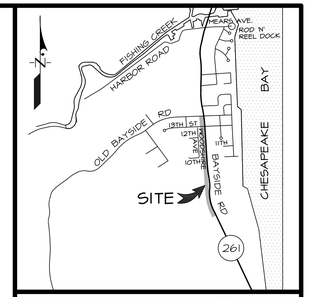
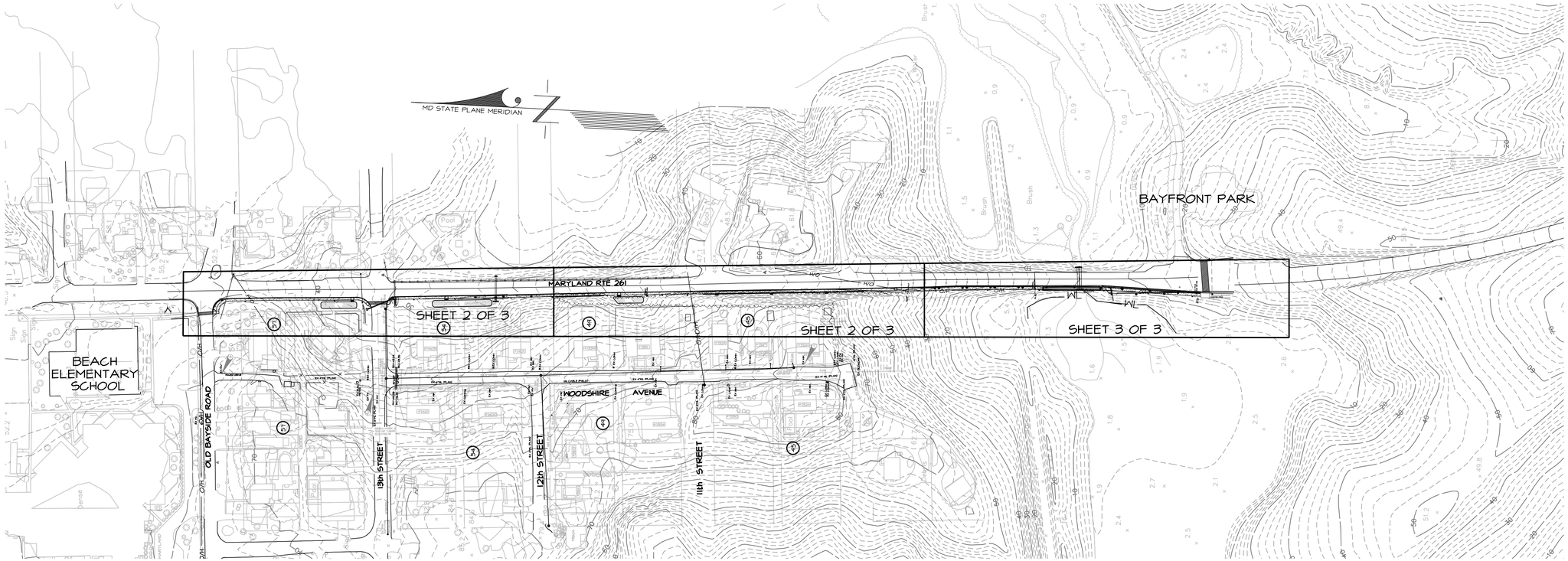


VICINITY MAP

SCALE: 1" = 2000'



OVERALL

SIDEWALK IMPROVEMENT CONCEPT PLAN

MARYLAND ROUTE 261
CHESAPEAKE BEACH

THIRD ELECTION DISTRICT

CALVERT COUNTY, MARYLAND

GRAPHIC SCALE 1"= 100'

0 100 200 300

SHEET 1 OF 3

CALVERT COUNTY ADC MAP BK LOCATION 4 F-12

DATE	DESCRIPTION	BY
	REVISIONS	

11721 WOODMORE ROAD, SUITE 200
MITCHELLVILLE, MARYLAND 20721
BEN DYER ASSOCIATES, INC.
Engineers / Surveyors / Planners
TELEPHONE (301) 430-2000

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DRAWN BY	DESIGNED BY	CHECKED BY	RECORD NO.
PCN	JS	PBA	J-B03021

SCALE 1" = 100'

DATE DECEMBER 2014

DRWG. NO. 6.057-Y

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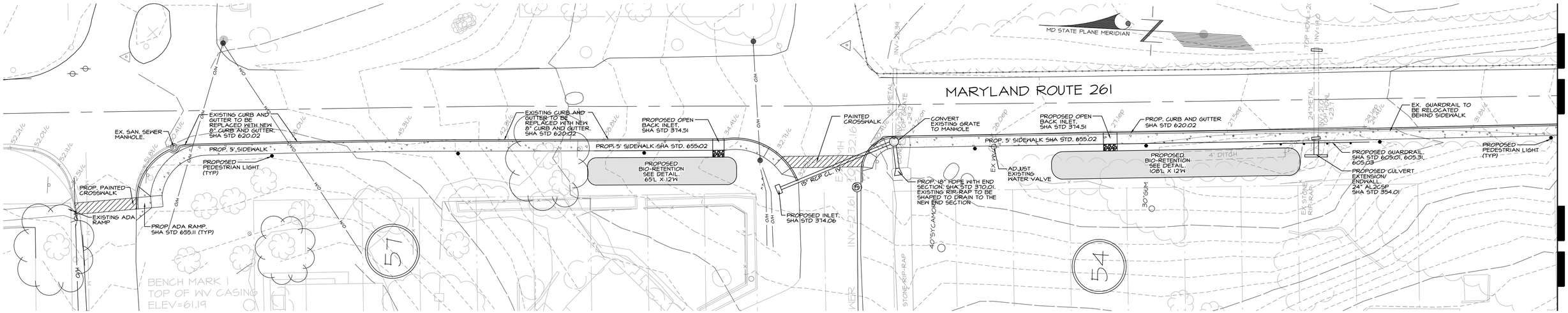
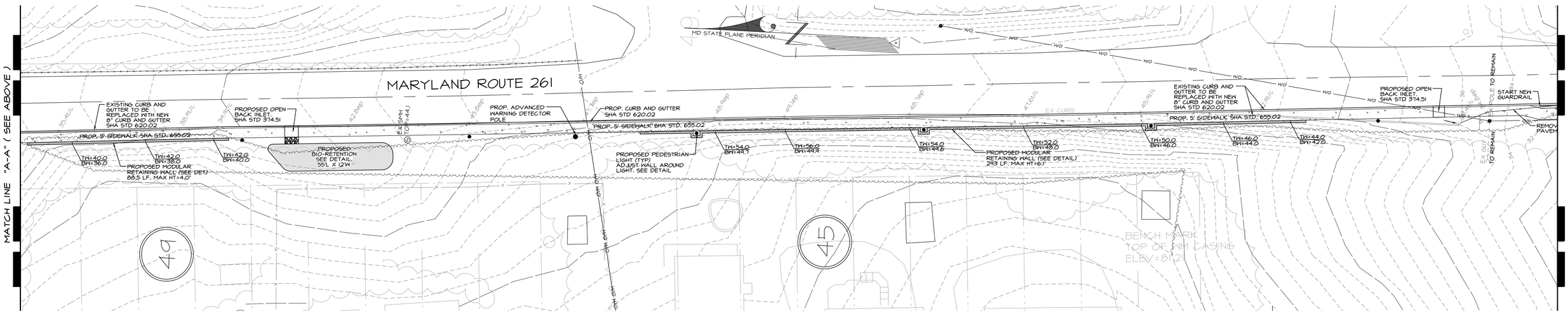
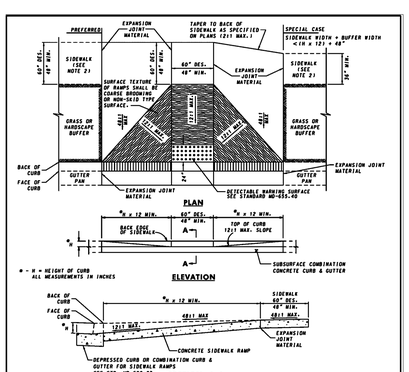






NOTES

1. TO BE USED ON WIDE SIDEWALKS ON SIDEWALKS WITH SIGNIFICANT SEPARATION FROM THE ROADWAY WHERE THE GEOMETRY SPECIFIED IN THE DETAILS ABOVE CAN BE SATISFIED. MAY BE MODIFIED TO SUIT A PARTICULAR LOCATION.
2. WHERE 60" SIDEWALK CAN NOT BE PROVIDED, 36" MIN. MAY BE USED AS LONG AS PASSING ZONES ARE PROVIDED IN ACCORDANCE WITH STD. MD-655.50.
3. RE-ALIGNMENT OF THE STREET CURB OR SIDEWALK TO EXCEED 12:1 IN THE DIRECTION OF PEDESTRIAN TRAVEL, OR 48:1 PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
4. EXPANSION JOINT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH STD. MD-655.01.
5. SIDEWALK RAMP SHALL BE INCLUDED IN PRICE BID FOR CONCRETE SIDEWALK. DEPRESSED CURB AND CURB TRANSITION SHALL BE INCLUDED IN PRICE BID FOR CURB OR CURB & GUTTER ADJACENT TO SIDEWALK RAMP. DETECTABLE WARNING SURFACE SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 611 OF THE SPECIFICATIONS.
6. SIDEWALK RAMPS TO BE SHOWN ON PLANS AND DETAILED AND REFERENCED WITH THE CENTER OF THE RAMP ALIGNED TO A STATION ON THE CONSTRUCTION CENTERLINE. SEPARATE DETAILS SHALL BE SHOWN WHEN PROPOSED RAMP VARIES FROM STANDARD CASES.

SPECIFICATION	CATEGORY CODE ITEMS
603 & 611	

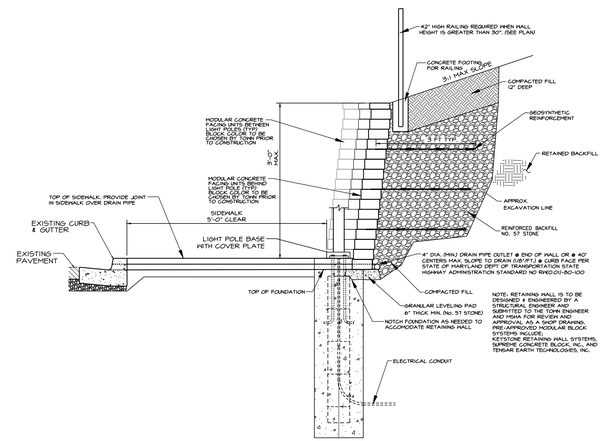
APPROVED: DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT

SHA State Highway Administration	APPROVAL - SHA REVISIONS	APPROVAL - FEDERAL HIGHWAY ADMINISTRATION
	APPROVAL 3-31-04	APPROVAL 3-31-04
	REVISED	REVISED
	REVISED	REVISED
	REVISED	REVISED

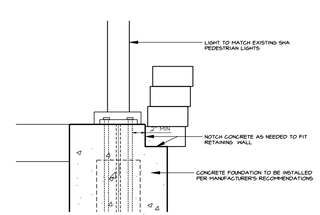
Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

SIDEWALK RAMPS PERPENDICULAR

STANDARD NO. MD 655.11



SIDEWALK, STREET LIGHT & MODULAR RETAINING WALL DETAIL
NTS



LIGHT POLE BASE DETAIL
NTS

SIDEWALK IMPROVEMENT CONCEPT PLAN

MARYLAND ROUTE 261
CHESAPEAKE BEACH

THIRD ELECTION DISTRICT
CALVERT COUNTY, MARYLAND

GRAPHIC SCALE 1" = 20'
0 20 40 60

SHEET 2 OF 3
CALVERT COUNTY ADC MAP BK LOCATION 4 F-12

DATE	DESCRIPTION	BY
	REVISIONS	

11721 WOODMORE ROAD, SUITE 200
MITCHELLVILLE, MARYLAND 20721
BEN DYER ASSOCIATES, INC.
Engineers / Surveyors / Planners
TELEPHONE (301) 430-2000

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DRAWN BY	DESIGNED BY	CHECKED BY	RECORD NO.
FCN	JS	HSW	J-B03021
SCALE 1" = 20'			DRWG. NO.
DATE DECEMBER 2014			6.058-Y

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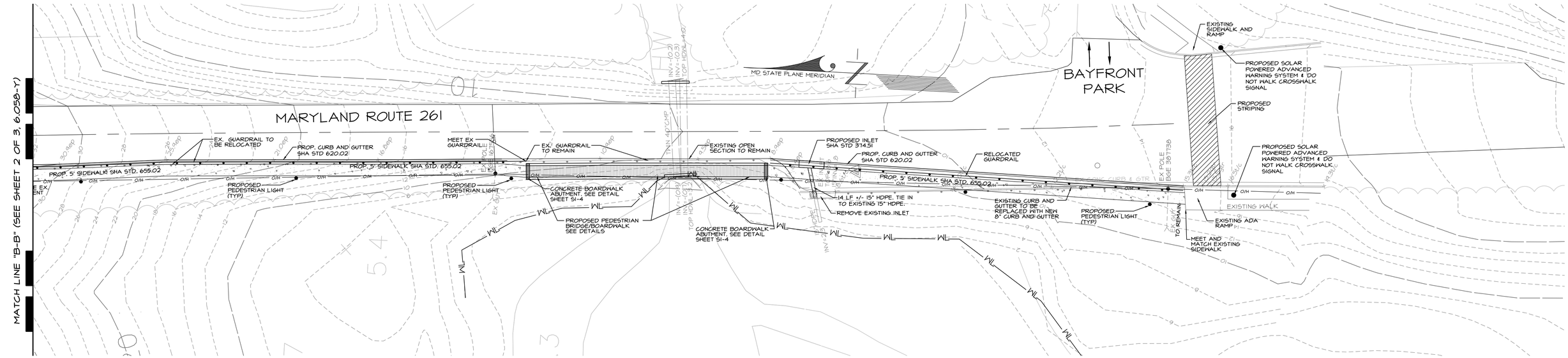
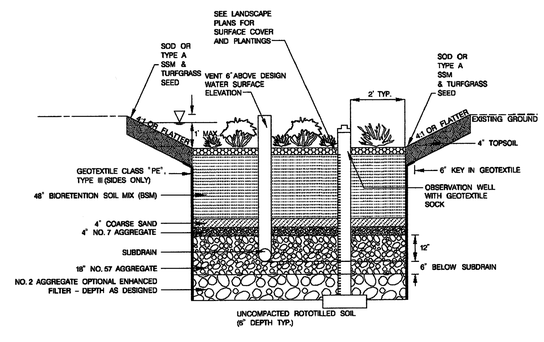
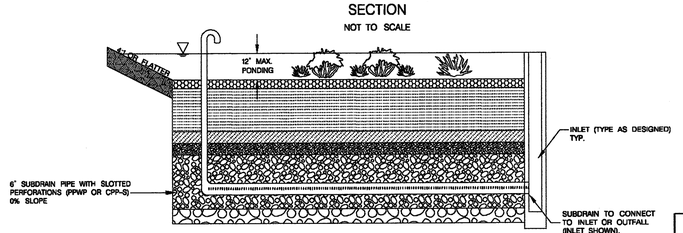


LANDSCAPE OPTIONS

CONSULT WITH LANDSCAPE ARCHITECTURE AND DISTRICT MAINTENANCE FOR DESIGN AND MAINTENANCE EXPECTATIONS



FOR POORLY DRAINING SOILS
(HSG C OR D)
SECTION
NOT TO SCALE

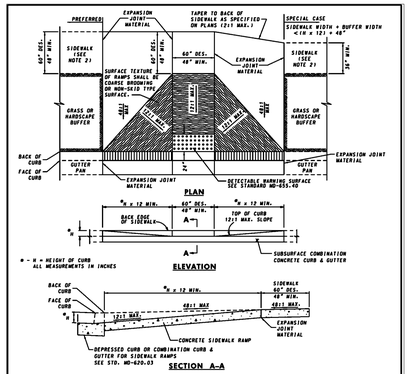


MICRO-BIORETENTION PROFILE
FOR POORLY DRAINING SOILS
(HSG C OR D)
(TYP.)
NOT TO SCALE

SHA DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY HYDRAULICS DIVISION

STANDARD MICRO-BIORETENTION (M-6)

STANDARD NO. | DATE: SEPTEMBER 3, 2013



NOTES

1. TO BE USED ON WIDE SIDEWALKS OR SIDEPATHS WITH SIGNIFICANT SEPARATION FROM THE ROADWAY WHERE THE GEOMETRY SPECIFIED IN THE INTERSECTION CAN BE SATISFIED. MAY BE MODIFIED TO SUIT PARTICULAR LOCATIONS.
2. MINIMUM 48" SIDEWALK CAN NOT BE PROVIDED. 36" MIN. MAY BE USED AS LONG AS PASSING ZONES ARE PROVIDED IN ACCORDANCE WITH STD. MD-655.01.
3. NO TRAVERSABLE SLOPE ON THE RAMP OR SIDEWALK SHALL EXCEED 12:1 IN THE DIRECTION OF PEDESTRIAN TRAVEL. OR 48:1 PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
4. EXPANSION JOINT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH STD. MD-655.01.
5. SIDEWALK RAMP SHALL BE INCLUDED IN PRICE BID FOR CONCRETE SIDEWALK. DEPRESSED CURB AND CURB TRANSITION SHALL BE INCLUDED IN PRICE BID FOR CURB OR CURB & GUTTER ADJACENT TO SIDEWALK RAMP. DETECTABLE WARNING SURFACE SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 611 OF THE SPECIFICATIONS.
6. SIDEWALK RAMPS TO BE SHOWN ON PLANS SYMBOLICALLY AND REFERENCED WITH THE CENTER OF THE RAMP ALIGNED TO A STATION ON THE CONSTRUCTION CENTERLINE. SEPARATE DETAILS SHALL BE SHOWN WHERE PROPOSED RAMP VARIES FROM STANDARD CASES.

SPECIFICATION	CATEGORY CODE ITEMS
603 & 611	

APPROVED: DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT

APPROVAL + SHA REVISIONS	APPROVAL + FEDERAL HIGHWAY ADMINISTRATION
APPROVAL 9-23-04	APPROVAL 9-21-04
REVISED	REVISED
REVISED	REVISED
REVISED	REVISED

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

SIDEWALK RAMPS
PERPENDICULAR

STANDARD NO. MD 655.11

SIDEWALK IMPROVEMENT CONCEPT PLAN

MARYLAND ROUTE 261
CHESAPEAKE BEACH

THIRD ELECTION DISTRICT
CALVERT COUNTY, MARYLAND

GRAPHIC SCALE 1" = 20'
0 20 40 60

SHEET 3 OF 3
CALVERT COUNTY ADC MAP BK LOCATION 4 F-12

DATE	DESCRIPTION	BY
	REVISIONS	

11721 WOODMORE ROAD, SUITE 200
MITCHELLVILLE, MARYLAND 20721
BEN DYER ASSOCIATES, INC.
Engineers / Surveyors / Planners
TELEPHONE (301) 430-2000

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DRAWN BY	DESIGNED BY	CHECKED BY	RECORD NO.
F-CN	JS	BEM	J-B03021

SCALE 1" = 20'
DRWG. NO. 6.059-Y
DATE DECEMBER 2014

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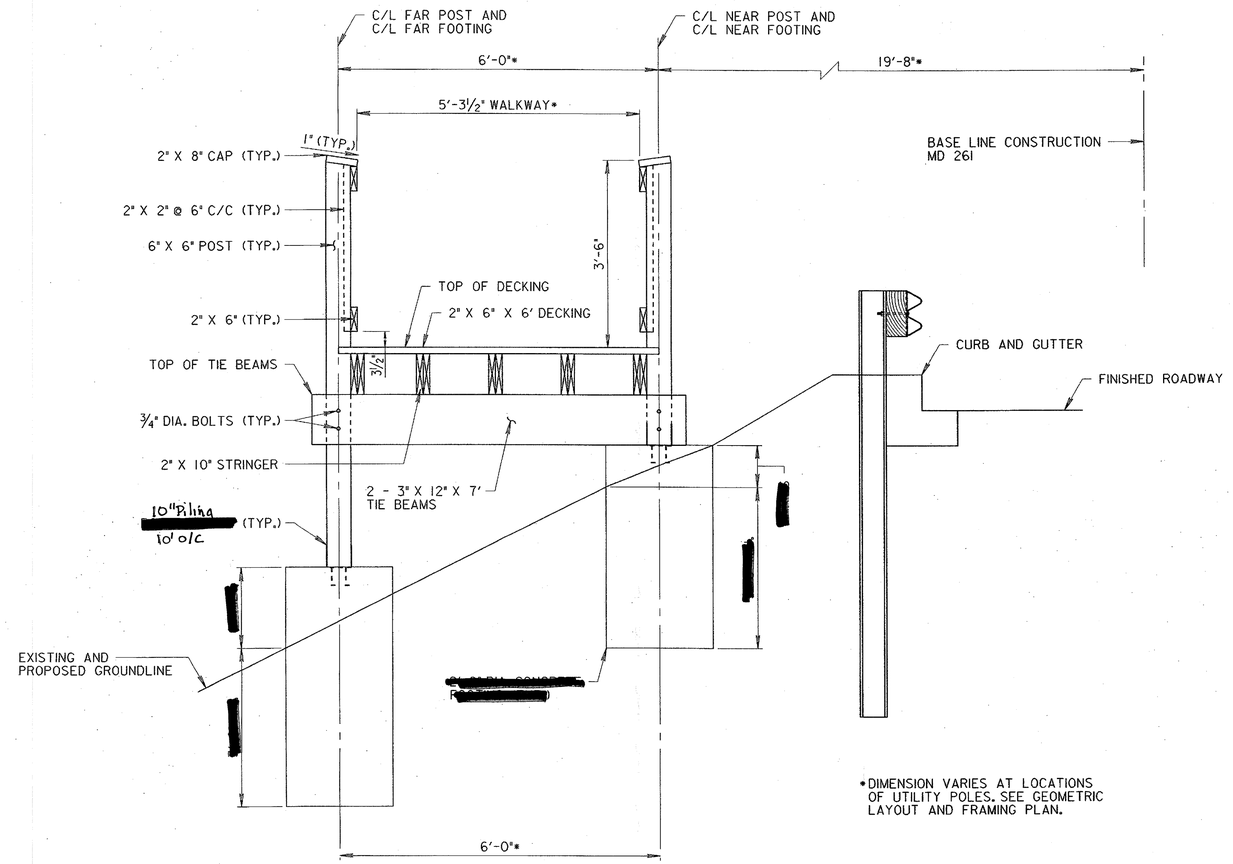


*DIMENSION VARIES AT LOCATIONS OF UTILITY POLES. SEE GEOMETRIC LAYOUT AND FRAMING PLAN.

TYPICAL SECTION

SCALE: ¾" = 1'-0"

GENERAL NOTES

SPECIFICATIONS: SHA SPECIFICATIONS DATED JANUARY, 2001 AND SPECIAL PROVISIONS FOR MATERIALS AND CONSTRUCTION.

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES DATED 2002.

~~CONCRETE DESIGN: SERVICE LOAD DESIGN METHOD~~

~~REINFORCING STEEL DESIGN: fs = 24,000 PSI~~

DESIGN LIVE LOADING: SUPERSTRUCTURE: 85 PSF PEDESTRIAN LOADING

FOUNDATIONS: 50 PSF PEDESTRIAN LOADING

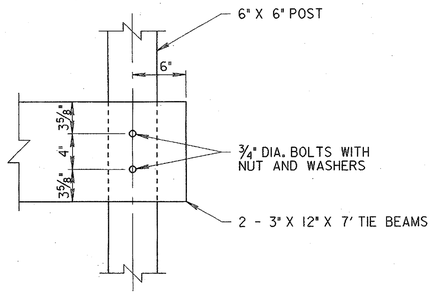
TIMBER: UNLESS OTHERWISE NOTED, ALL TIMBER SHALL BE OF NOMINAL SIZE CROSS SECTION AS INDICATED ON THE PLANS AND SHALL BE SOUTHERN PINE #2 WITH MINIMUM STRENGTH VALUES OF:

Fb = 1300 PSI
Fv = 90 PSI
E = 1,600,000 PSI

ALL TIMBER SHALL BE PRESSURE TREATED.

CONSTRUCTION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO COMMENCING ANY WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPENCIES WHICH MAY EXIST.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY GUYING AND BRACING TO HOLD THE TIMBER FRAMES IN ALIGNMENT UNTIL THE DECKING IS INSTALLED AND FINAL FASTENINGS ARE COMPLETED.



TIE BEAM/POST CONNECTION ELEVATION

SCALE: 1½" = 1'-0"

CONNECTION NOTES:
THE 2" X 8" CAP SHALL BE SECURED TO EACH 6" X 6" POST AND EACH 4" X 6" POST USING TWO NO. 11 SCREWS AND TO THE TOP OF 2" X 6" HORIZONTAL RAILING MEMBER USING ONE NO. 11 SCREW AT 5'-0" MAXIMUM SPACING. THE SCREWS AT THESE LOCATIONS SHALL BE COUNTERSUNK INTO THE WOOD A MINIMUM OF ⅛".

THE 2" X 6" HORIZONTAL RAILING MEMBERS SHALL BE SECURED TO EACH 6" X 6" POST AND EACH 4" X 6" POST USING TWO NO. 11 SCREWS. THE SCREWS AT THESE LOCATIONS NEED NOT BE COUNTERSUNK.

THE 2" X 2" SPINDLES SHALL BE SECURED TO EACH 2" X 6" HORIZONTAL RAILING MEMBER USING TWO 8d NAILS.

THE 3" X 12" TIE BEAMS SHALL BE SECURED TO THE 6" X 6" POSTS USING ¾" DIAMETER BOLTS.

THE 6" X 6" POSTS SHALL BE SECURED TO THE POST ANCHORS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS, BUT THE CONNECTION MUST INCLUDE AT LEAST TWO BOLTS.

ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED ACCORDING TO THE SPECIFICATIONS.

S1 – 2

REVISIONS

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PEDESTRIAN BOARDWALK STRUCTURE
ON MARYLAND 261
LEFT OF STA [redacted] TO [redacted]
TYPICAL BOARDWALK SECTION

SCALE AS SHOWN DATE [redacted] CONTRACT [redacted]

DESIGNED BY [redacted]
DRAWN BY [redacted]
CHECKED BY [redacted]

E.S.F.
[redacted]

SHEET NO. [redacted]

OTHER CONTRACTS FOR THIS STRUCTURE _____ _____

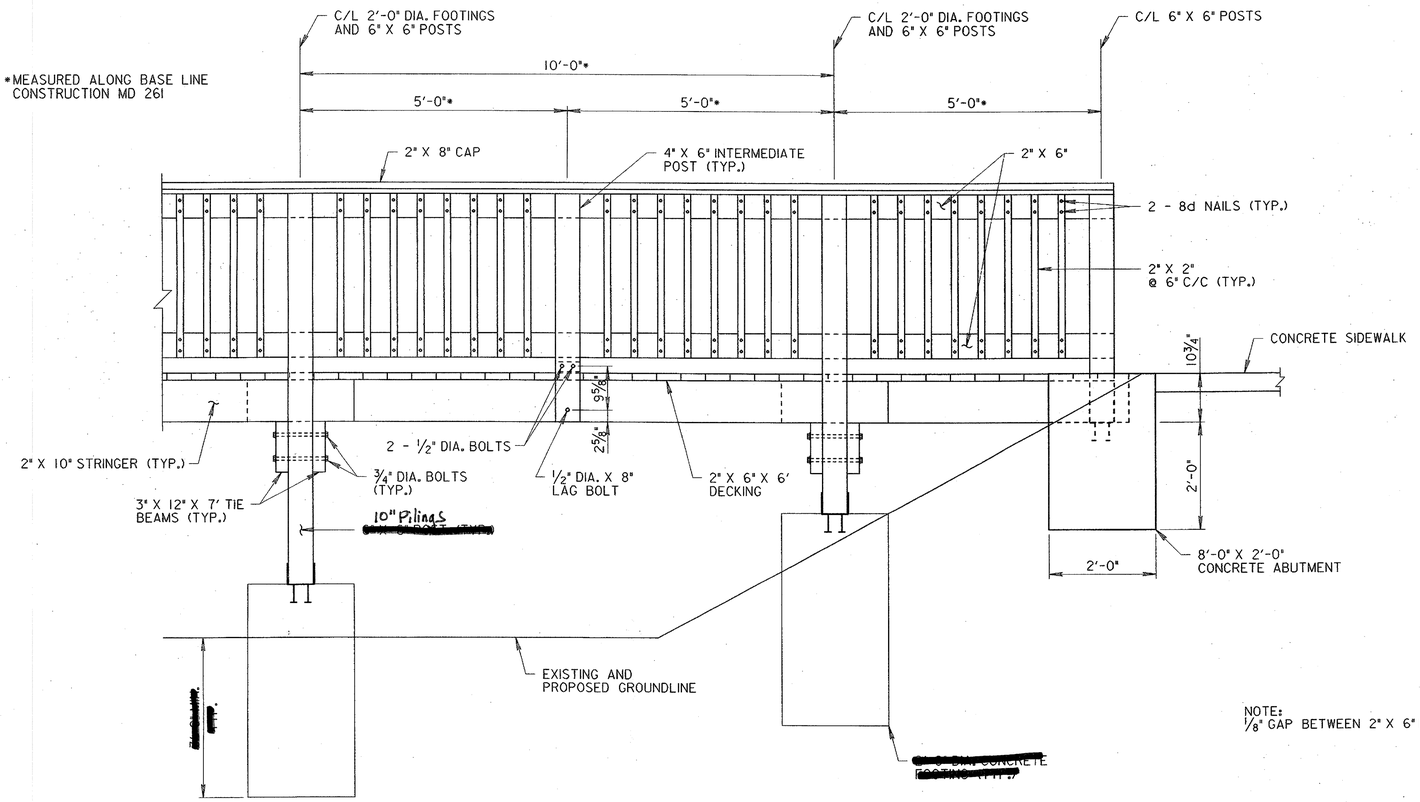
STRUCTURE INVENTORY NO. _

SURVEY BOOK NO.

[redacted]

INDEXED

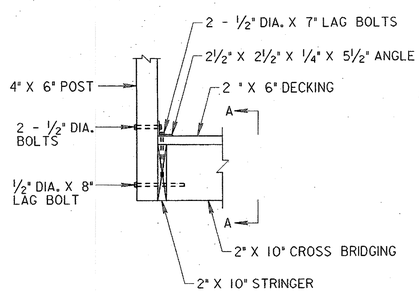
*MEASURED ALONG BASE LINE
CONSTRUCTION MD 261



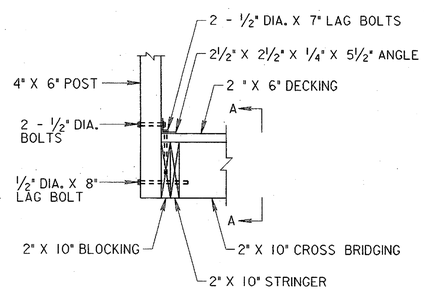
ELEVATION
SCALE: ¾" = 1'-0"

CONNECTION NOTES:
ALL FASTENERS AND ANGLES SHALL BE HOT DIPPED GALVANIZED ACCORDING TO THE SPECIFICATIONS.

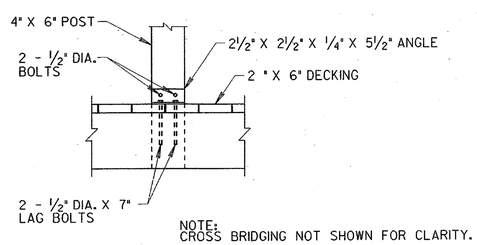
NOTE:
⅛" GAP BETWEEN 2" X 6" DECKING PLANKS.



POSTS WITHOUT BLOCKING



POSTS WITH BLOCKING



VIEW A-A

INTERMEDIATE POST CONNECTION DETAILS
SCALE: 1" = 1'-0"

S1 – 3

REVISIONS

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PEDESTRIAN BOARDWALK STRUCTURE
ON MARYLAND 261
LEFT OF STA [redacted] TO [redacted]
ELEVATION

SCALE AS SHOWN DATE [redacted] CONTRACT [redacted]

DESIGNED BY [redacted]
DRAWN BY [redacted]
CHECKED BY [redacted]

E.S.F.
[redacted]

SHEET NO. [redacted]

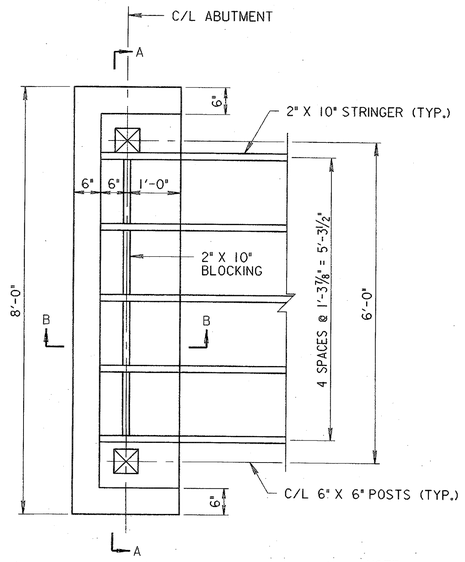
OTHER CONTRACTS FOR THIS STRUCTURE _____ _____

STRUCTURE INVENTORY NO. _

SURVEY BOOK NO.

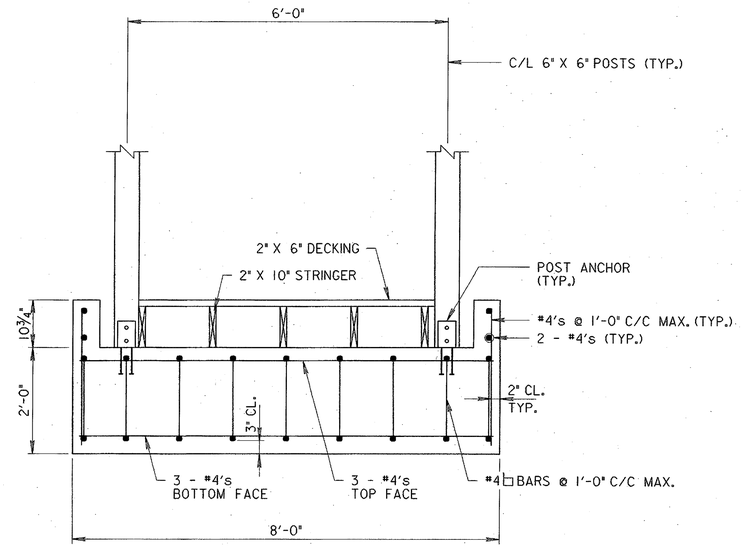
[redacted]

INDEXED

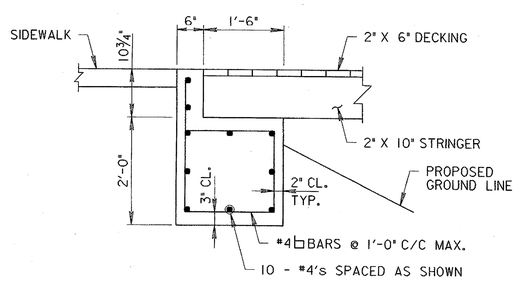


NOTE:
DECKING NOT SHOWN FOR CLARITY.

ABUTMENT PLAN
SCALE: 3/4" = 1'-0"



SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"

S1 – 4

REVISIONS

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PEDESTRIAN BOARDWALK STRUCTURE
ON MARYLAND 261
LEFT OF STA [redacted] TO [redacted]
ABUTMENT DETAILS

SCALE AS SHOWN DATE [redacted] CONTRACT [redacted]

DESIGNED BY [redacted]
DRAWN BY [redacted]
CHECKED BY [redacted]

E.S.F.
[redacted]

SHEET NO. [redacted]

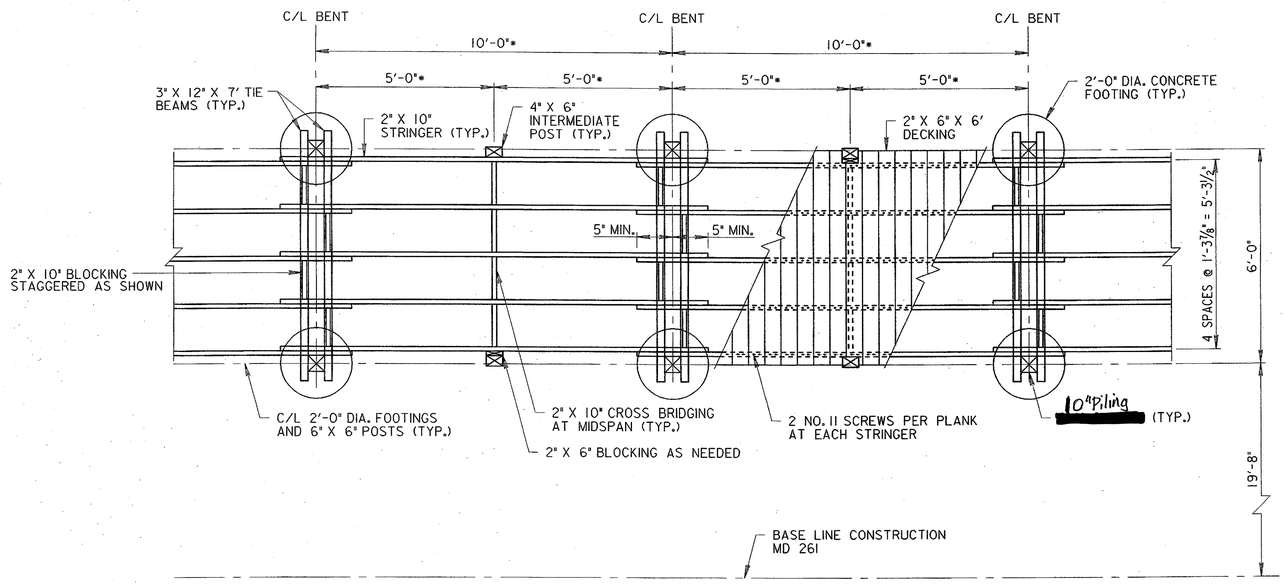
OTHER CONTRACTS FOR THIS STRUCTURE _____ _____

STRUCTURE INVENTORY NO. _

SURVEY BOOK NO.

[redacted]

INDEXED



TYPICAL BOARDWALK FRAMING PLAN

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

NOTES:
1/8" GAP BETWEEN 2" X 6" DECKING PLANKS.

THE OVERLAP OF THE STRINGERS WILL VARY DUE TO THE CURVATURE OF THE BOARDWALK STRUCTURE, AND THE CONTRACTOR MAY INCREASE THE OVERLAP TO ELIMINATE THE NEED TO CUT THE STRINGERS. HOWEVER, IN ALL CASES THE OVERLAP SHALL MEET THE MINIMUM LENGTH SHOWN ON THIS SHEET.

* MEASURED ALONG BASE LINE CONSTRUCTION MD 261

CONNECTION NOTES:
THE 2" X 6" DECKING SHALL BE SECURED TO THE 2" X 10" STRINGERS USING 2 NO. 11 SCREWS PER PLANK AT EACH STRINGER.

THE 2" X 10" STRINGERS SHALL BE NAILED TOGETHER WHERE THEY OVERLAP USING 8d NAILS.

THE 2" X 10" CROSS BRIDGING SHALL BE NAILED TO THE 2" X 10" STRINGERS USING 8d NAILS.

THE 2" X 6" BLOCKING SHALL BE NAILED TO THE 4" X 6" POSTS USING 8d NAILS.

THE 2" X 10" BLOCKING SHALL BE NAILED TO THE 2" X 10" STRINGERS USING 8d NAILS.

ALL FASTENERS SHALL BE HOT DIPPED GALVANIZED ACCORDING TO THE SPECIFICATIONS.

S1 – 5

REVISIONS

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT

PEDESTRIAN BOARDWALK STRUCTURE
ON MARYLAND 261
LEFT OF STA [redacted] TO [redacted]
TYPICAL FRAMING PLAN

SCALE AS SHOWN DATE JAN. 2006 CONTRACT CA4815184

DESIGNED BY [redacted]
DRAWN BY [redacted]
CHECKED BY [redacted]

E.S.F.
[redacted]

SHEET NO. [redacted]

OTHER CONTRACTS FOR THIS STRUCTURE _____ _____

STRUCTURE INVENTORY NO. _

SURVEY BOOK NO.

[redacted]

INDEXED