+74.79	831.85' (1) (2)	813.11'						
5+74.79 TO 5+91.36	829.85' (1) (2)	811.11'						
5+91.36 TO 6+20.64	831.85' (1) (2)	813.11'						
6+20.64 TO 9+40±	831.05' (1) (2)	811.55'						
9+40± TO 10+58.68 (END)	831.05' (2)	811.55' (3)						

(1) – INDICATES 1V:2H TRANSITION REQ'D AT ADJACENT ABOVE GRADE TOP OF SHEET PILING ELEVATION CHANGES

(2) – INDICATES TEMPORARY TOP OF SHEET PILING AT ELEVATION 832.50'± FOR CONSTRUCTION TEMPORARY PROTECTION & DEWATERING PURPOSES

(3) – INDICATES BOTTOM OF SHEET PILING AT CLOSE PROXIMITY TO WEATHERED BEDROCK AND REFUSAL COULD MORE LIKELY GOVERN AT THIS LOCATION

(4) – INDICATES TEMPORARY TOP OF SHEET PILING AT EXIST GRADE PLUS 0.50'± FOR CONSTRUCTION TEMPORARY SHORING PURPOSES

CATCH BASIN & MANHOLE SCHEDULE					
STRUCTURE NUMBER	STRUCTURE CENTERLINE COORDINATES		TOP OF FRAME ELEVATION	INVERT ELEVATIONS	
	NORTHING	EASTING		IN	OUT
CB-1	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W) XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W) XXX.XX' (X"-N,S,E,W)
CB-2	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-3	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-4	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-5	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-6	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-7	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-8	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-9	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W) XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W) XXX.XX' (X"-N,S,E,W)
CB-10	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-11	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
CB-12	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-1	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-2	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-3	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-4	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-5	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W) XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W) XXX.XX' (X"-N,S,E,W)
MH-6	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-7	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-8	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-9	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-10	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-11	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)
MH-12	XXXXXX.XX	XXXXXX.XX	XXX.XX'	XXX.XX' (X"-N,S,E,W)	XXX.XX' (X"-N,S,E,W)

* – INDICATES PRESSURE GATE REQUIRED
** – INDICATES BACKFLOW PREVENTER & FLAP GATE REQUIRED
*** – INDICATES PIPE DROP & TIDEFLEX CHECK VALVE REQUIRED – COOR'D INVERT ELEVATION IN FIELD

Woidt Engineering
41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING, LLC

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
Fax (607) 724-2436

Seal

Date: 11-12-2014
Rev.#
Project No.: 2012-116
Plot Scale: AS NOTED
Designed by: GA
Drawn by: GA
Ckd by: DG

UNAUTHORIZED ALTERATION OF THIS DRAWING IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209, SUBDIVISION 2.

Drawing Name: TABULATED SCHEDULES

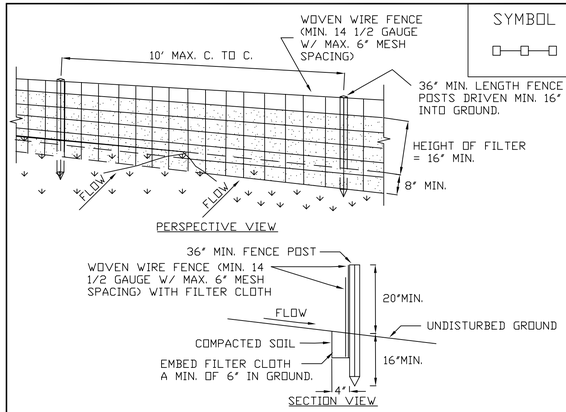
Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: **BJCJSTP FLOOD WALL**

Drawing Reference Number: C-16

X OF X

FOR REVIEW PURPOSES ONLY



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER 'T' OR 'U' TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

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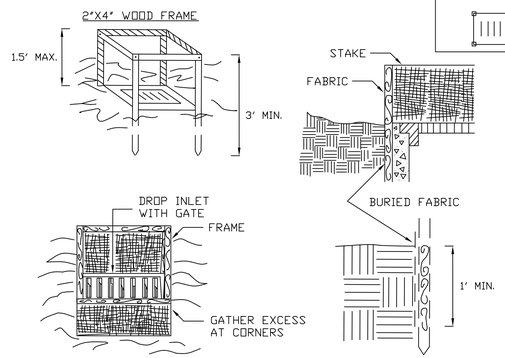
SILT FENCE



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUN DRAINAGE AREA 1 ACRE

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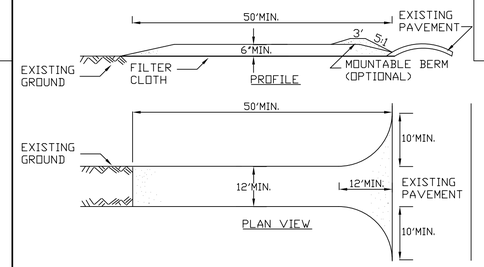
FILTER FABRIC DROP INLET PROTECTION



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON-STRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

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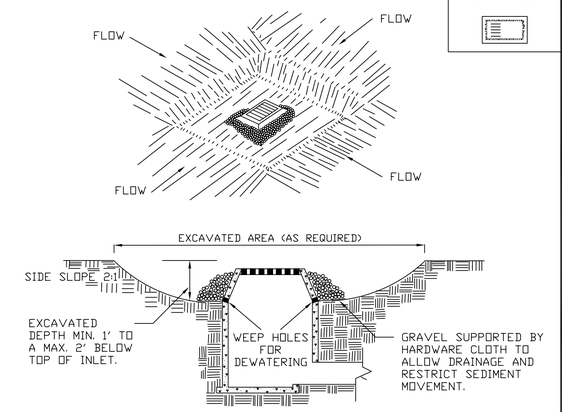
STABILIZED CONSTRUCTION ENTRANCE



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

MAXIMUM DRAINAGE AREA 1 ACRE

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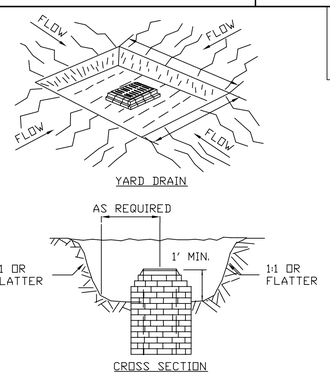
EXCAVATED DROP INLET PROTECTION



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE VOLUME OF SEDIMENT STORAGE SHALL BE 1800 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. ALL CUT SLOPES SHALL BE 1:1 OR FLATTER.

MAXIMUM DRAINAGE AREA: 3 ACRES

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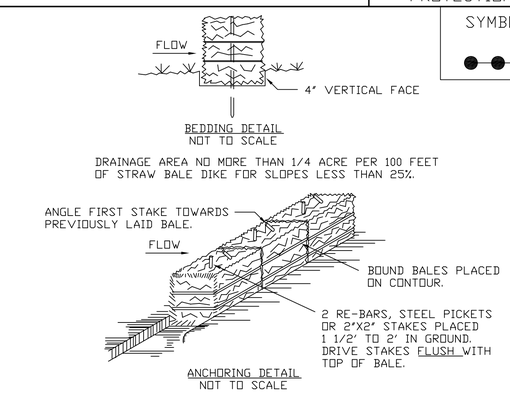
CATCH BASIN SEDIMENT TRAP ST-III



SYMBOL

DRAINAGE AREA NO MORE THAN 1/4 ACRE PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULLNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

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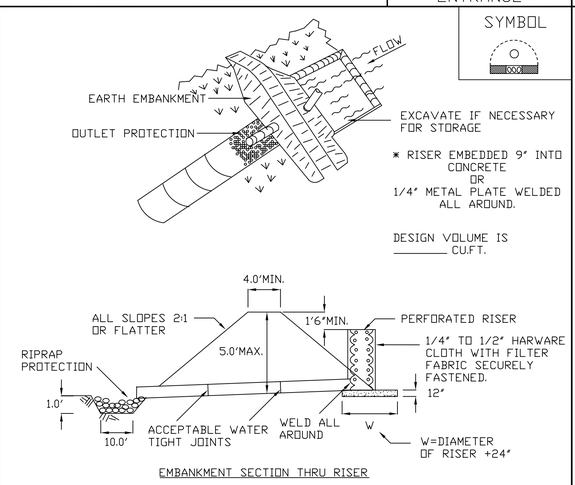
STRAW BALE DIKE



SYMBOL

SIZES OF PIPE NEEDED:

BARREL DIAMETER: _____
RISER DIAMETER: _____

NOTE:
CONSTRUCTION SPECIFICATION SHOULD BE ATTACHED TO THIS DETAIL TO COMPLETE DESIGN.

MAXIMUM DRAINAGE AREA: 5 ACRES

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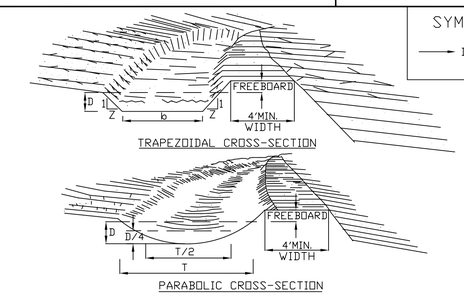
PIPE OUTLET SEDIMENT TRAP ST-1



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION.
2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
3. FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETE DIVERSION.
4. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIVERSION.
5. STABILIZATION SHALL BE DONE ACCORDING TO THE APPROPRIATE STANDARD AND SPECIFICATIONS FOR VEGETATIVE PRACTICES.
   A. FOR DESIGN VELOCITIES OF LESS THAN 3.5 FT. PER. SEC., SEEDING AND MULCHING MAY BE USED FOR THE ESTABLISHMENT OF THE VEGETATION. IT IS RECOMMENDED THAT, WHEN CONDITIONS PERMIT, TEMPORARY DIVERSIONS OR OTHER MEANS SHOULD BE USED TO PREVENT WATER FROM ENTERING THE DIVERSION DURING THE ESTABLISHMENT OF THE VEGETATION.
   B. FOR DESIGN VELOCITIES OF MORE THAN 3.5 FT. PER. SEC., THE DIVERSION SHALL BE STABILIZED WITH SOD, WITH SEEDING PROTECTED BY JUTE OR EXCELSIOR MATTING OR WITH SEEDING AND MULCHING INCLUDING TEMPORARY DIVERSION OF THE WATER UNTIL THE VEGETATION IS ESTABLISHED.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

DIVERSION

Woidt Engineering
41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
Fax (607) 724-2456

Seal

Date: 11-12-2014	Rev.#
Project No.:	2012-116
Designed by: GA	
Drawn by: DEC/GA	Ckd by: DG
Plot Scale:	AS NOTED

UNAUTHORIZED ALTERATION OF THIS DRAWING IS A VIOLATION OF THE STATE EDUCATION LAW, SECTION 7209, SUBDIVISION 2.

Drawing Name: NYSDEC EROSION & SEDIMENT CONTROL DETAILS

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJC-STP FLOOD WALL

Drawing Reference Number: C-17

X OF X

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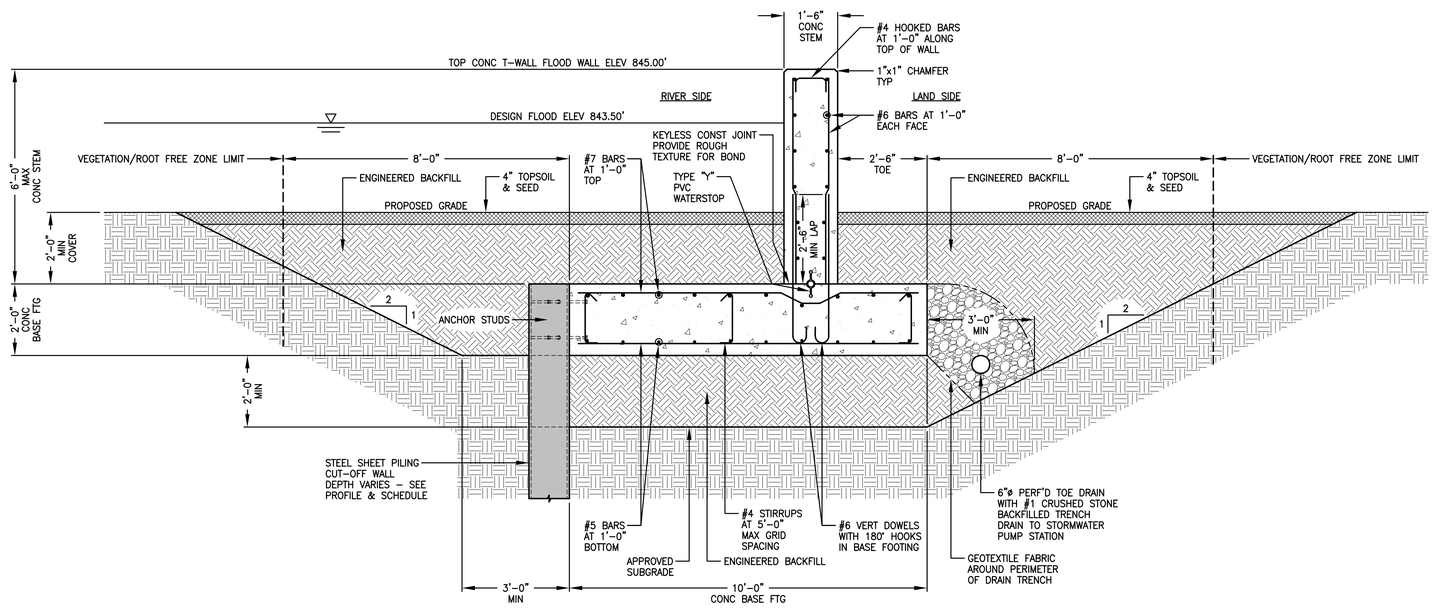
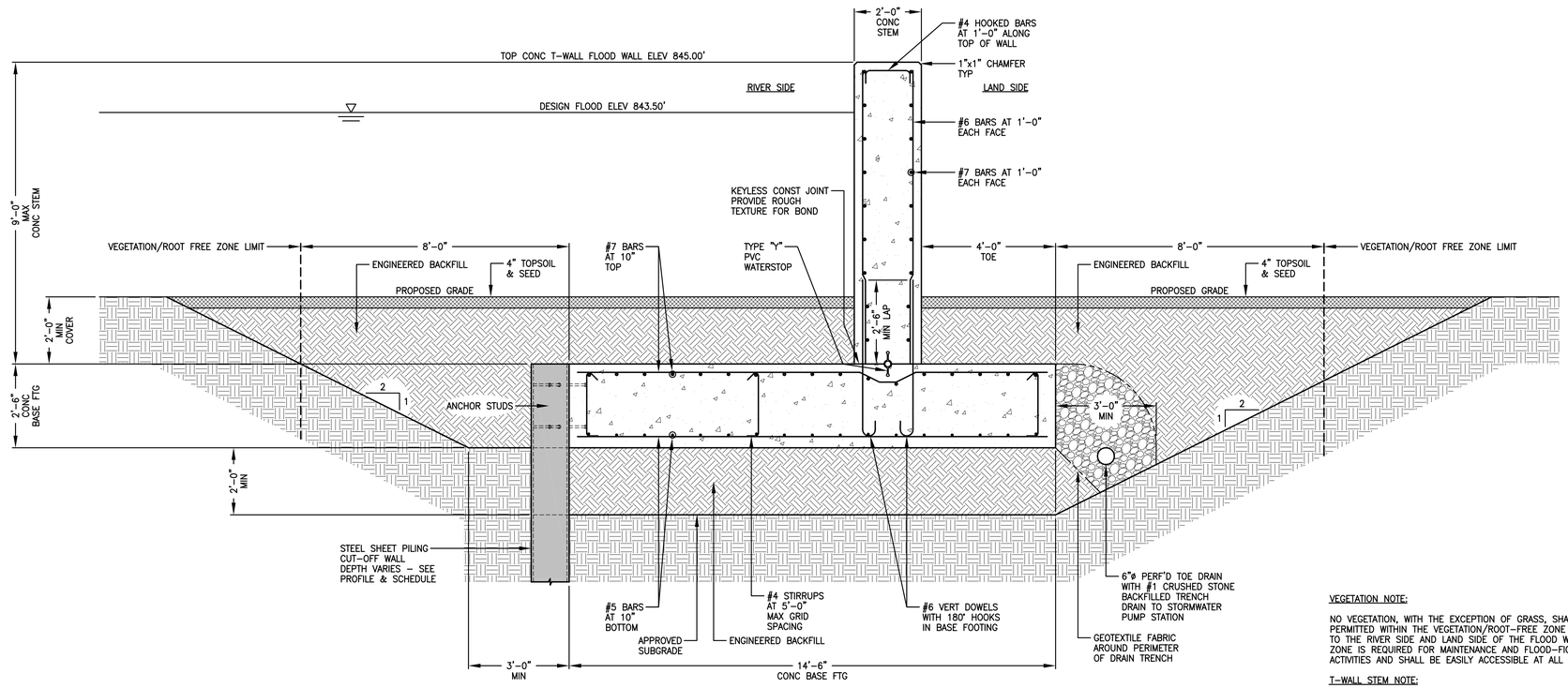


T-WALL TYPE 1

1 / S-1 TYPICAL T-WALL SECTION

SCALE: 1/2"=1'-0"



T-WALL TYPE 2

2 / S-1 TYPICAL T-WALL SECTION

SCALE: 1/2"=1'-0"

VEGETATION NOTE:

NO VEGETATION, WITH THE EXCEPTION OF GRASS, SHALL BE PERMITTED WITHIN THE VEGETATION/ROOT-FREE ZONE ADJACENT TO THE RIVER SIDE AND LAND SIDE OF THE FLOOD WALL. THIS ZONE IS REQUIRED FOR MAINTENANCE AND FLOOD-FIGHTING ACTIVITIES AND SHALL BE EASILY ACCESSIBLE AT ALL TIMES.

T-WALL STEM NOTE:

THE STEM THICKNESS SHOWN IS THE MINIMUM DEPTH OF CONCRETE SECTION REQUIRED EXCLUSIVE OF ARCHITECTURAL FORM LINER DEPTHS. IN-THE-EVENT THAT THE OWNER ELECTS TO USE ARCHITECTURAL FORM LINERS, ALL CONCRETE T-WALL STEM FORMED THICKNESSES SHALL BE ADJUSTED AS REQUIRED TO PROVIDE THE MINIMUM DEPTH OF SECTION SHOWN. ALL PERMANANTLY EXPOSED CONCRETE STEM VERTICAL SURFACES SHALL HAVE A SMOOTH FINISH VOID OF TRANSFERRED FORM JOINTS, U.N.O. ALL TOP OF STEM SURFACES SHALL HAVE A LIGHT BROOM FINISH.

SUBGRADE NOTE:

THE SUBGRADE SHALL BE FIELD APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER AT THE TIME OF EXCAVATION. OVER-EXCAVATION OF THE EXISTING IN SITU SOIL AND REPLACEMENT WITH SUITABLE MATERIAL MAY BE REQUIRED TO MEET BEARING CAPACITY AND PERMEABILITY CRITERIA.

CONCRETE COVER NOTE:

CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
CONCRETE SURFACES CAST AGAINST EARTH ..... 4"
CONCRETE FORMED SURFACES PERMANENTLY EXPOSED TO EARTH ... 3"
CLEARANCE OF BARS AT JOINTS AND WATERSTOPS ..... 2"
TYPICAL, UNLESS NOTED OTHERWISE ..... 3"

REINFORCING BAR SPLICE NOTE:

ALL REINFORCING BAR LAP SPLICES SHALL BE CLASS B UNLESS NOTED OTHERWISE.

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41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
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Telephone (607) 724-2400
Fax (607) 724-2456

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Designed by: GA	Date: 11-12-2014
Drawn by: GA	Project No: 2012-116
Cad by: DG	Plot Scale: AS NOTED

Rev.#

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Drawing Name: STRUCTURAL SECTIONS 1

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJC/STP FLOOD WALL

Drawing Reference Number: S-1

X OF X

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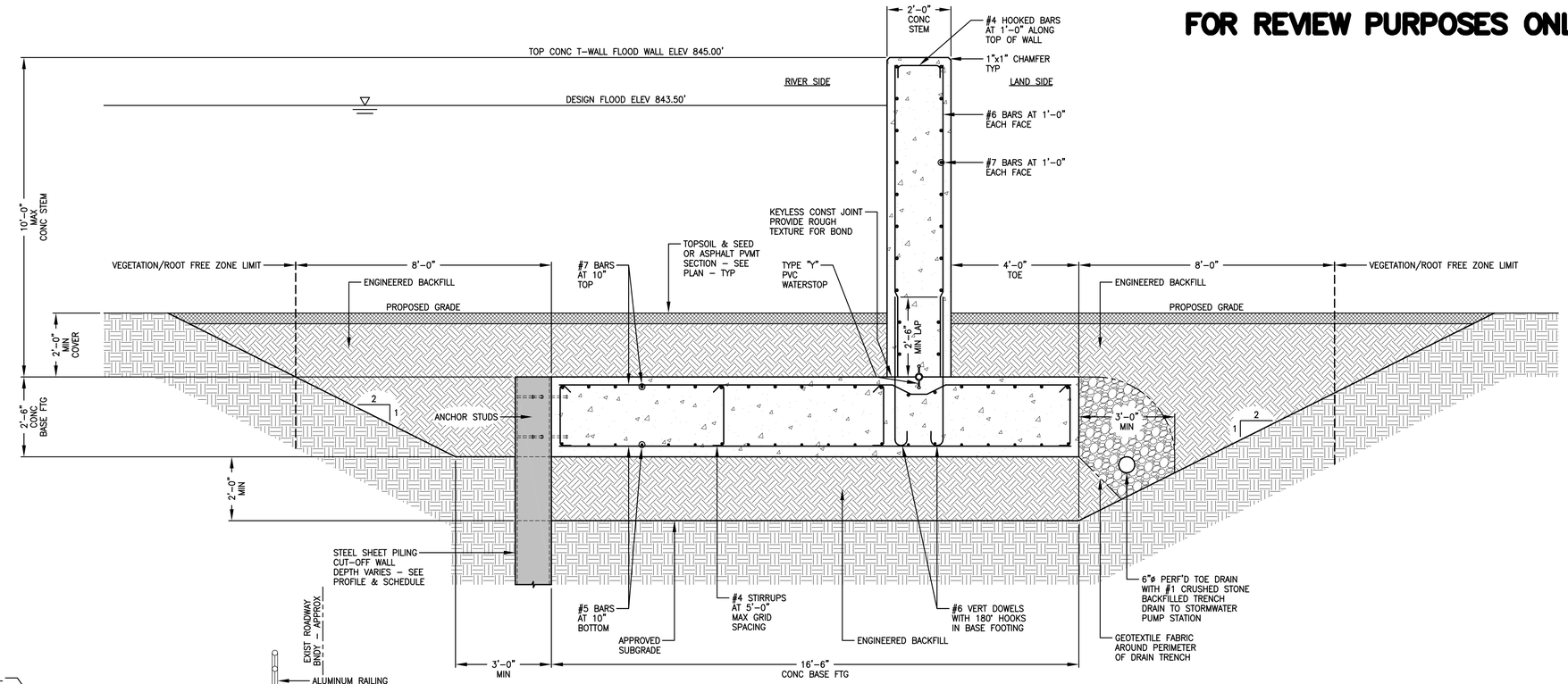
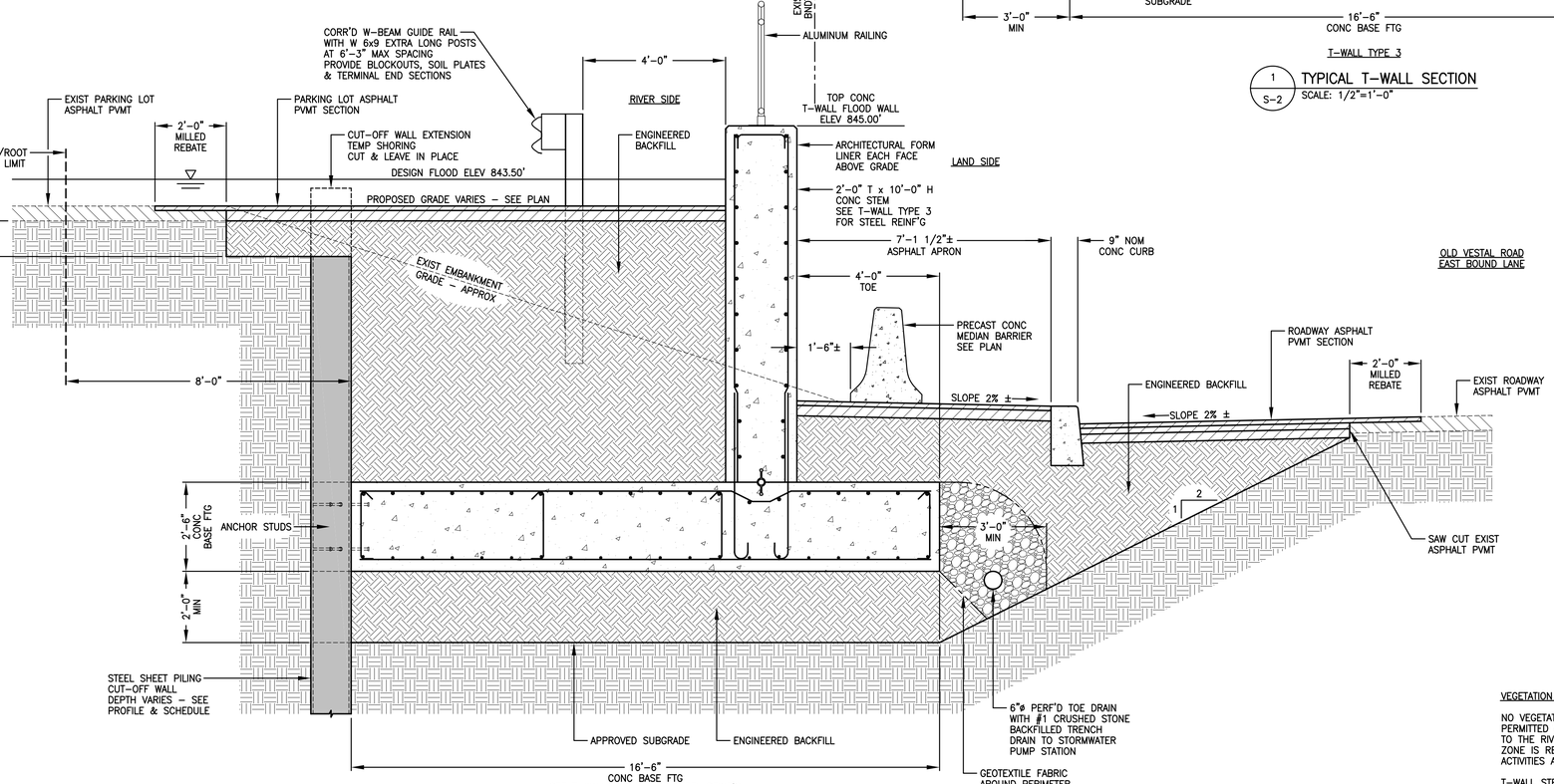


T-WALL TYPE 3

1 / S-2 TYPICAL T-WALL SECTION
SCALE: 1/2"=1'-0"



T-WALL TYPE 3-SUR

2 / S-2 TYPICAL T-WALL SECTION
SCALE: 1/2"=1'-0"

VEGETATION NOTE:

NO VEGETATION, WITH THE EXCEPTION OF GRASS, SHALL BE PERMITTED WITHIN THE VEGETATION/ROOT-FREE ZONE ADJACENT TO THE RIVER SIDE AND LAND SIDE OF THE FLOOD WALL. THIS ZONE IS REQUIRED FOR MAINTENANCE AND FLOOD-FIGHTING ACTIVITIES AND SHALL BE EASILY ACCESSIBLE AT ALL TIMES.

T-WALL STEM NOTE:

THE STEM THICKNESS SHOWN IS THE MINIMUM DEPTH OF CONCRETE SECTION REQUIRED EXCLUSIVE OF ARCHITECTURAL FORM LINER DEPTHS. IN-THE-EVENT THAT THE OWNER ELECTS TO USE ARCHITECTURAL FORM LINERS, ALL CONCRETE T-WALL STEM FORMED THICKNESSES SHALL BE ADJUSTED AS REQUIRED TO PROVIDE THE MINIMUM DEPTH OF SECTION SHOWN. ALL PERMANANTLY EXPOSED CONCRETE STEM VERTICAL SURFACES SHALL HAVE A SMOOTH FINISH VOID OF TRANSFERRED FORM JOINTS, U.N.O. ALL TOP OF STEM SURFACES SHALL HAVE A LIGHT BROOM FINISH.

SUBGRADE NOTE:

THE SUBGRADE SHALL BE FIELD APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER AT THE TIME OF EXCAVATION. OVER-EXCAVATION OF THE EXISTING IN SITU SOIL AND REPLACEMENT WITH SUITABLE MATERIAL MAY BE REQUIRED TO MEET BEARING CAPACITY AND PERMEABILITY CRITERIA.

CONCRETE COVER NOTE:

CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
CONCRETE SURFACES CAST AGAINST EARTH ..... 4"
CONCRETE FORMED SURFACES PERMANENTLY EXPOSED TO EARTH ... 3"
CLEARANCE OF BARS AT JOINTS AND WATERSTOPS ..... 2"
TYPICAL, UNLESS NOTED OTHERWISE ..... 3"

REINFORCING BAR SPLICE NOTE:

ALL REINFORCING BAR LAP SPLICES SHALL BE CLASS B UNLESS NOTED OTHERWISE.

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41 Chenango Street, Suite 200
Binghamton, NY 13901
(607) 722-1014

GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 724-2400
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Designed by: GA	Date: 11-12-2014
Drawn by: GA	Checked by: DG
Project No.: 2012-116	Rev.#
Plot Scale: AS NOTED	

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Drawing Name: STRUCTURAL SECTIONS 2

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJCJSTP FLOOD WALL

Drawing Reference Number: S-2
X OF X

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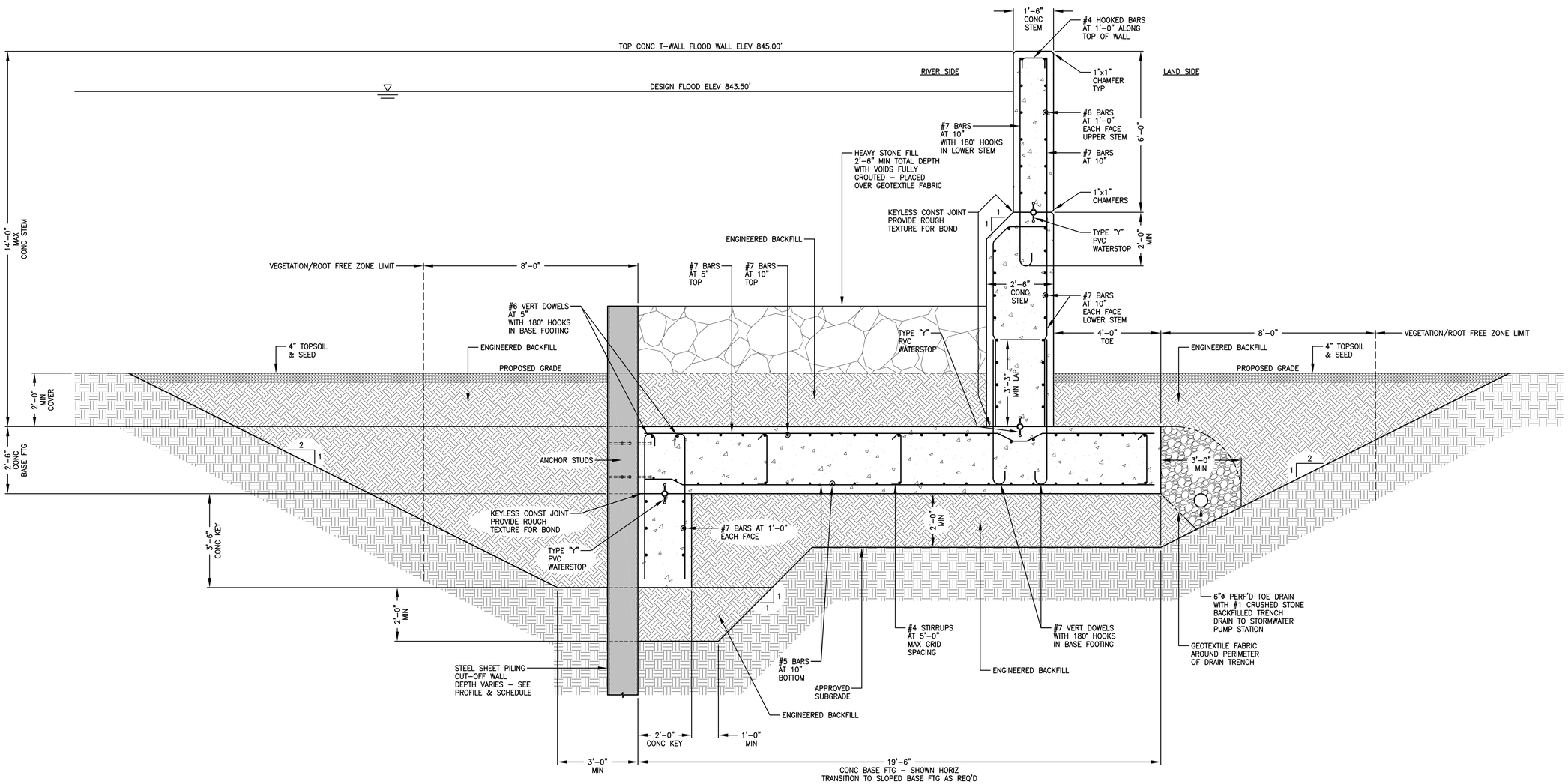

T-WALL TYPE KY-1

1 / S-3 TYPICAL T-WALL SECTION
SCALE: 1/2"=1'-0"

VEGETATION NOTE:

NO VEGETATION, WITH THE EXCEPTION OF GRASS, SHALL BE PERMITTED WITHIN THE VEGETATION/ROOT-FREE ZONE ADJACENT TO THE RIVER SIDE AND LAND SIDE OF THE FLOOD WALL. THIS ZONE IS REQUIRED FOR MAINTENANCE AND FLOOD-FIGHTING ACTIVITIES AND SHALL BE EASILY ACCESSIBLE AT ALL TIMES.

T-WALL STEM NOTE:

THE STEM THICKNESS SHOWN IS THE MINIMUM DEPTH OF CONCRETE SECTION REQUIRED EXCLUSIVE OF ARCHITECTURAL FORM LINER DEPTHS. IN-THE-EVENT THAT THE OWNER ELECTS TO USE ARCHITECTURAL FORM LINERS, ALL CONCRETE T-WALL STEM FORMED THICKNESSES SHALL BE ADJUSTED AS REQUIRED TO PROVIDE THE MINIMUM DEPTH OF SECTION SHOWN. ALL PERMANANTLY EXPOSED CONCRETE STEM VERTICAL SURFACES SHALL HAVE A SMOOTH FINISH VOID OF TRANSFERRED FORM JOINTS, U.N.O. ALL TOP OF STEM SURFACES SHALL HAVE A LIGHT BROOM FINISH.

SUBGRADE NOTE:

THE SUBGRADE SHALL BE FIELD APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER AT THE TIME OF EXCAVATION. OVER-EXCAVATION OF THE EXISTING IN SITU SOIL AND REPLACEMENT WITH SUITABLE MATERIAL MAY BE REQUIRED TO MEET BEARING CAPACITY AND PERMEABILITY CRITERIA.

CONCRETE COVER NOTE:

CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
CONCRETE SURFACES CAST AGAINST EARTH ..... 4"
CONCRETE FORMED SURFACES PERMANENTLY EXPOSED TO EARTH ... 3"
CLEARANCE OF BARS AT JOINTS AND WATERSTOPS ..... 2"
TYPICAL, UNLESS NOTED OTHERWISE ..... 3"

REINFORCING BAR SPLICE NOTE:

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GRIFFITHS ENGINEERING
13 South Washington Street, Suite 1
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Telephone (607) 724-2400
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Designed by: GA	Date: 11-12-2014
Drawn by: GA	Project No.: 2012-116
Sld by: DG	Plot Scale: AS NOTED
	Rev.#

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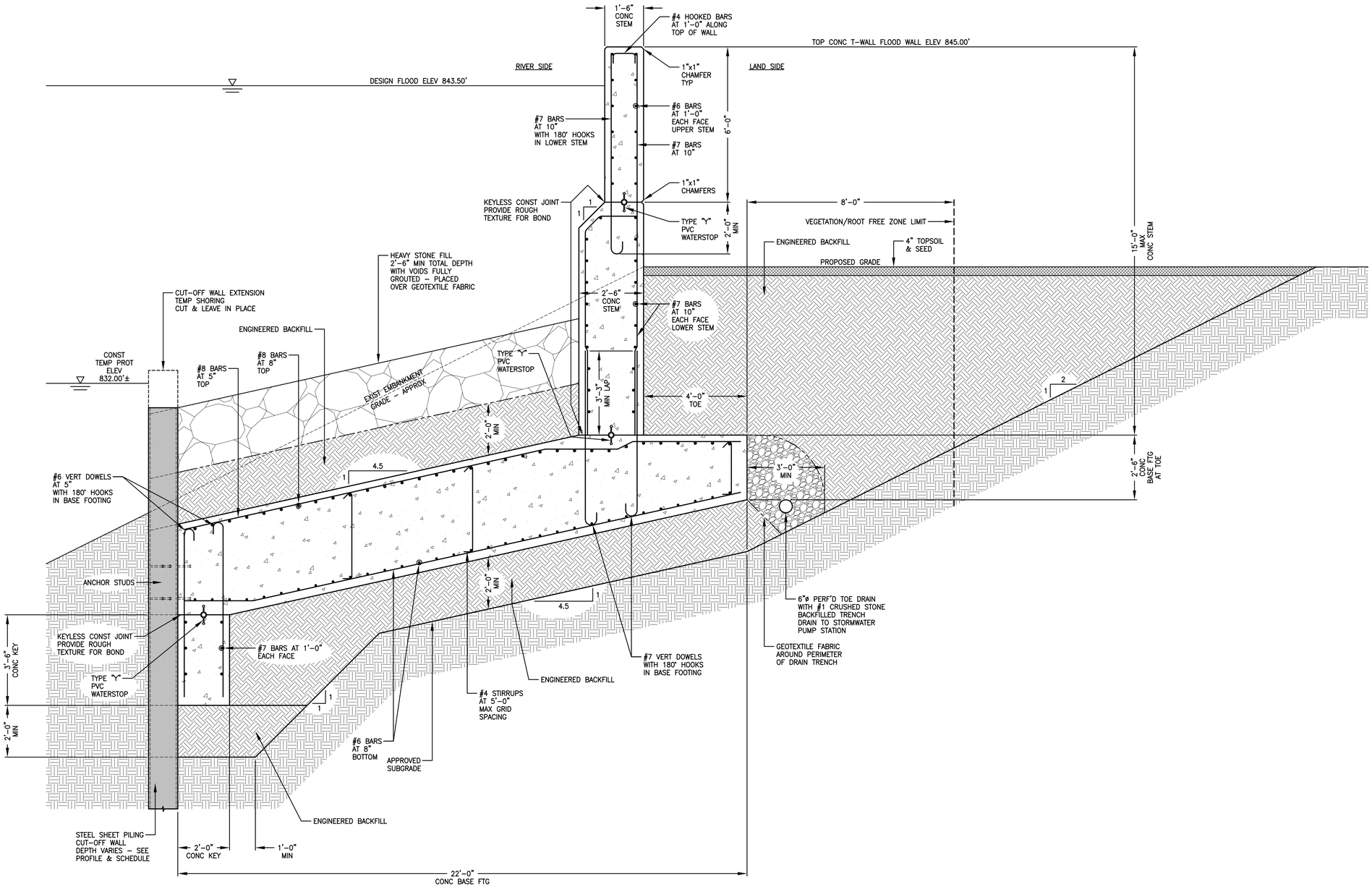
Drawing Name: STRUCTURAL SECTIONS 3

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJCJSTP FLOOD WALL

Drawing Reference Number: S-3
X OF X

FOR REVIEW PURPOSES ONLY



T-WALL TYPE KY-2

1 / S-4 TYPICAL T-WALL SECTION
SCALE: 1/2"=1'-0"

VEGETATION NOTE:

NO VEGETATION, WITH THE EXCEPTION OF GRASS, SHALL BE PERMITTED WITHIN THE VEGETATION/ROOT-FREE ZONE ADJACENT TO THE RIVER SIDE AND LAND SIDE OF THE FLOOD WALL. THIS ZONE IS REQUIRED FOR MAINTENANCE AND FLOOD-FIGHTING ACTIVITIES AND SHALL BE EASILY ACCESSIBLE AT ALL TIMES.

T-WALL STEM NOTE:

THE STEM THICKNESS SHOWN IS THE MINIMUM DEPTH OF CONCRETE SECTION REQUIRED EXCLUSIVE OF ARCHITECTURAL FORM LINER DEPTHS. IN-THE-EVENT THAT THE OWNER ELECTS TO USE ARCHITECTURAL FORM LINERS, ALL CONCRETE T-WALL STEM FORMED THICKNESSES SHALL BE ADJUSTED AS REQUIRED TO PROVIDE THE MINIMUM DEPTH OF SECTION SHOWN. ALL PERMANANTLY EXPOSED CONCRETE STEM VERTICAL SURFACES SHALL HAVE A SMOOTH FINISH VOID OF TRANSFERRED FORM JOINTS, U.N.O. ALL TOP OF STEM SURFACES SHALL HAVE A LIGHT BROOM FINISH.

SUBGRADE NOTE:

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CONCRETE COVER NOTE:

CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
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CONCRETE FORMED SURFACES PERMANENTLY EXPOSED TO EARTH ... 3"
CLEARANCE OF BARS AT JOINTS AND WATERSTOPS ..... 2"
TYPICAL, UNLESS NOTED OTHERWISE ..... 3"

REINFORCING BAR SPLICE NOTE:

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Woidt Engineering
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GRIFFITHS ENGINEERING
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Fax (607) 724-2456

Seal

Date: 11-12-2014
Project No: 2012-116
Rev.#
Designed by: GA
Drawn by: GA
Ckd by: DG
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Plot Scale: AS NOTED

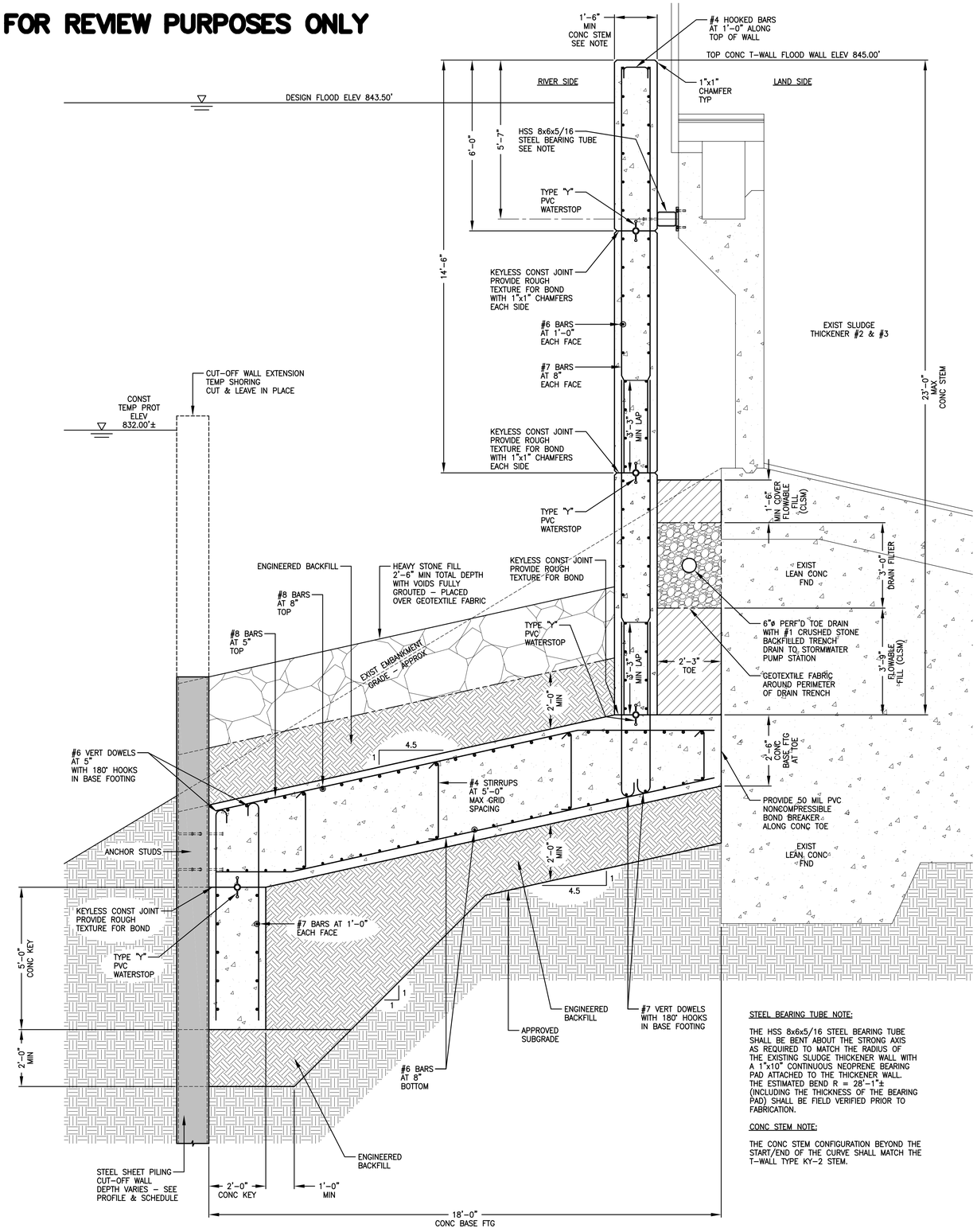
Drawing Name: STRUCTURAL SECTIONS 4

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJC/STP FLOOD WALL

Drawing Reference Number: S-4
X OF X

FOR REVIEW PURPOSES ONLY



STEEL BEARING TUBE NOTE:

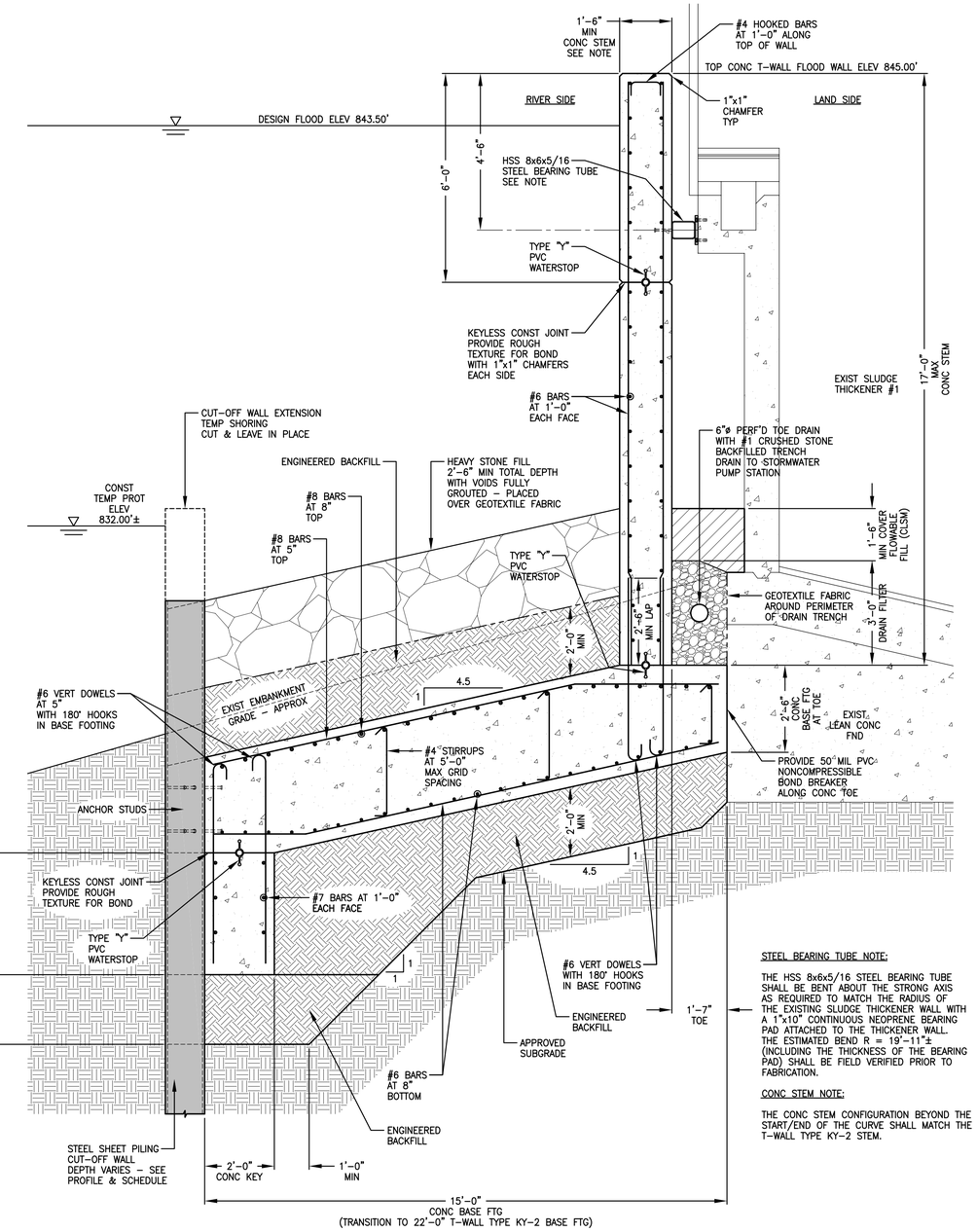
THE HSS 8x6x5/16 STEEL BEARING TUBE SHALL BE BENT ABOUT THE STRONG AXIS AS REQUIRED TO MATCH THE RADIUS OF THE EXISTING SLUDGE THICKENER WALL WITH A 1"x10" CONTINUOUS NEOPRENE BEARING PAD ATTACHED TO THE THICKENER WALL. THE ESTIMATED BEND R = 28'-1"± (INCLUDING THE THICKNESS OF THE BEARING PAD) SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

CONC STEM NOTE:

THE CONC STEM CONFIGURATION BEYOND THE START/END OF THE CURVE SHALL MATCH THE T-WALL TYPE KY-2 STEM.

T-WALL TYPE SLGT-2-3

1 / S-5 TYPICAL T-WALL SECTION
SCALE: 1/2"=1'-0"



STEEL BEARING TUBE NOTE:

THE HSS 8x6x5/16 STEEL BEARING TUBE SHALL BE BENT ABOUT THE STRONG AXIS AS REQUIRED TO MATCH THE RADIUS OF THE EXISTING SLUDGE THICKENER WALL WITH A 1"x10" CONTINUOUS NEOPRENE BEARING PAD ATTACHED TO THE THICKENER WALL. THE ESTIMATED BEND R = 19'-11"± (INCLUDING THE THICKNESS OF THE BEARING PAD) SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

CONC STEM NOTE:

THE CONC STEM CONFIGURATION BEYOND THE START/END OF THE CURVE SHALL MATCH THE T-WALL TYPE KY-2 STEM.

T-WALL TYPE SLGT-1

2 / S-5 TYPICAL T-WALL SECTION
SCALE: 1/2"=1'-0"

VEGETATION NOTE:

NO VEGETATION, WITH THE EXCEPTION OF GRASS, SHALL BE PERMITTED WITHIN THE VEGETATION/ROOT-FREE ZONE ADJACENT TO THE RIVER SIDE AND LAND SIDE OF THE FLOOD WALL. THIS ZONE IS REQUIRED FOR MAINTENANCE AND FLOOD-FIGHTING ACTIVITIES AND SHALL BE EASILY ACCESSIBLE AT ALL TIMES.

T-WALL STEM NOTE:

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SUBGRADE NOTE:

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CONCRETE COVER NOTE:

CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
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CLEARANCE OF BARS AT JOINTS AND WATERSTOPS ..... 2"
TYPICAL, UNLESS NOTED OTHERWISE ..... 3"

REINFORCING BAR SPLICE NOTE:

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Date: 11-12-2014	Rev.#
Project No:	2012-116
Designed by: GA	Plot Scale: AS NOTED
Drawn by: GA	Cad by: DG

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Drawing Name: STRUCTURAL SECTIONS 5

Project Location: OLD VESTAL ROAD TOWN OF VESTAL BROOME COUNTY, NY

Project Name: BJC/STP FLOOD WALL

Drawing Reference Number: S-5
X OF X