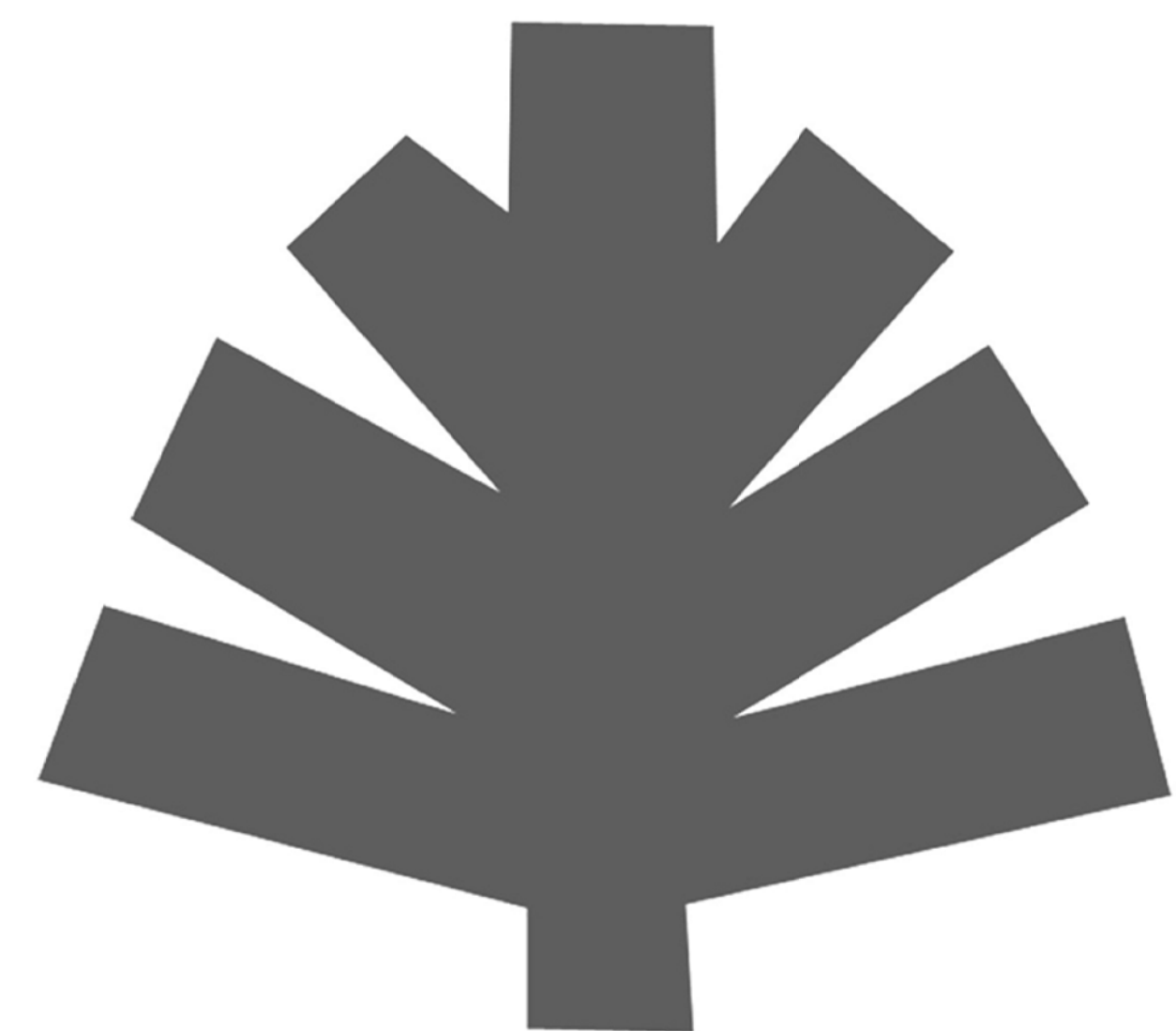


United States Department of Agriculture  
U.S. National Arboretum



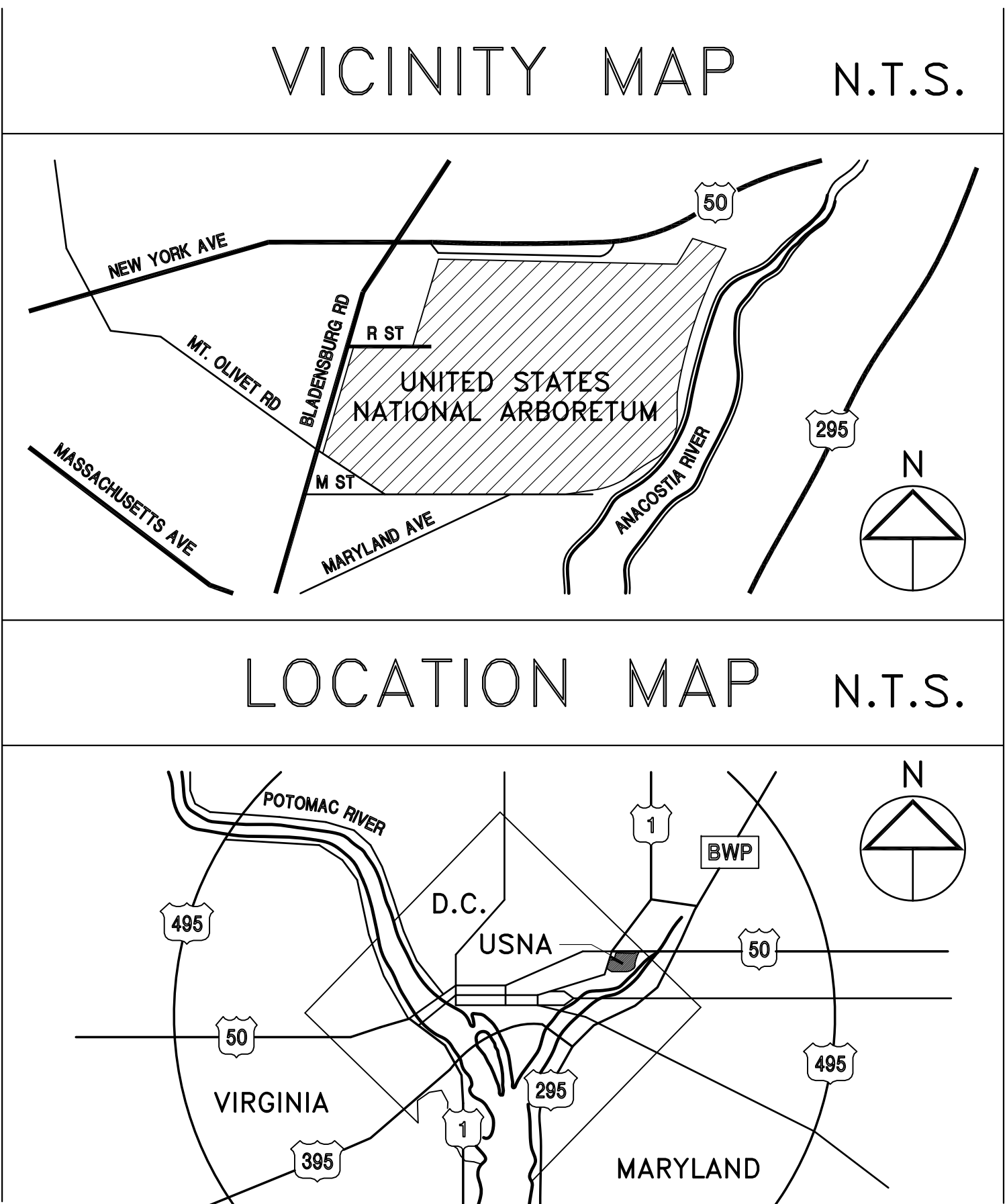
HERB GARDEN RENOVATIONS

03 JULY 2013

100% DRAFT CONSTRUCTION DOCUMENTS

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CS-002	ABBREVIATIONS, GENERAL NOTES AND SYMBOLS
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C-001	EXISTING SURFACE CONDITIONS
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ES-101	EROSION & SEDIMENT CONTROL PLAN
ES-161	EROSION & SEDIMENT CONTROL DETAILS
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L-101	KEY PLAN
L-111	MATERIALS & GRADING PLAN
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L-121	LAYOUT PLAN
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L-164	LANDSCAPE DETAILS
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LP-101	PLANTING PLAN
S-001	STRUCTURAL GENERAL NOTES, SYMBOLS & ABBREVIATIONS
S-101	HERB GARDEN FOUNDATION PLAN
S-111	HERB GARDEN FRAMING PLAN
S-161	STRUCTURAL DETAILS



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ROBERT SILMAN ASSOCIATES  
STRUCTURAL ENGINEERS

LYNCH & ASSOCIATES  
IRRIGATION DESIGNERS

	Authorization Signature				
	NO. DATE BY DESCRIPTION				
	REVISIONS				
	USDA Agricultural Research Service				
PROJECT MANAGER KP		EPH K. HUMPHREY		USNA HERB GARDEN RENOVATIONS	
DESIGNER KP/FH		PPH		COVER SHEET	
CHECKED BY KP/FH		SAFETY & HEALTH		SOLICITATION NO.	
DRAWN BY TW/DB		REAL PROPERTY LISA BYNUM		DATE 07/03/2013	
				BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
				DWG. NO CS-001	
				SHEET OF	

EXISTING CONDITIONS TO REMAIN  
(PROTECT FROM DAMAGE)

- 1K
- HERB GARDEN OFFICE
- 2K
- OFFICE DOOR
- 3K
- YARD TRELLIS POST BRACKETS  
AND FOOTINGS

- 5K
- PEDESTRIAN BENCH
- 6K
- UNIT PAVERS
- 7K
- PLANTING BEDS
- 8K
- TREES
- 9K
- TURF GRASS
- 10K
- SURFACE DRAINAGE INLET
- 11K
- LIGHT POLE
- 12K
- DISPLAY SHELTER
- 13K
- FOUNTAIN
- 14K
- IRRIGATION SATELLITE
- 15K
- CONCRETE SIDEWALK
- 16K
- CRUSHED AGGREGATE WALK
- 17K
- LARGE ARBOR STRUCTURE
- 18K
- IRRIGATION POINT OF CONNECTION
- 19K
- IRRIGATION PVC MAINLINE AND  
LOW VOLTAGE CONTROL WIRES

EXISTING ITEMS TO SALVAGE

- 20S
- BENCH TYPE 'A'  
REMOVE AND REPLACE WOOD COMPONENTS,  
BASE AND FOOTERS TO REMAIN
- 21S
- YARD GATE 1  
REMOVE AND REUSE METAL GATE FRAMES
- 22S
- YARD GATE 2  
REMOVE AND REUSE METAL GATE FRAMES
- 23S
- REMOVE AND REPLACE BRICK PAVERS  
WITH REINFORCED EDGE
- 24S
- REMOVE LIGHTING ON EX TRELLIS  
REATTACH TO NEW TRELLIS
- 25S
- REMOVE RAIN CAN ON EX FENCE  
REATTACH TO NEW SHED
- 26S
- REPAIR / RELOCATE IRRIGATION AS NECESSARY  
FOR INSTALLATION OF NEW SUPPORTED TURF
- 27S
- REMOVE / RELOCATE SATELLITE CONTROLLER  
GROUND ROD IN 10" ROUND VALVE BOX

EXISTING CONDITIONS TO REMOVE

- 30R
- CRUSHED STONE ACCESS DRIVE,  
EDGING, AND BASE MATERIAL
- 31R
- LINEAR TRELLIS AND FOOTINGS
- 32R
- FREESTANDING TRELLIS AND FOOTINGS
- 33R
- YARD TRELLIS POSTS, BEAMS,  
AND ALUMINUM CAP
- 34R
- YARD SHED AND FOOTINGS
- 35R
- PRIVACY FENCE AND FOOTINGS
- 36R
- TWO REMOTE CONTROL VALVES  
IN TWO VALVE BOXES (ZONES #10B AND 20)  
SEAL WIRES AND TAG "SPARE"  
PROVIDE 10" ROUND SPLICE BOX
- 37R
- SPRINKLER HEADS ASSOCIATED  
WITH ZONES #10B AND 20
- 38R
- DRY WELL
- 39R
- EXISTING TURF  
AND TOPSOIL TO SUBGRADE

EXISTING ITEMS TO BE REMOVED BY USNA  
PRIOR TO CONSTRUCTION

- 40R
- PLANTED POTS
- 41R
- HERB GARDEN COLD FRAMES

TEMPORARY FACILITIES

- 60T
- TEMPORARY CONSTRUCTION FENCE  
APPROX LOCATION
- 61T
- TEMPORARY CONSTRUCTION GATE

BOUNDARY LINES

- 80
- LIMITS OF WORK  
(CONTRACTOR SHALL PRESERVE AND PROTECT ALL ELEMENTS  
AND STRUCTURES SCHEDULED TO REMAIN BOTH INSIDE  
AND OUTSIDE OF THE LIMITS OF WORK)

SITE PREPARATION

- 130
- TREE PRESERVATION FENCE
- 131
- EXISTING VINES ON TRELLIS –  
USNA TO EITHER REMOVE OR  
DETACH FROM TRELLIS PRIOR TO CONSTRUCTION

SITE UTILITIES

- 180
- CONNECT DOWNSPOUT TO STORM DRAIN  
SEE CIVIL DRAINAGE PLAN
- 181
- UNDERDRAINAGE  
SEE CIVIL DRAINAGE PLAN

PAVING / SURFACING SCHEDULE

SYMBOL	MATERIAL	COLOR	FINISH	SIZE (NOMINAL)	THICKNESS	JOINTS	BASE
GS-01	CRUSHED AGGREGATE GRANITE	GRAY	CRUSHED ANGULAR GRANITE	$\frac{1}{4}$ "– $\frac{1}{2}$ "	N/A	N/A	N/A

HARDSCAPE

- 210
- PERMEABLE PAVING  
ALTERNATIVES
- 211
- GRAVEL SURFACING GS-01  
SEE PAVING SCHEDULE
- 212
- CONCRETE SLAB  
DIMENSION TBD

SITE FEATURES

- 250
- LINEAR TRELLIS
- 251
- FREESTANDING TRELLIS
- 252
- YARD TRELLIS
- 253
- PRIVACY FENCE
- 254
- VEHICULAR YARD GATE
- 270
- YARD SHED –  
FURNISHED BY USNA,  
INSTALLED BY CONTRACTOR

PLANTING

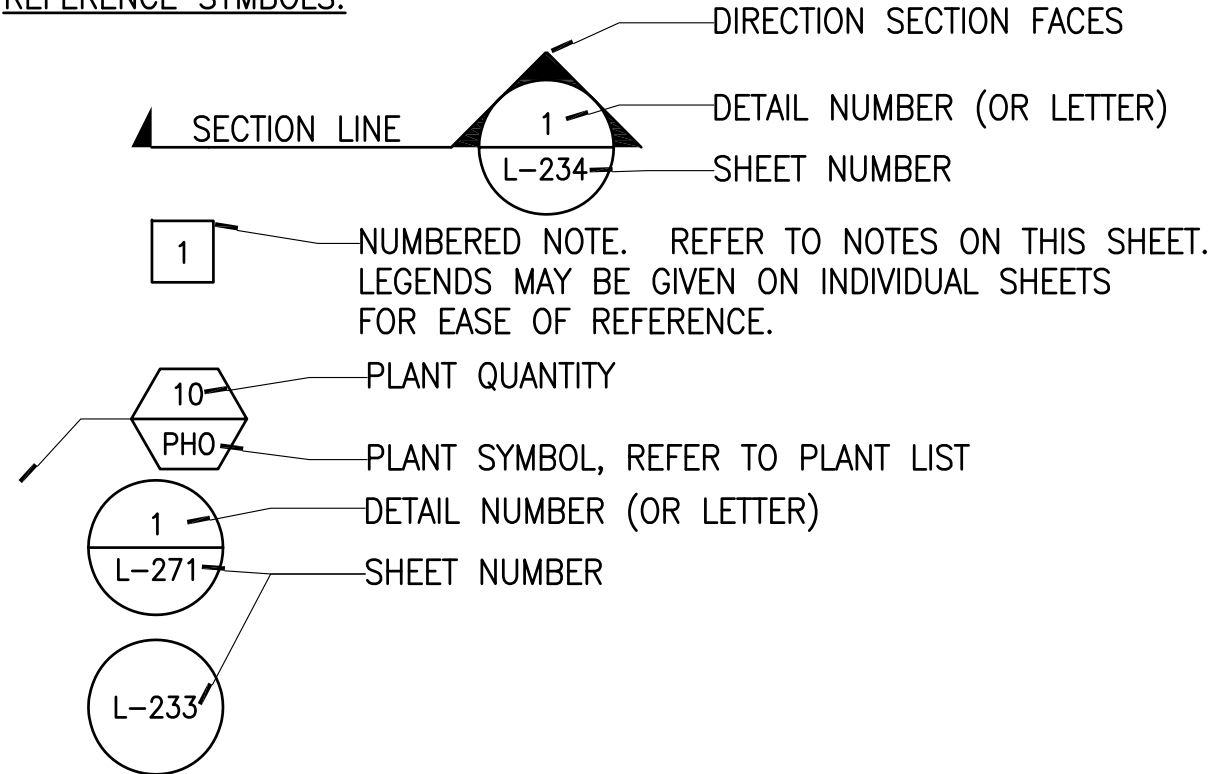
- PA
- PLANTING AREA
- 900
- TURF SOD RENOVATION
- 901
- STEEL BED DIVIDER

LIST OF LANDSCAPE ARCHITECTURAL ABBREVIATIONS & SYMBOLS:

BFG	BELOW FINISH GRADE	PC	POINT OF CURVATURE
BG	BELOW GRADE	POB	POINT OF BEGINNING
BW	BOTTOM OF WALL	PT	POINT OF TANGENCY
CAL	CALIPER	ROW	RIGHT-OF-WAY
CJ	CONTROL JOINT	SF	SQUARE FEET
CL	CENTERLINE	SPEC	SPECIFICATIONS/SPECIFIED
CONC	CONCRETE	SQ	SQUARE
DWG	DRAWING	SS	STAINLESS STEEL
EJ	EXPANSION JOINT	TW	TOP OF WALL
EOP	EDGE OF PAVEMENT	TYP	TYPICAL
EQ	EQUAL	VAR	VARIES/VARIABLE
EX	EXISTING	VIF	VERIFY IN FIELD
FG	FINISHED GRADE	WWM	WOVEN WIRE MESH
FOB	FACE OF BUILDING		
FT	FOOT/FEET		
GALV	GALVANIZED		
HP	HIGH POINT		
HT	HEIGHT		
LOD	LIMIT OF DISTURBANCE		
MANF	MANUFACTURER		
MAX	MAXIMUM		
MIN	MINIMUM		
NTS	NOT TO SCALE		
OC	ON CENTER		
PA	PLANTING AREA (SEE PLANTING PLANS)		

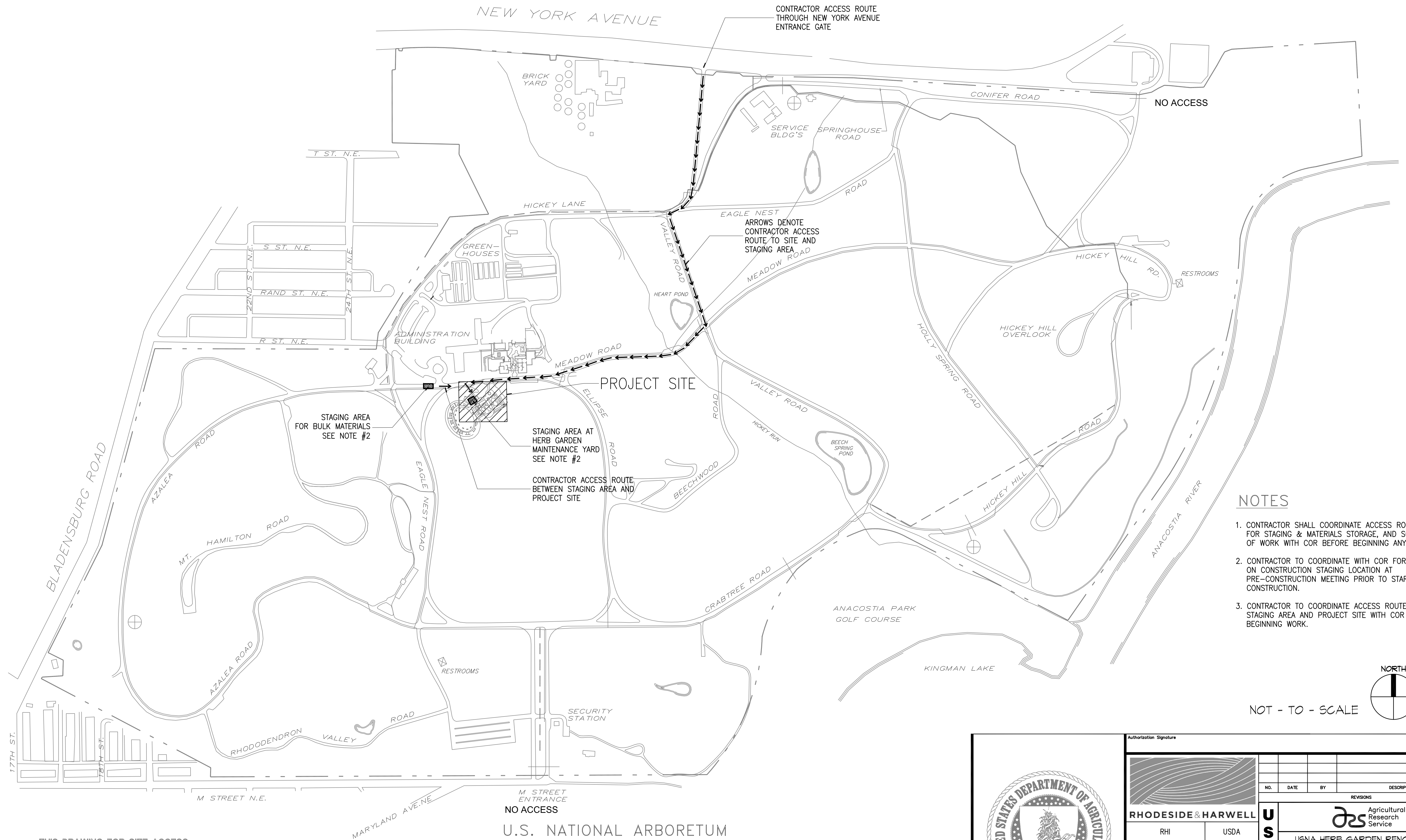
	MISCELLANEOUS:
@	AT
'	FEET
"	INCHES
#	NUMBER

REFERENCE SYMBOLS:



Authorization Signature			
NO. DATE BY DESCRIPTION			
REVISIONS			
PROJECT MANAGER KP		USDA K. HUMPHREY	
DESIGNER KP/FH		PPM	
CHECKED BY KP/FH		SAFETY & HEALTH	
DRAWN BY TW/DB		REAL PROPERTY LISA BYNUM	
SOLICITATION NO.		DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705		DWG. NO. CS-002 SHEET OF	



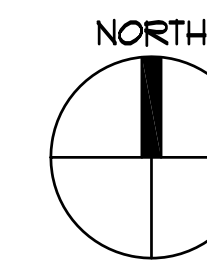


THIS DRAWING FOR SITE ACCESS  
AND PROJECT LOCATION ONLY.

NOTES

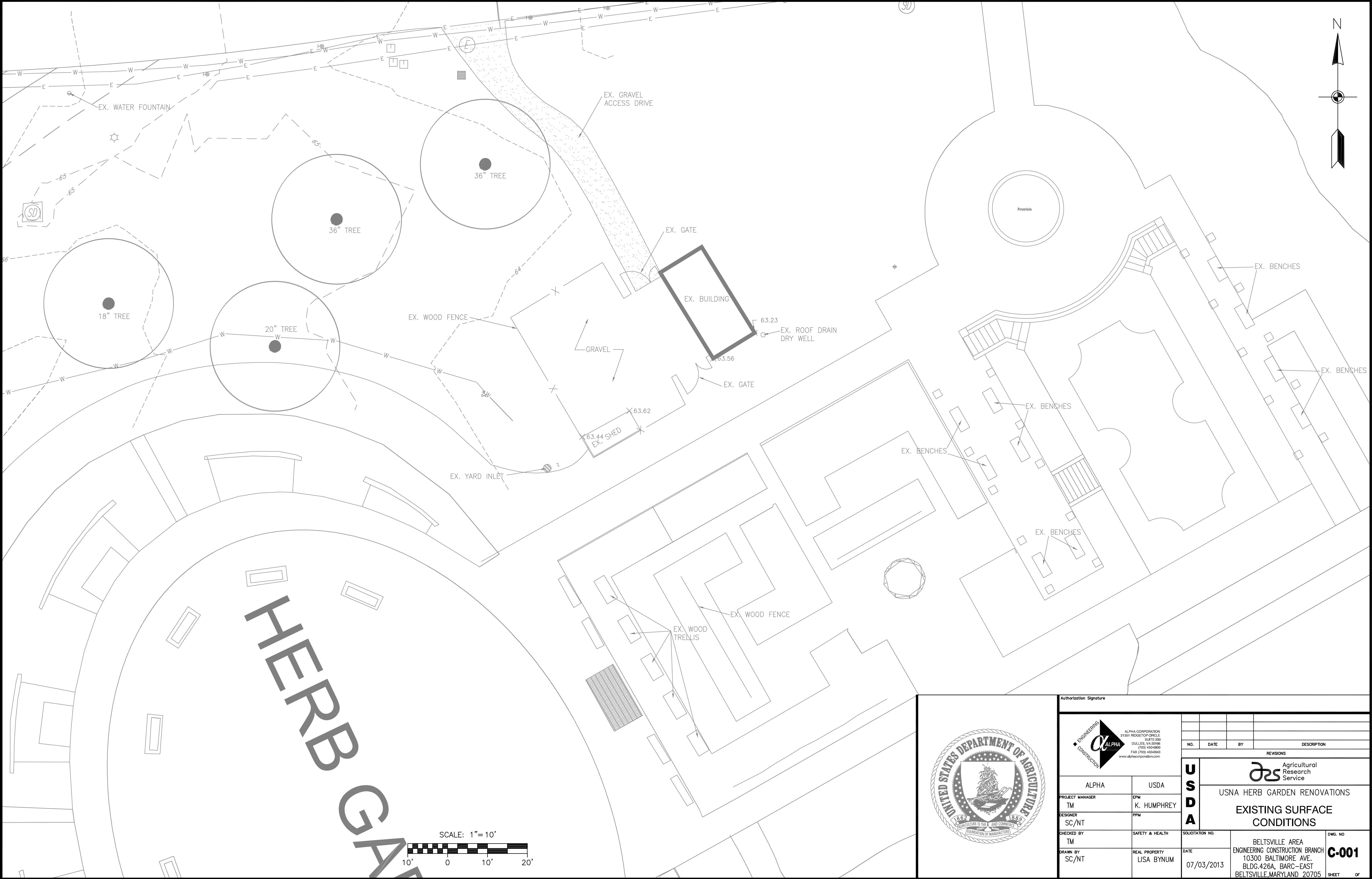
1. CONTRACTOR SHALL COORDINATE ACCESS ROUTE, AREA FOR STAGING & MATERIALS STORAGE, AND SCHEDULING OF WORK WITH COR BEFORE BEGINNING ANY WORK.
2. CONTRACTOR TO COORDINATE WITH COR FOR INSTRUCTION ON CONSTRUCTION STAGING LOCATION AT PRE-CONSTRUCTION MEETING PRIOR TO START OF CONSTRUCTION.
3. CONTRACTOR TO COORDINATE ACCESS ROUTE BETWEEN STAGING AREA AND PROJECT SITE WITH COR PRIOR TO BEGINNING WORK.

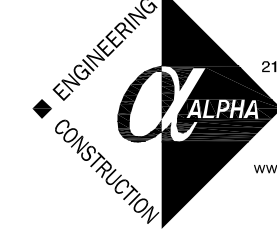
NOT - TO - SCALE

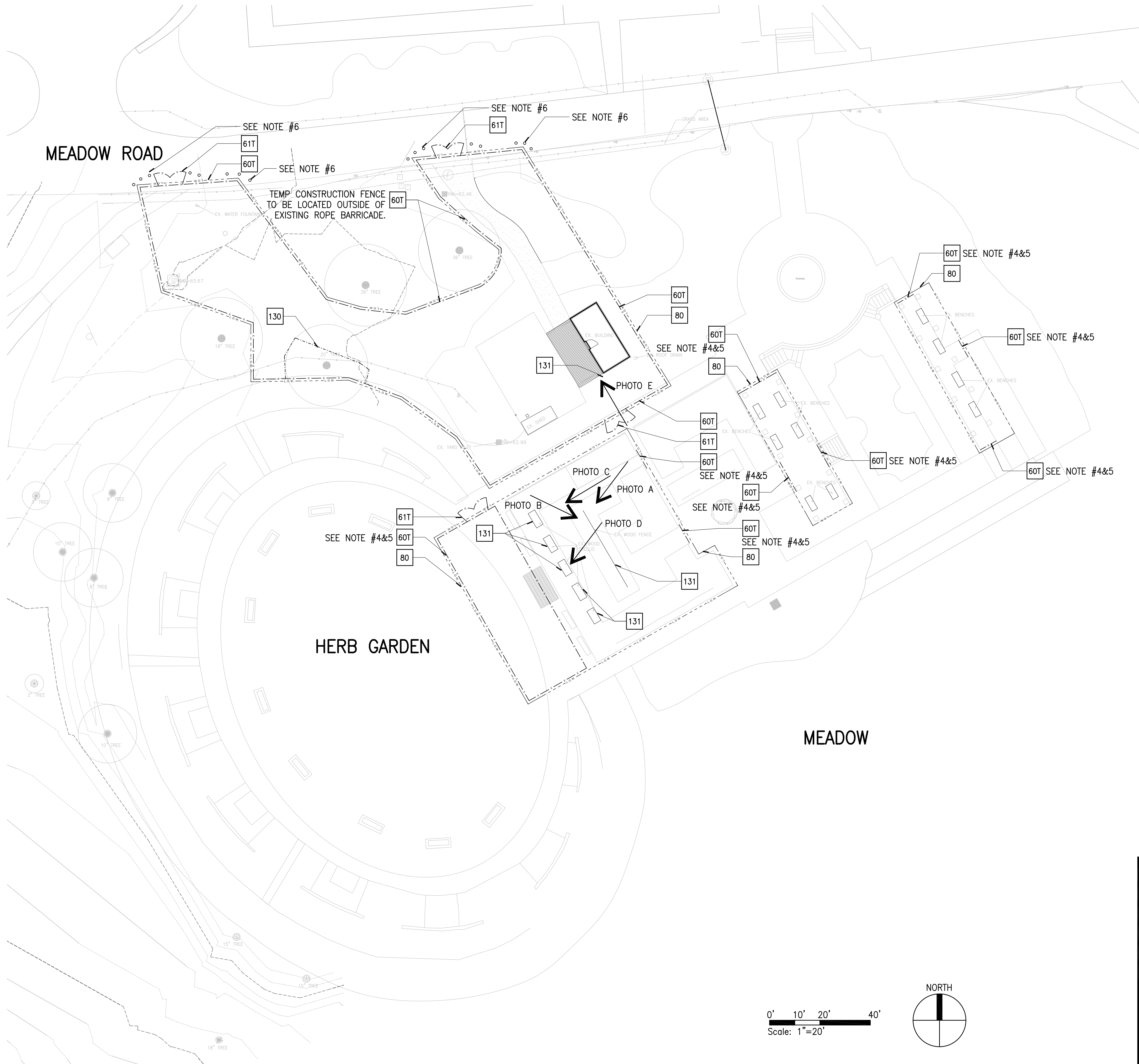


Authorization Signature	
RHODESIDE & HARWELL	
RHI	USDA
PROJECT MANAGER KP	EPH K. HUMPHREY
DESIGNER KP/FH	PPM
CHECKED BY KP/FH	SAFETY & HEALTH
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM
SOLICITATION NO.	
DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
DWC NO CS-003	
SHEET OF	





Authorization Signature			
		ALPHA CORPORATION 21351 RIDGETOP CIRCLE SUITE 200 DULLES, VA 20166 (703) 450-0800 FAX (703) 450-0843 www.alphacorporation.com	
ALPHA		USDA	
PROJECT MANAGER TM		EPM K. HUMPHREY	
DESIGNER SC/NT		PPM	
CHECKED BY TM		SAFETY & HEALTH	
DRAWN BY SC/NT		REAL PROPERTY LISA BYNUM	
		SOLICITATION NO.	
		DATE 07/03/2013	
		BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
		DWG. NO <b>C-001</b>	
		SHEET OF	



TEMPORARY FACILITIES

- 60T TEMPORARY CONSTRUCTION FENCE  
APPROX LOCATION
- 61T TEMPORARY CONSTRUCTION GATE

BOUNDARY LINES

- 80 LIMITS OF WORK  
(CONTRACTOR SHALL PRESERVE AND PROTECT ALL ELEMENTS  
AND STRUCTURES SCHEDULED TO REMAIN BOTH INSIDE  
AND OUTSIDE OF THE LIMITS OF WORK)


SITE PREPARATION

- 130 TREE PRESERVATION FENCE
- 131 EXISTING VINES ON TRELLIS -  
USNA TO EITHER REMOVE OR  
DETACH FROM TRELLIS PRIOR TO CONSTRUCTION

DIRECTION OF VIEW  
PHOTO #XX

- NOTES:
- SEE SHEET LT-161 FOR PHOTOS OF EXISTING PLANT MATERIAL AS INDICATED BY CORRESPONDING LETTER.
  - SEE SHEET D-161 FOR PHOTOS OF EXISTING CONDITIONS.
  - PROVIDE TEMPORARY PROTECTION OF PAVING AT TEMPORARY CONSTRUCTION GATES.
  - TEMPORARY CONSTRUCTION FENCE AT ROSE GARDEN, ARBOR, AND HERB GARDEN OVAL ONLY NEEDED DURING DURATION OF CONSTRUCTION OF COMPONENTS (DEMO/REPLACE).
  - CONTRACTOR'S OPTION: ORANGE PLASTIC MESH FENCE AT THESE AREAS.
  - CONTRACTOR TO PROVIDE TRAFFIC SAFETY MEASURES AT L.O.W. / CONSTRUCTION FENCE GATES.



Authorization Signature	
	
RHI USDA	
PROJECT MANAGER KP	EPH K. HUMPHREY
DESIGNER KP/FH	PPH
CHECKED BY KP/FH	SAFETY & HEALTH
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM
SOLICITATION NO.	
DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
DWC. NO LT-101	
SHEET OF	





A EXISTING PLANTINGS AT LINEAR TRELLIS –  
USNA TO EITHER REMOVE OR DETACH FROM TRELLIS  
NTS



B EXISTING PLANTINGS AT LINEAR TRELLIS –  
USNA TO EITHER REMOVE OR DETACH FROM TRELLIS  
NTS



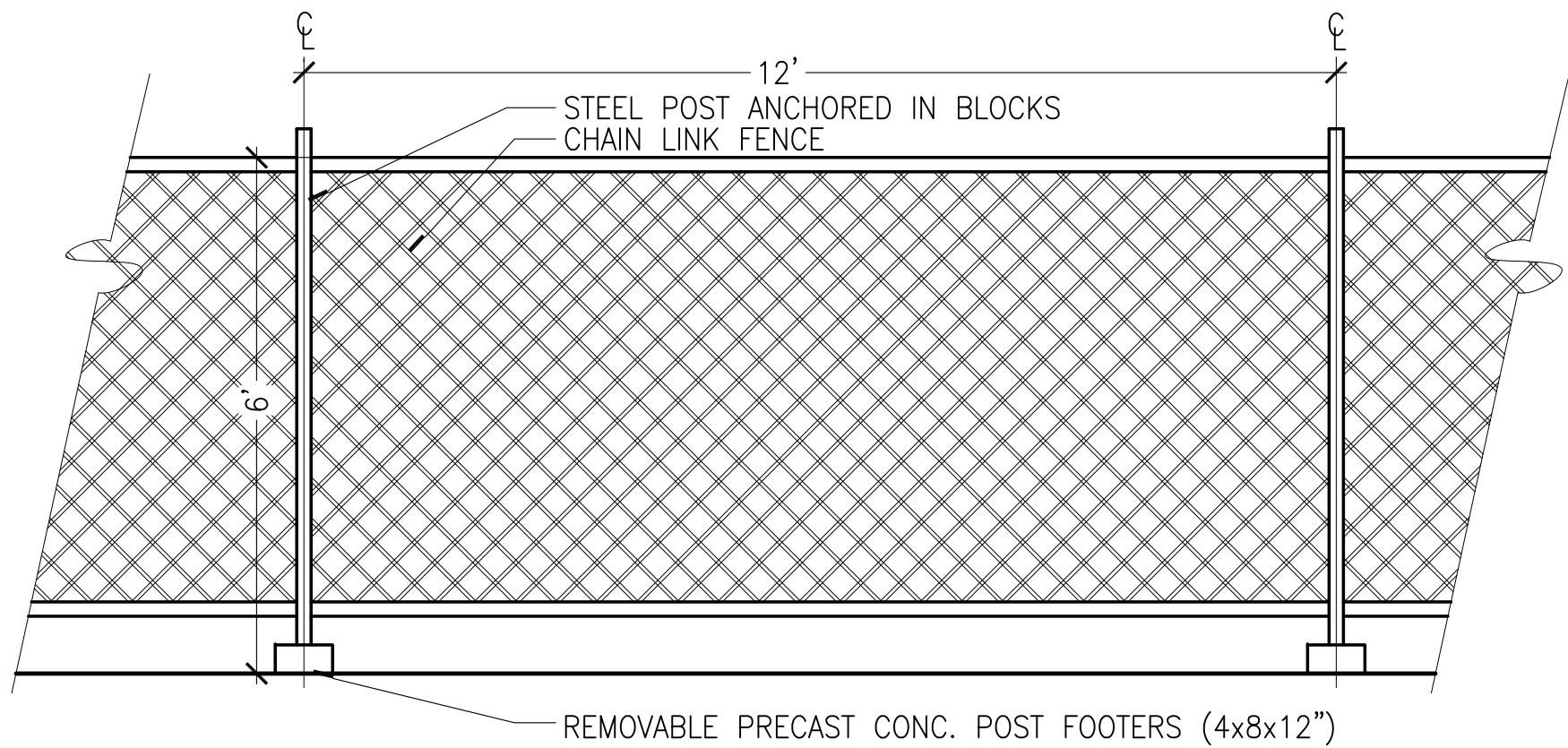
C EXISTING PLANTINGS AT FREESTANDING TRELLIS –  
USNA TO EITHER REMOVE OR DETACH FROM TRELLIS  
NTS



D EXISTING PLANTINGS AT FREESTANDING TRELLIS –  
USNA TO EITHER REMOVE OR DETACH FROM TRELLIS  
NTS

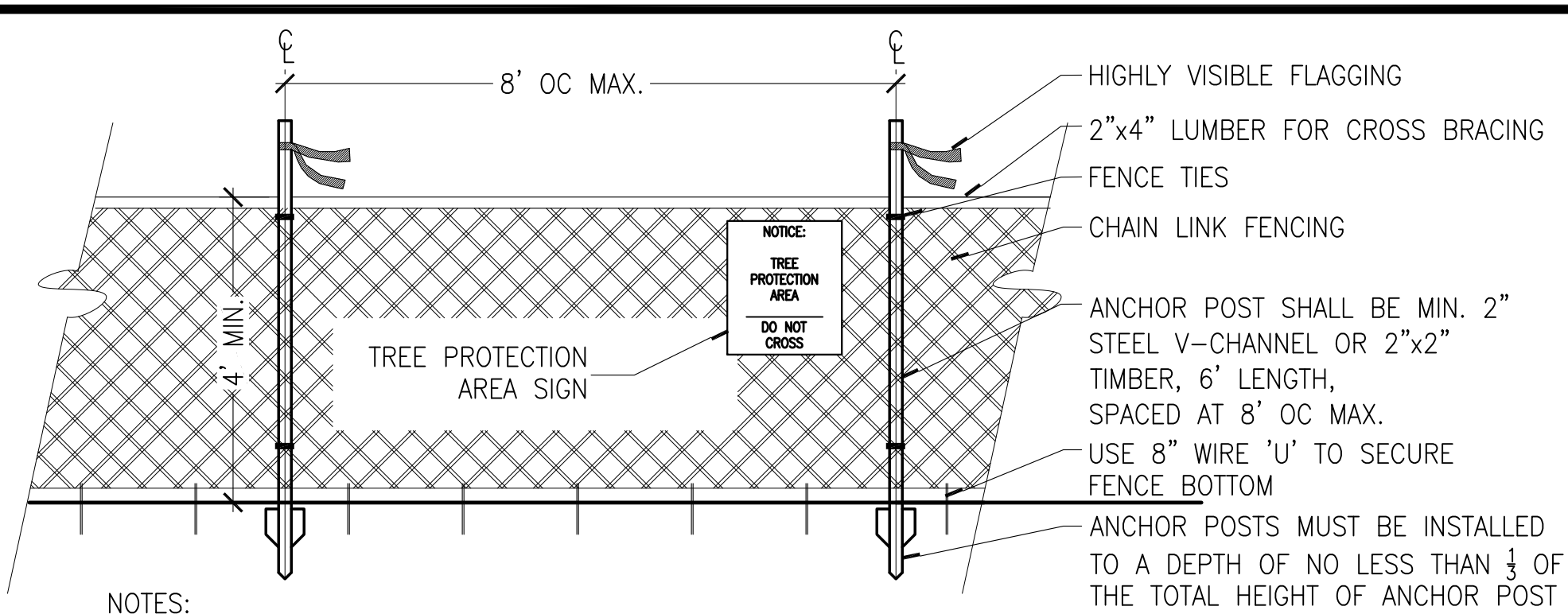


E EXISTING PLANTINGS AT MAINTENANCE GATES –  
USNA TO EITHER REMOVE OR DETACH FROM TRELLIS  
NTS



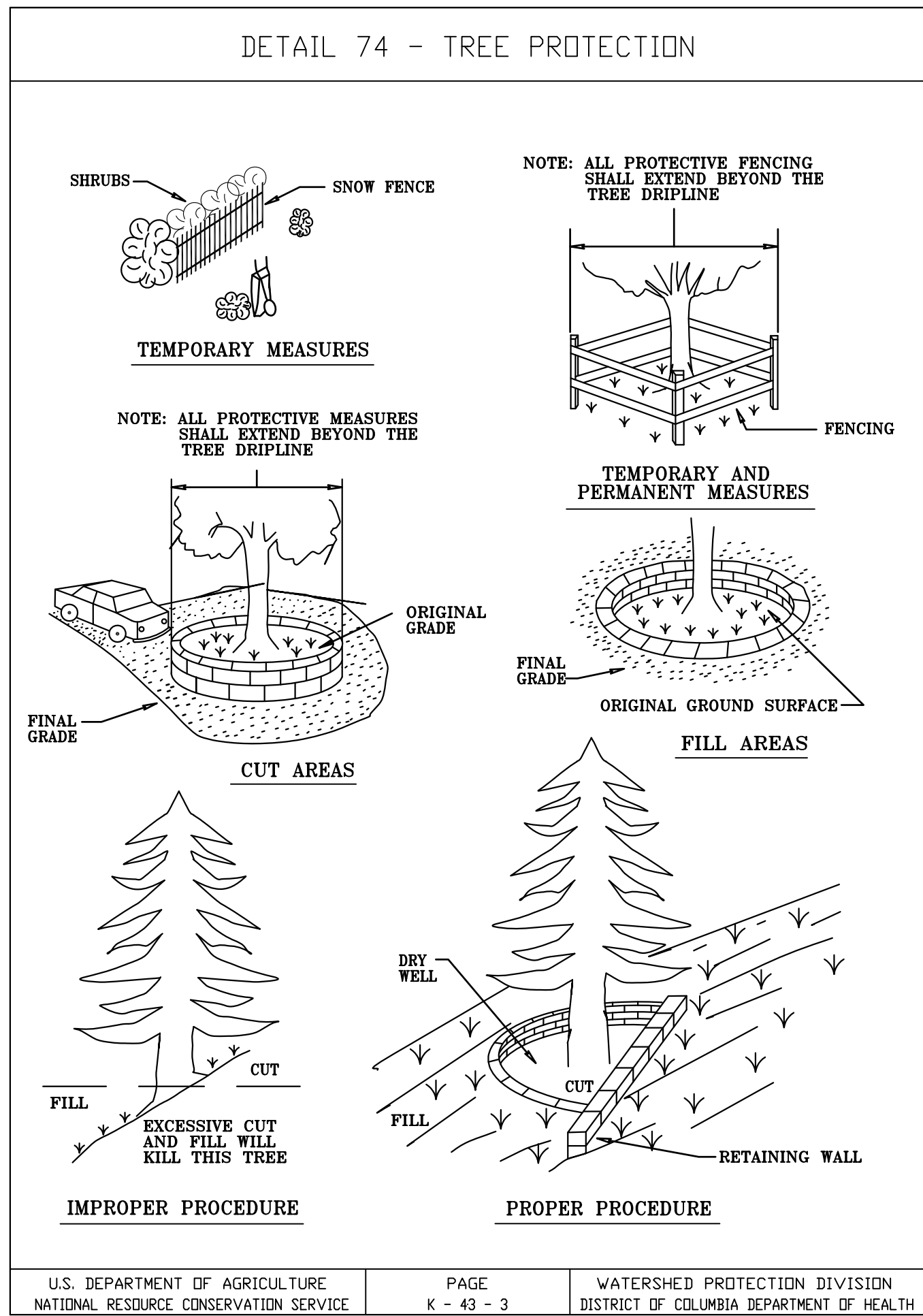
NOTES:  
1. ERECT TEMPORARY CONSTRUCTION FENCE AROUND ENTIRE PERIMETER OF LIMITS OF WORK.

1 TEMPORARY CONSTRUCTION FENCE (60T)  
1/2"=1'

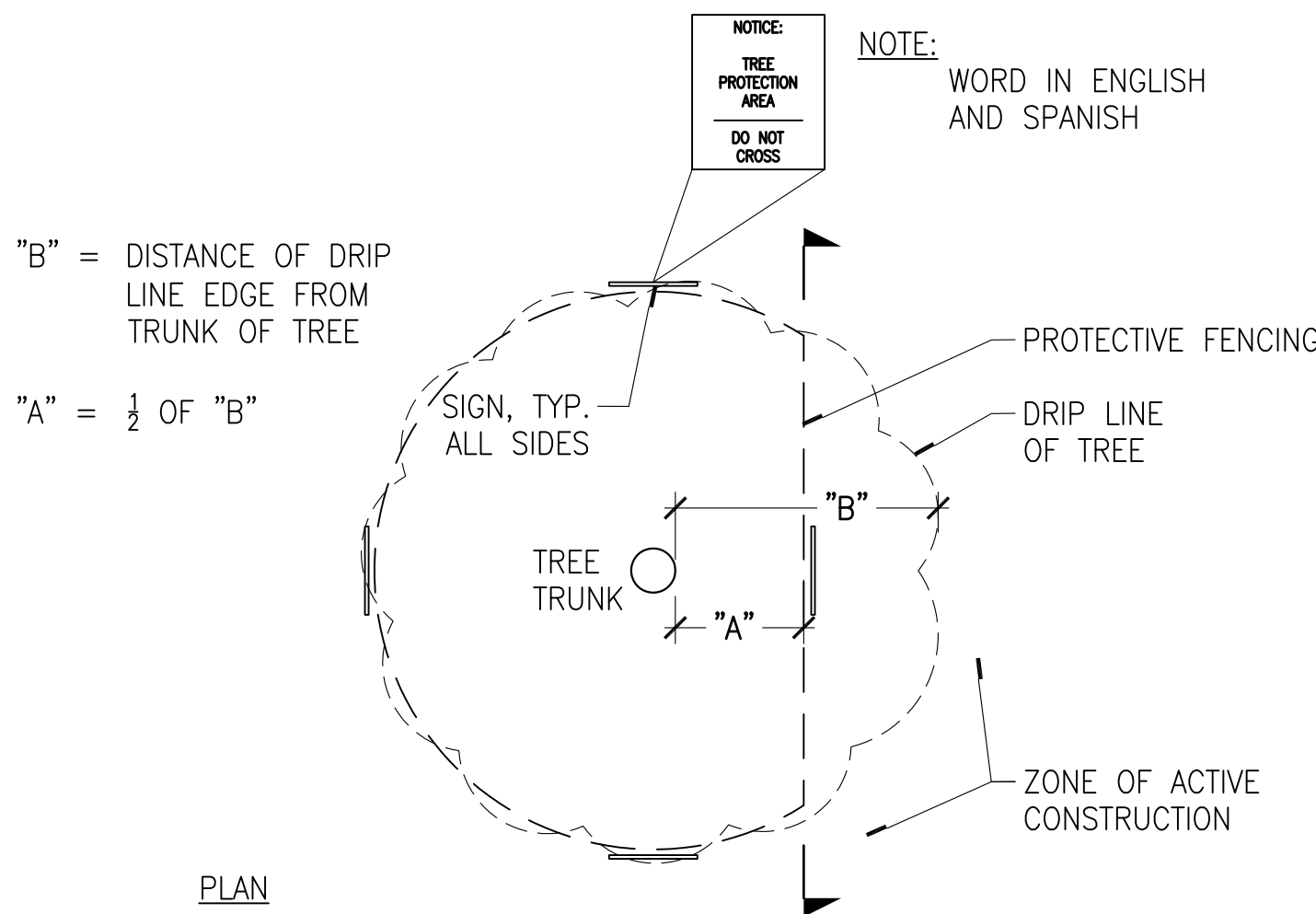


NOTES:  
1. ERECT TREE PRESERVATION FENCE BETWEEN PATHWAY / HARDSCAPE IMPROVEMENTS AND EXISTING TREES.  
2. FENCE SHALL SEPARATE WORK AREAS FROM TREE PROTECTION AREAS AT ALL TIMES.  
3. FOREST PROTECTION DEVICE ONLY.  
4. ROOT DAMAGE SHALL BE AVOIDED.  
5. PROTECTION SIGNAGE IS REQUIRED. WORD IN ENGLISH AND SPANISH.  
6. DEVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

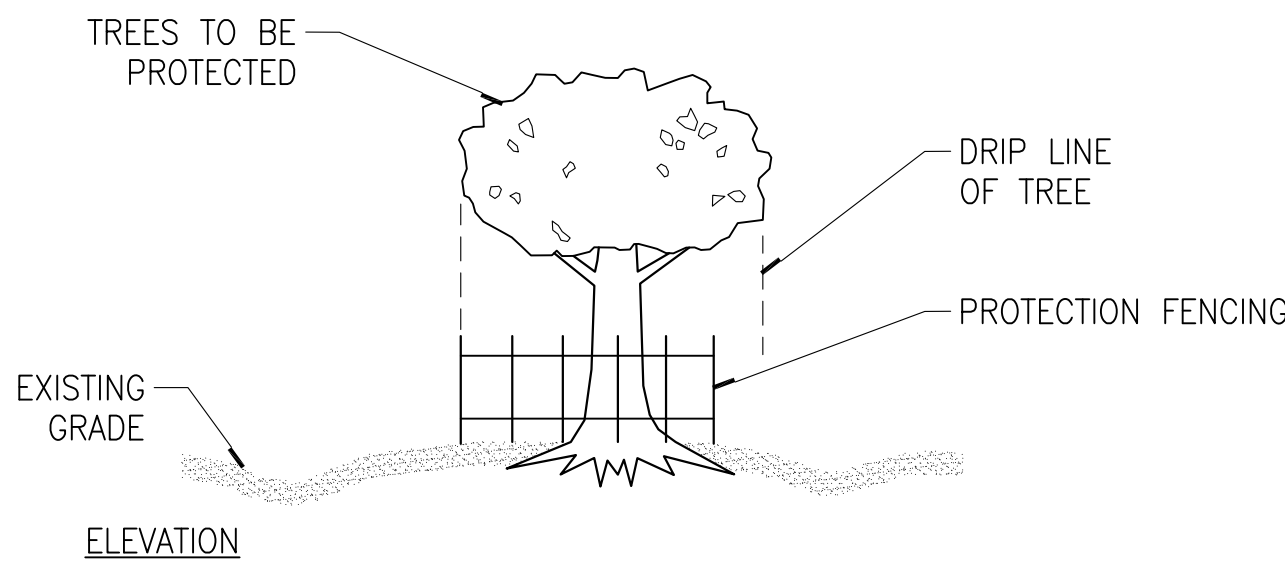
2 TREE PRESERVATION FENCE  
1/2"=1'



3 TREE PROTECTION – TYP DETAILS  
NTS



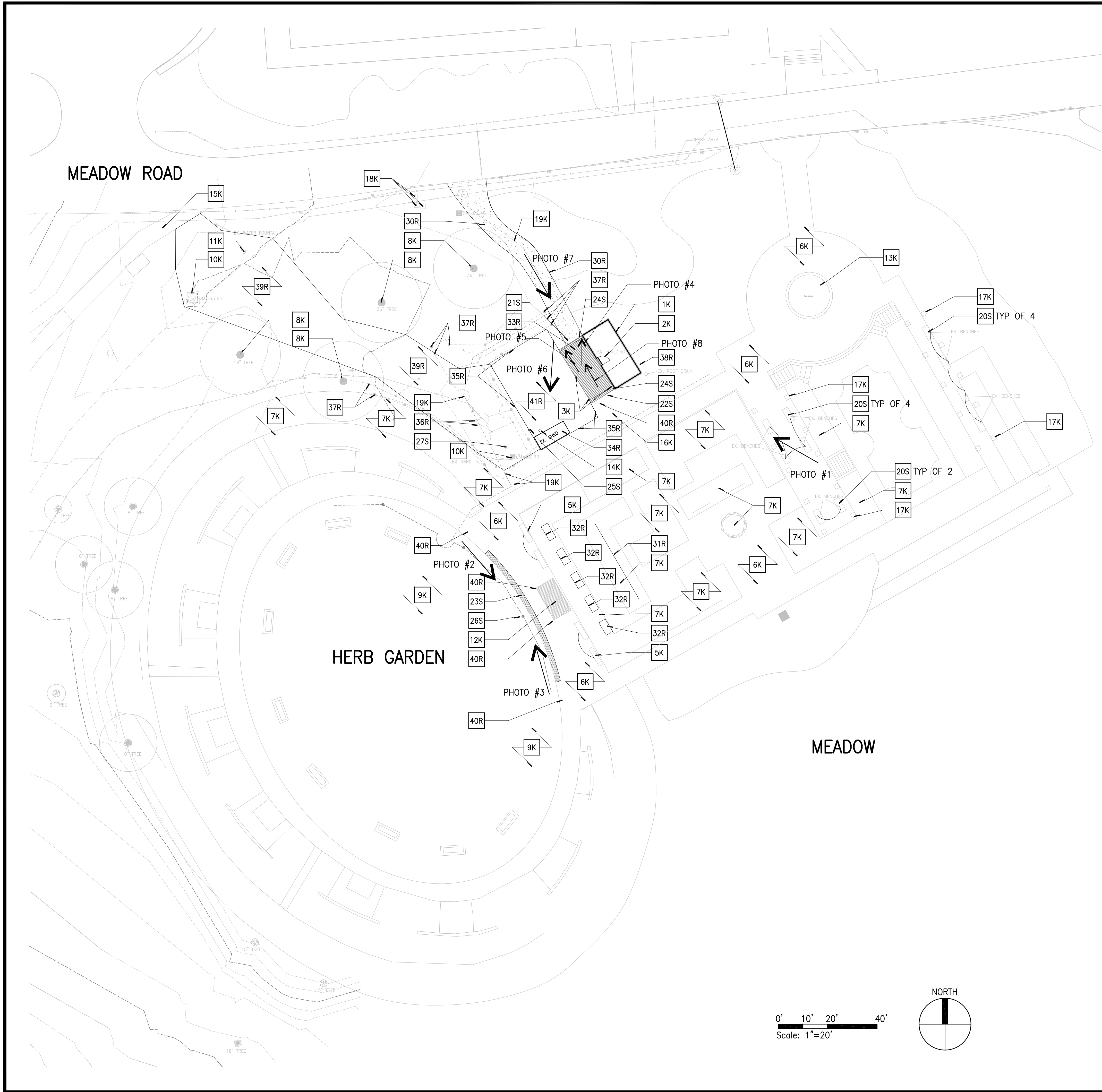
NOTES:  
1. PROTECTIVE FENCING SHALL BE PLACED AT THE DRIPLINE OF TREES TO BE PROTECTED DURING CONSTRUCTION, EXCEPT ON THE SIDE OF CONSTRUCTION DISTURBANCE WHERE FENCING SHALL NOT BE PLACED CLOSER TO THE TREE THAN 1/2 THE TOTAL DISTANCE FROM THE TREE TO THE LIMITS OF THE TREE'S DRIPLINE. THIS SPACE IS TO ACCOMMODATE GRADING ONLY AND NOT TO ALLOW ADDITIONAL WORKING SPACE.  
2. GROUPS OF TREES MAY BE FENCED AS ONE SINGLE UNIT.



4 TREE PROTECTION – DETAILS  
NTS

		Authorization Signature	
		NO. DATE BY DESCRIPTION	
		REVISIONS	
PROJECT MANAGER KP		USDA K. HUMPHREY	
		DESIGNER KP/FH	
CHECKED BY KP/FH		SAFETY & HEALTH	
		DRAWN BY TW/DB	
REAL PROPERTY LISA BYNUM		DATE 07/03/2013	
		SOLICITATION NO.	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705		DWC. NO. LT-161	
		SHEET OF	





EXISTING CONDITIONS TO REMAIN  
(PROTECT FROM DAMAGE)

- 1K HERB GARDEN OFFICE
- 2K OFFICE DOOR
- 3K YARD TRELLIS POST BRACKETS AND FOOTINGS

- 5K PEDESTRIAN BENCH
- 6K UNIT PAVERS
- 7K PLANTING BEDS
- 8K TREES
- 9K TURF GRASS
- 10K SURFACE DRAINAGE INLET
- 11K LIGHT POLE
- 12K DISPLAY SHELTER
- 13K FOUNTAIN
- 14K IRRIGATION SATELLITE
- 15K CONCRETE SIDEWALK
- 16K CRUSHED AGGREGATE WALK
- 17K LARGE ARBOR STRUCTURE
- 18K IRRIGATION POINT OF CONNECTION
- 19K IRRIGATION PVC MAINLINE AND LOW VOLTAGE CONTROL WIRES

EXISTING ITEMS TO SALVAGE

- 20S BENCH TYPE 'A' REMOVE AND REPLACE WOOD COMPONENTS, BASE AND FOOTERS TO REMAIN
- 21S YARD GATE 1 REMOVE AND REUSE METAL GATE FRAMES
- 22S YARD GATE 2 REMOVE AND REUSE METAL GATE FRAMES
- 23S REMOVE AND REPLACE BRICK PAVERS WITH REINFORCED EDGE
- 24S REMOVE LIGHTING ON EX TRELLIS REATTACH TO NEW TRELLIS
- 25S REMOVE RAIN CAN ON EX FENCE REATTACH TO NEW SHED
- 26S REPAIR / RELOCATE IRRIGATION AS NECESSARY FOR INSTALLATION OF NEW SUPPORTED TURF
- 27S REMOVE / RELOCATE SATELLITE CONTROLLER GROUND ROD IN 10" ROUND VALVE BOX

EXISTING CONDITIONS TO REMOVE

- 30R CRUSHED STONE ACCESS DRIVE, EDGING, AND BASE MATERIAL
- 31R LINEAR TRELLIS AND FOOTINGS
- 32R FREESTANDING TRELLIS AND FOOTINGS
- 33R YARD TRELLIS POSTS, BEAMS, AND ALUMINUM CAP
- 34R YARD SHED AND FOOTINGS
- 35R PRIVACY FENCE AND FOOTINGS
- 36R TWO REMOTE CONTROL VALVES IN TWO VALVE BOXES (ZONES #10B AND 20) SEAL WIRES AND TAG "SPARE" PROVIDE 10" ROUND SPLICE BOX
- 37R SPRINKLER HEADS ASSOCIATED WITH ZONES #10B AND 20
- 38R DRY WELL
- 39R EXISTING TURF AND TOPSOIL TO SUBGRADE

EXISTING ITEMS TO BE REMOVED BY USNA PRIOR TO CONSTRUCTION

- 40R PLANTED POTS
- 41R HERB GARDEN COLD FRAMES

↑  
DIRECTION OF VIEW  
PHOTO #XX

- NOTES:
- SEE SHEET LT-161 FOR PHOTOS OF EXISTING PLANT MATERIAL.
  - SEE SHEET D-161 FOR PHOTOS OF EXISTING CONDITIONS BY CORRESPONDING NUMBER.
  - THIS PLAN FOR DEMOLITION OF SURFACE FEATURES ONLY. SEE CIVIL DRAWINGS FOR BELOW SURFACE UTILITY DEMOLITION.



Authorization Signature	
RHODESIDE & HARWELL	
RHI	USDA
PROJECT MANAGER KP	EPH K. HUMPHREY
DESIGNER KP/FH	PPH
CHECKED BY KP/FH	SAFETY & HEALTH
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM
SOLICITATION NO.	
DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
DWC NO D-101	
SHEET OF	

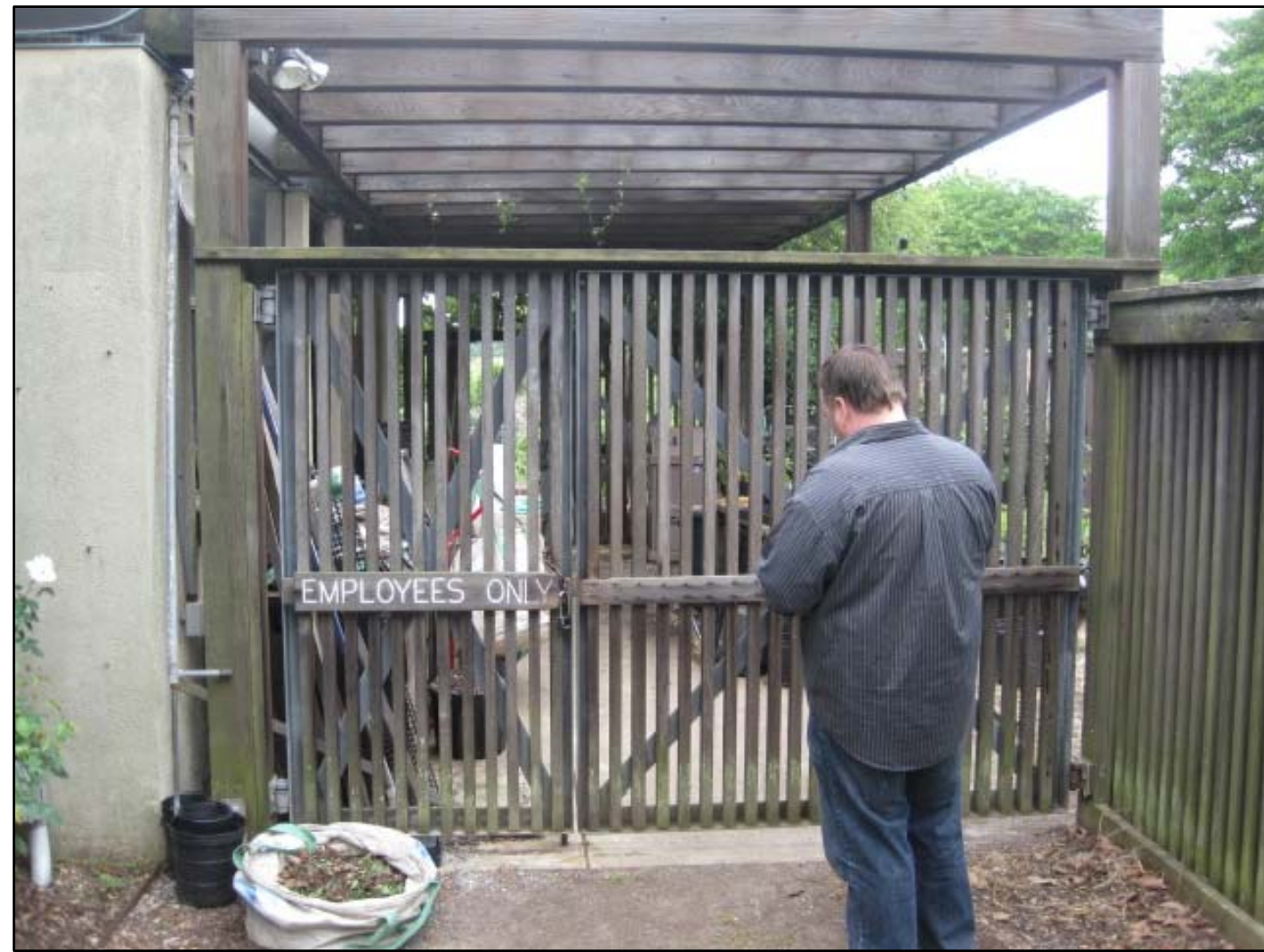




① EXISTING BENCH – REMOVE AND REPLACE WOOD COMPONENTS,  
BASE AND FOOTERS TO REMAIN  
NTS



④ REMOVE LIGHTING FROM EXISTING TRELLIS  
REATTACH TO NEW TRELLIS  
NTS



⑦ YARD GATES  
REMOVE AND REUSE METAL GATE FRAMES  
NTS



② OVAL HERB WALK  
EXISTING BRICK PAVERS TO SALVAGE  
NTS



⑤ EXISTING YARD TRELLIS  
POST BRACKETS AND FOOTINGS TO REMAIN  
NTS



⑧ YARD GATES  
REMOVE AND REUSE METAL GATE FRAMES  
NTS





③ OVAL HERB WALK  
EXISTING BRICK PAVERS TO SALVAGE  
NTS

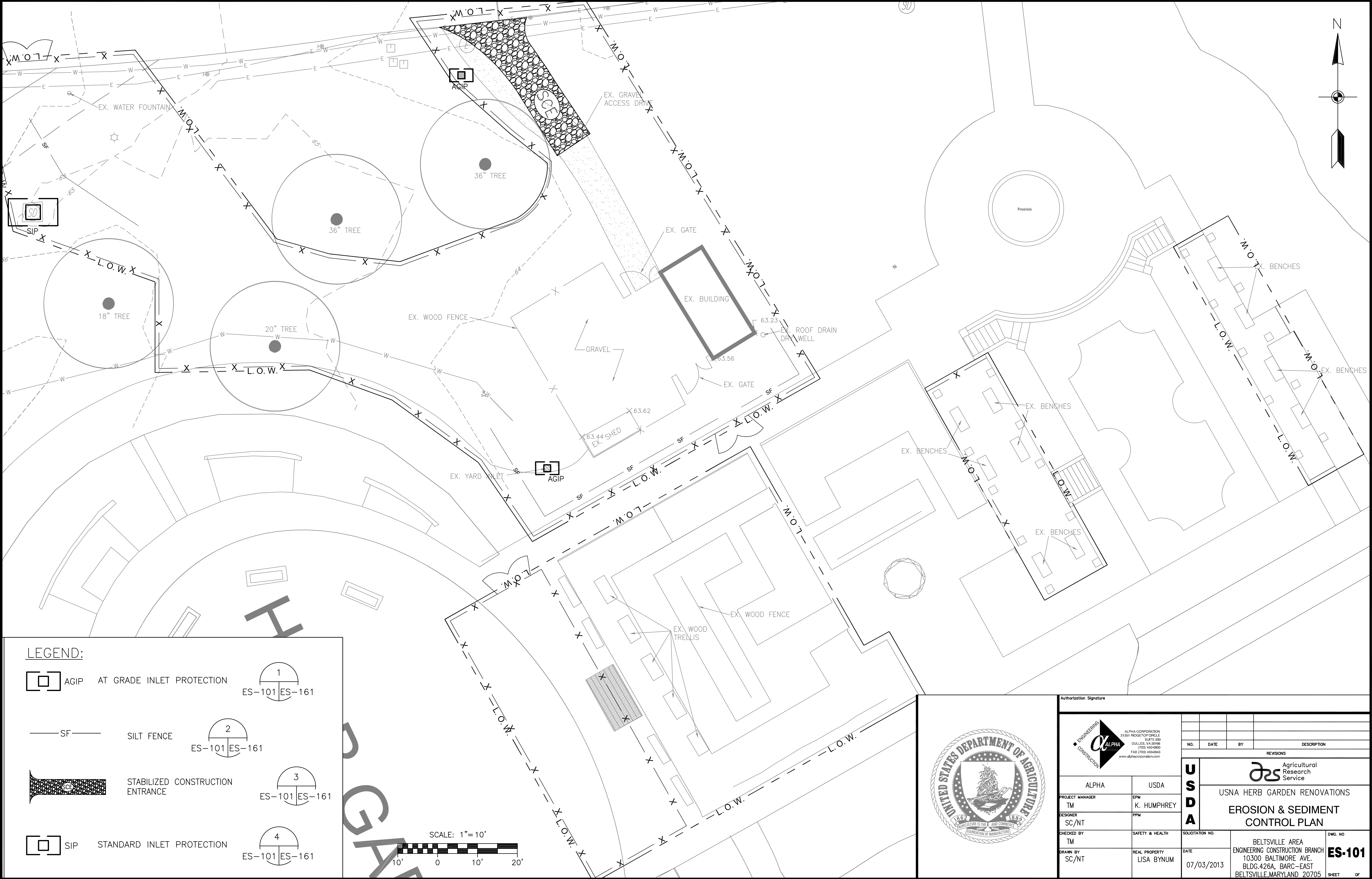


⑥ EXISTING MAINTENANCE YARD  
EXISTING SHED TO BE REMOVED, COLD FRAMES TO REMOVED BY USNA  
NTS

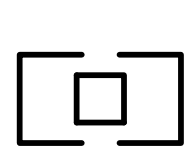
FOR INFORMATION ONLY

		Authorization Signature			
					
PROJECT MANAGER KP		USDA K. HUMPHREY		NO. DATE BY DESCRIPTION	
DESIGNER KP/FH		SAFETY & HEALTH LISA BYNUM		REVISIONS	
CHECKED BY KP/FH		REAL PROPERTY LISA BYNUM		USDA Agricultural Research Service USNA HERB GARDEN RENOVATIONS DEMOLITION INFORMATION	
DRAWN BY TW/DB		DATE 07/03/2013		SOLICITATION NO. BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
				Dwg. No. D-161 SHEET OF	

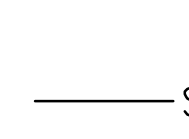




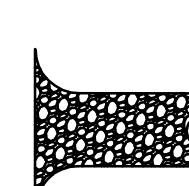
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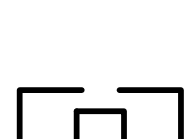
AGIP AT GRADE INLET PROTECTION




SILT FENCE



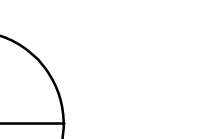
STABILIZED CONSTRUCTION ENTRANCE



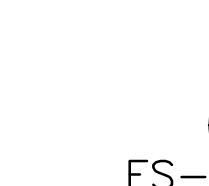
SIP STANDARD INLET PROTECTION



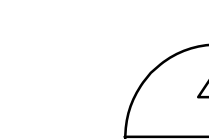
ES-101 ES-161



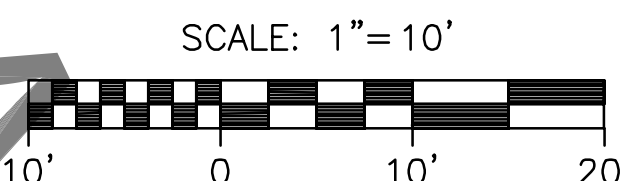
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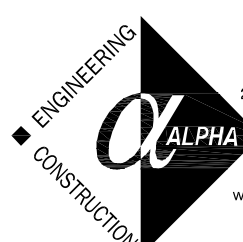



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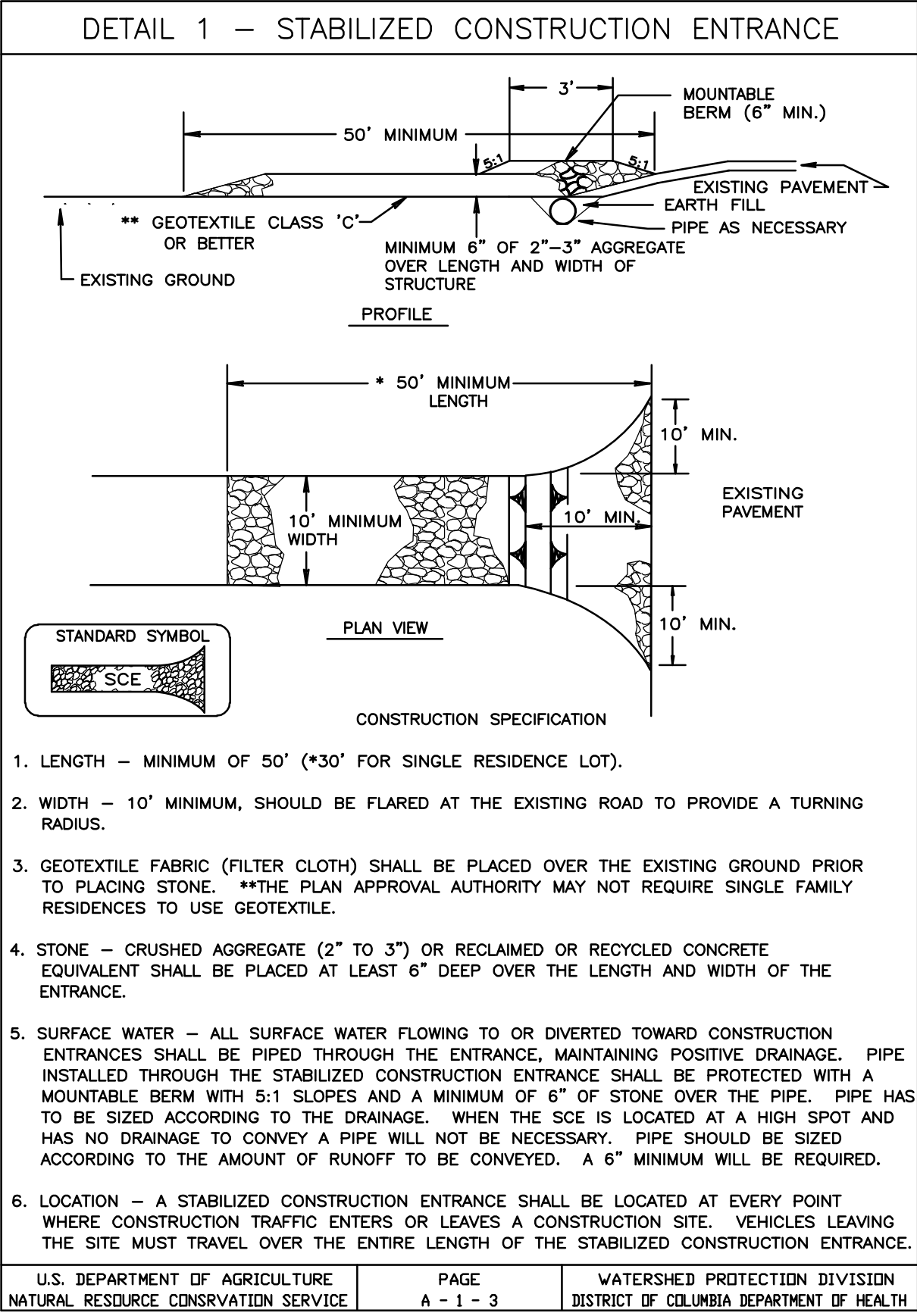


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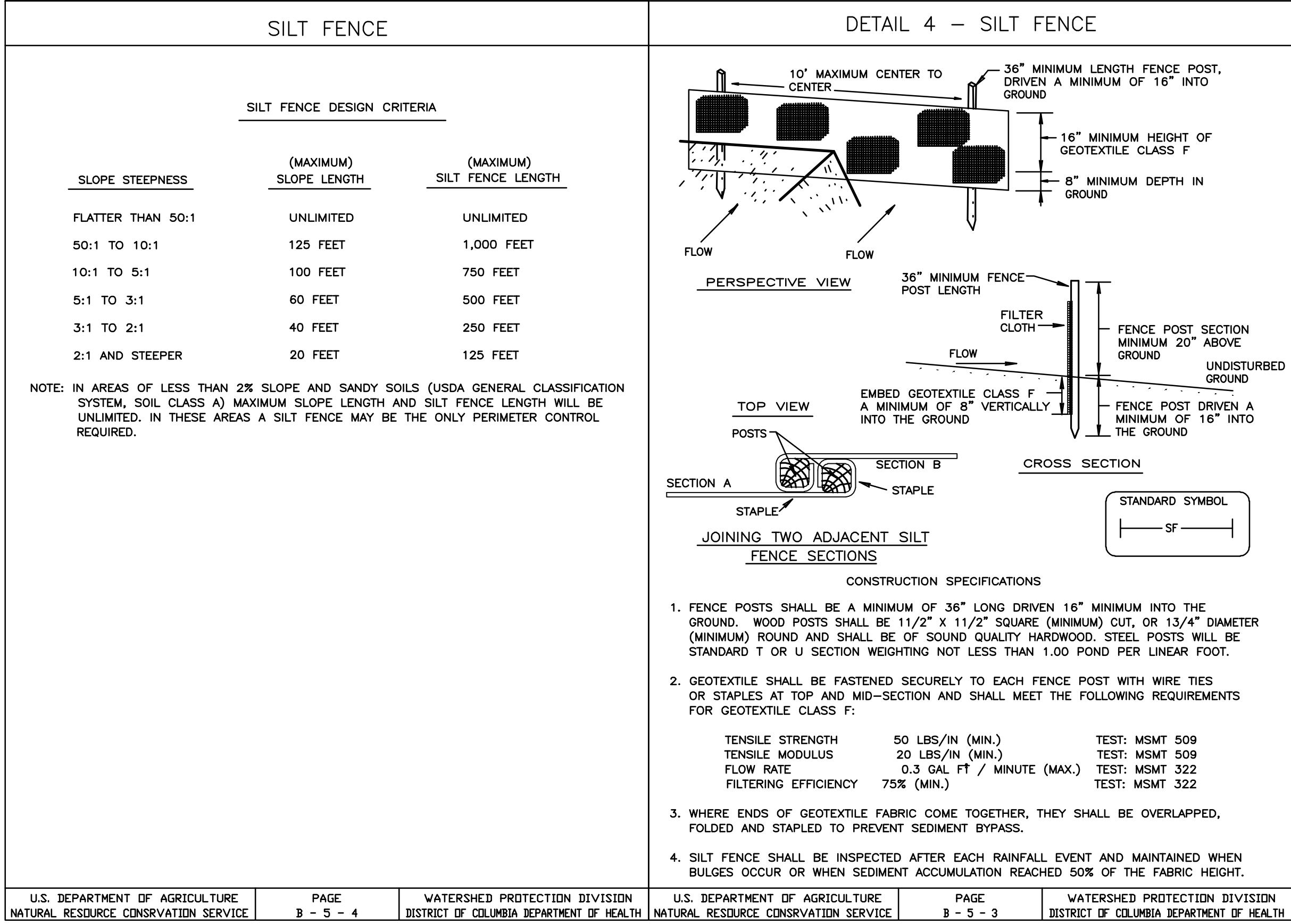
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 <div>ALPHA CORPORATION 21351 RIDGETOP CIRCLE SUITE 200 DULLES, VA 20166 (703) 450-0800 FAX (703) 450-0843 www.alphacorporation.com</div>				
	NO.	DATE	BY	DESCRIPTION
REVISIONS				
U S D A	 Agricultural Research Service  USNA HERB GARDEN RENOVATIONS  EROSION & SEDIMENT CONTROL PLAN			
PROJECT MANAGER	EPH	K. HUMPHREY		
TM				
DESIGNER	PPM			
SC/NT				
CHECKED BY	SAFETY & HEALTH	SOLICITATION NO.		
TM				
DRAWN BY	REAL PROPERTY	DATE	BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	DWG. NO  <b>ES-101</b>
SC/NT	LISA BYNUM	07/03/2013		SHEET OF





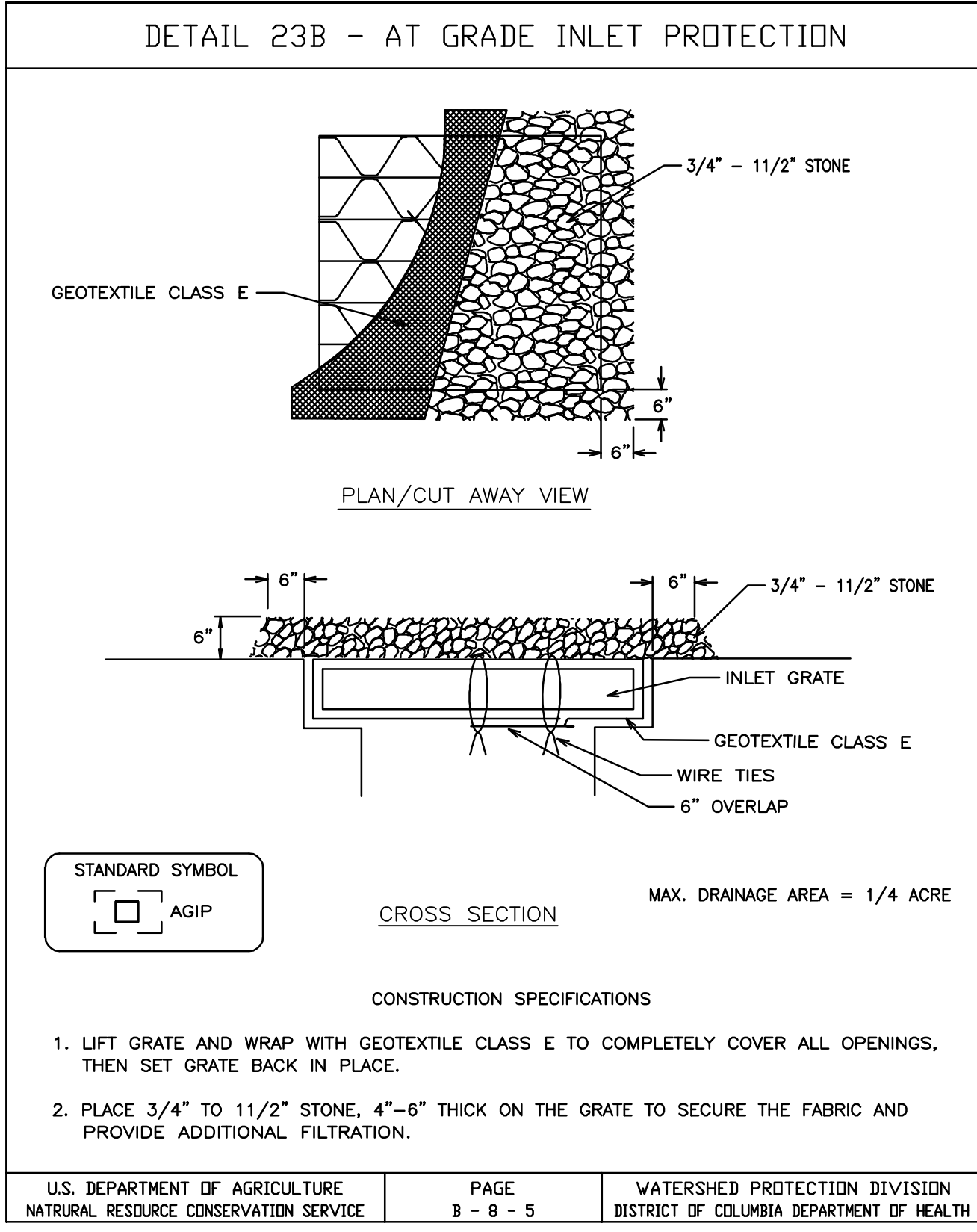
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ES-101 | ES-161 N.T.S.

CONSTRUCTION ENTRANCE



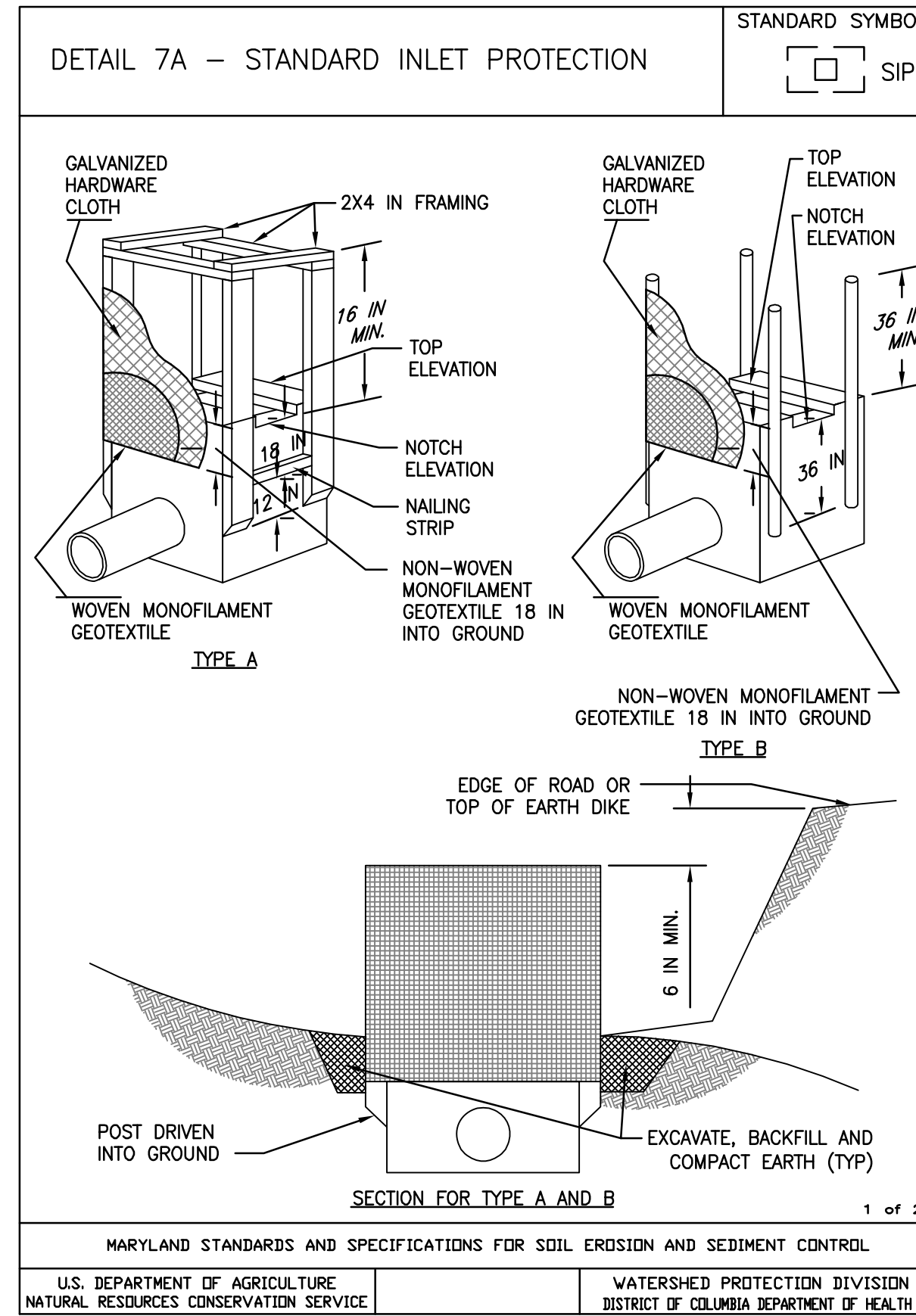
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ES-101 | ES-161 N.T.S.

SILT FENCE



1  
ES-101 | ES-161 N.T.S.

AT GRADE INLET PROTECTION



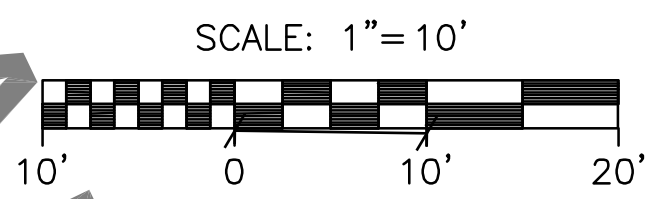
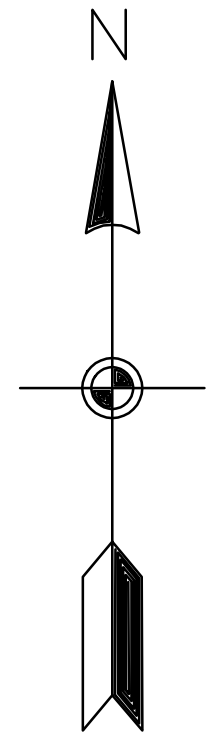
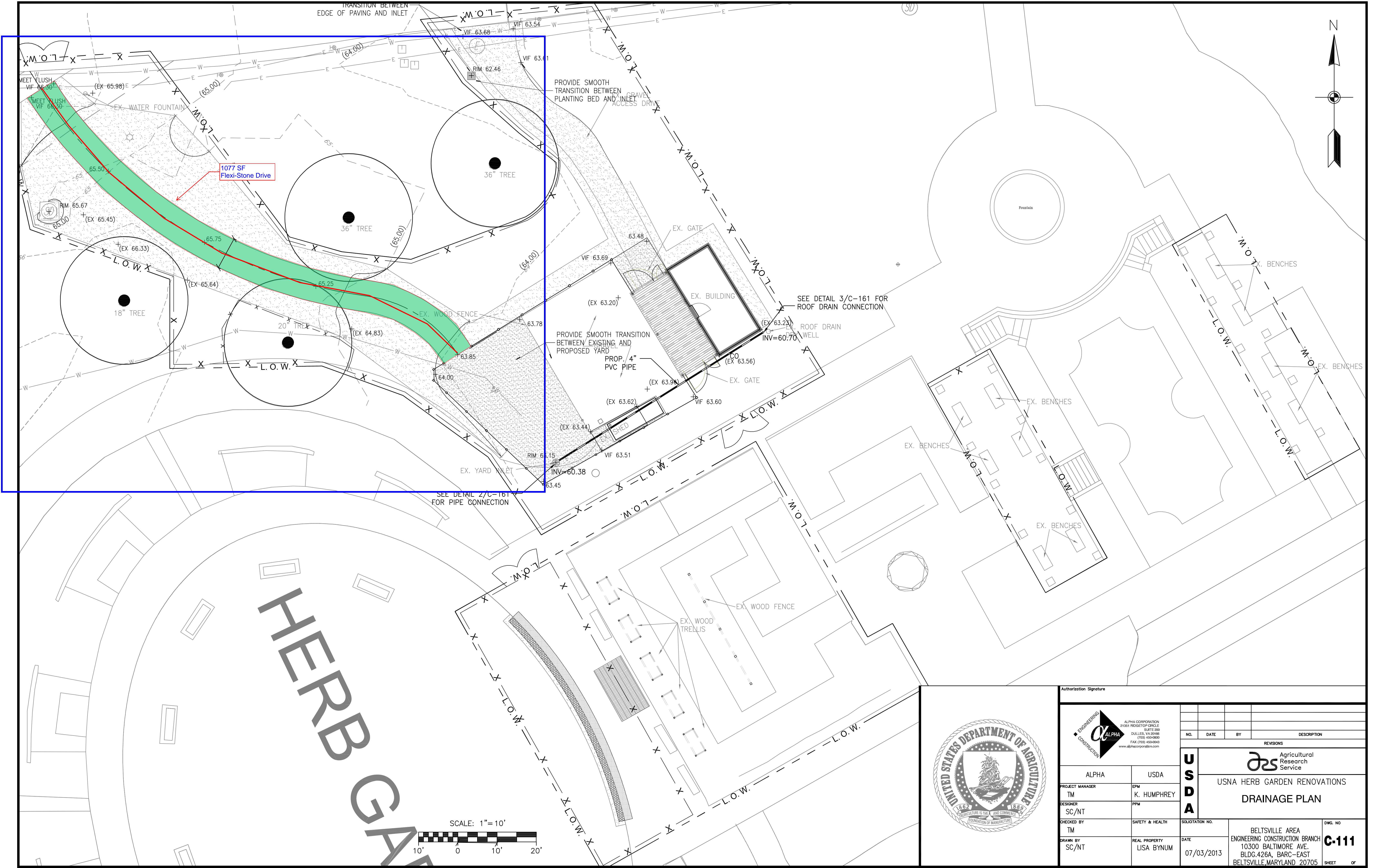
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ES-101 | ES-161 N.T.S.

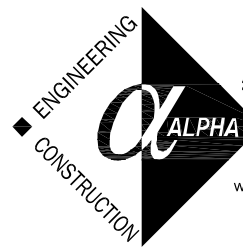

STANDARD INLET PROTECTION



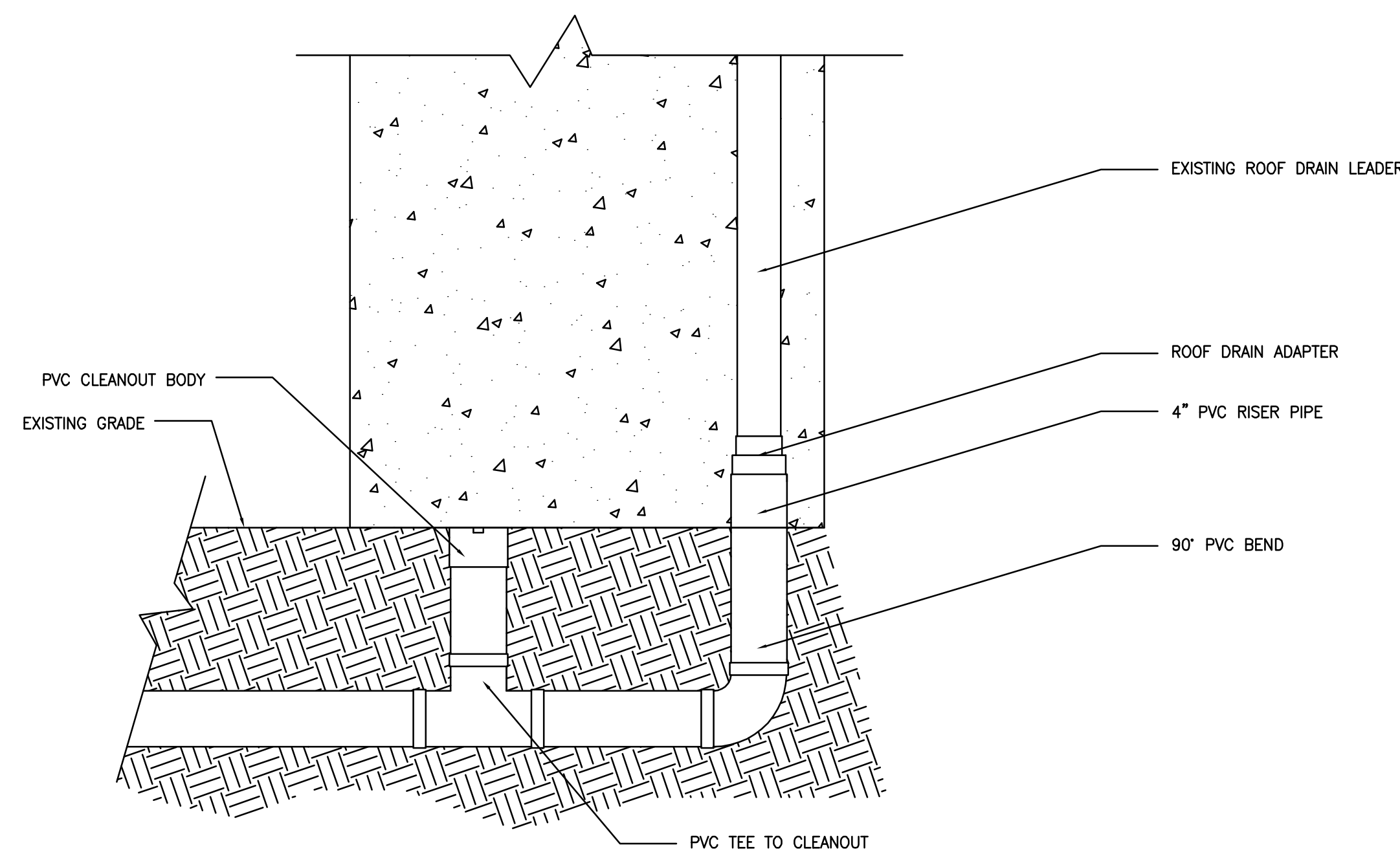
Authorization Signature		NO.		DATE	BY	DESCRIPTION
ALPHA CORPORATION 21351 RIDGETOP CIRCLE SUITE 200 DULLES, VA 20186 (703) 450-0800 FAX (703) 450-0843 www.alphacorporation.com		U S D A		Agricultural Research Service		
PROJECT MANAGER TM		EPH K. HUMPHREY		USNA HERB GARDEN RENOVATIONS		
DESIGNER SC/NT		PPM		EROSION & SEDIMENT CONTROL DETAILS		
CHECKED BY TM		SAFETY & HEALTH		SOLICITATION NO.		DWG. NO.
DRAWN BY SC/NT		REAL PROPERTY LISA BYNUM		DATE 07/03/2013		BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705 <b>ES-161</b>



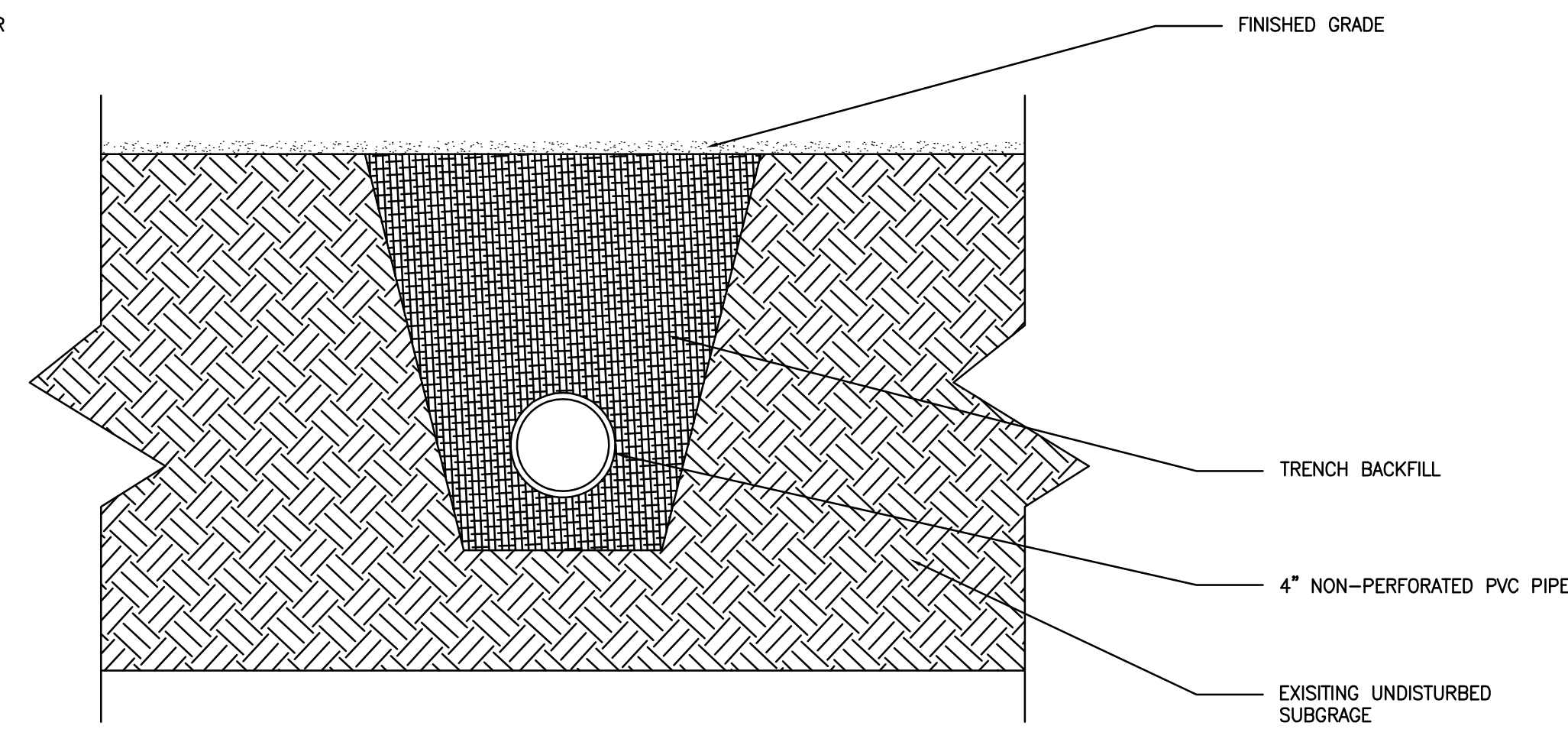


Authorization Signature							
	ALPHA CORPORATION 21351 RIDGETOP CIRCLE SUITE 200 DULLES, VA 20186 (703) 450-0800 FAX (703) 450-0843 www.alphacorporation.com						
				NO.	DATE	BY	DESCRIPTION
				REVISIONS			
ALPHA		USDA		USDA	 Agricultural Research Service  USNA HERB GARDEN RENOVATIONS  DRAINAGE PLAN		
PROJECT MANAGER TM		EPM K. HUMPHREY					
DESIGNER SC/NT		PPM					
CHECKED BY TM		SAFETY & HEALTH					
DRAWN BY SC/NT		REAL PROPERTY LISA BYNUM		SOLICITATION NO.		DWG. NO.	
				DATE 07/03/2013		BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705  <b>C-111</b>	
				SHEET OF			

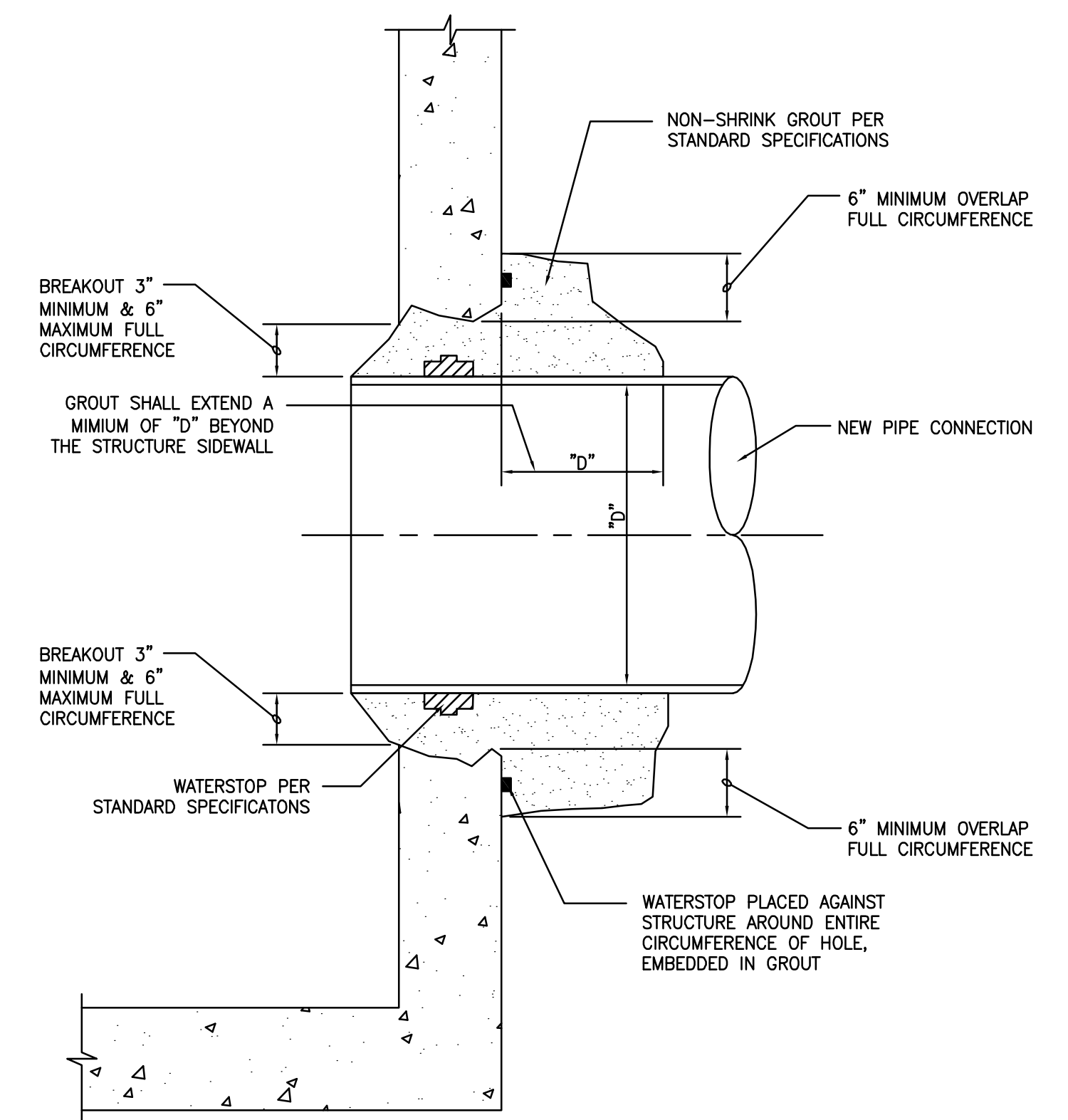




3 ROOF DRAIN CONNECTION  
C-111 | C-161 SCALE NTS

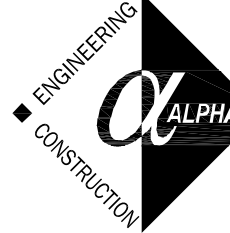


2 NON-PERFORATED PVC PIPE  
C-111 | C-161 SCALE NTS

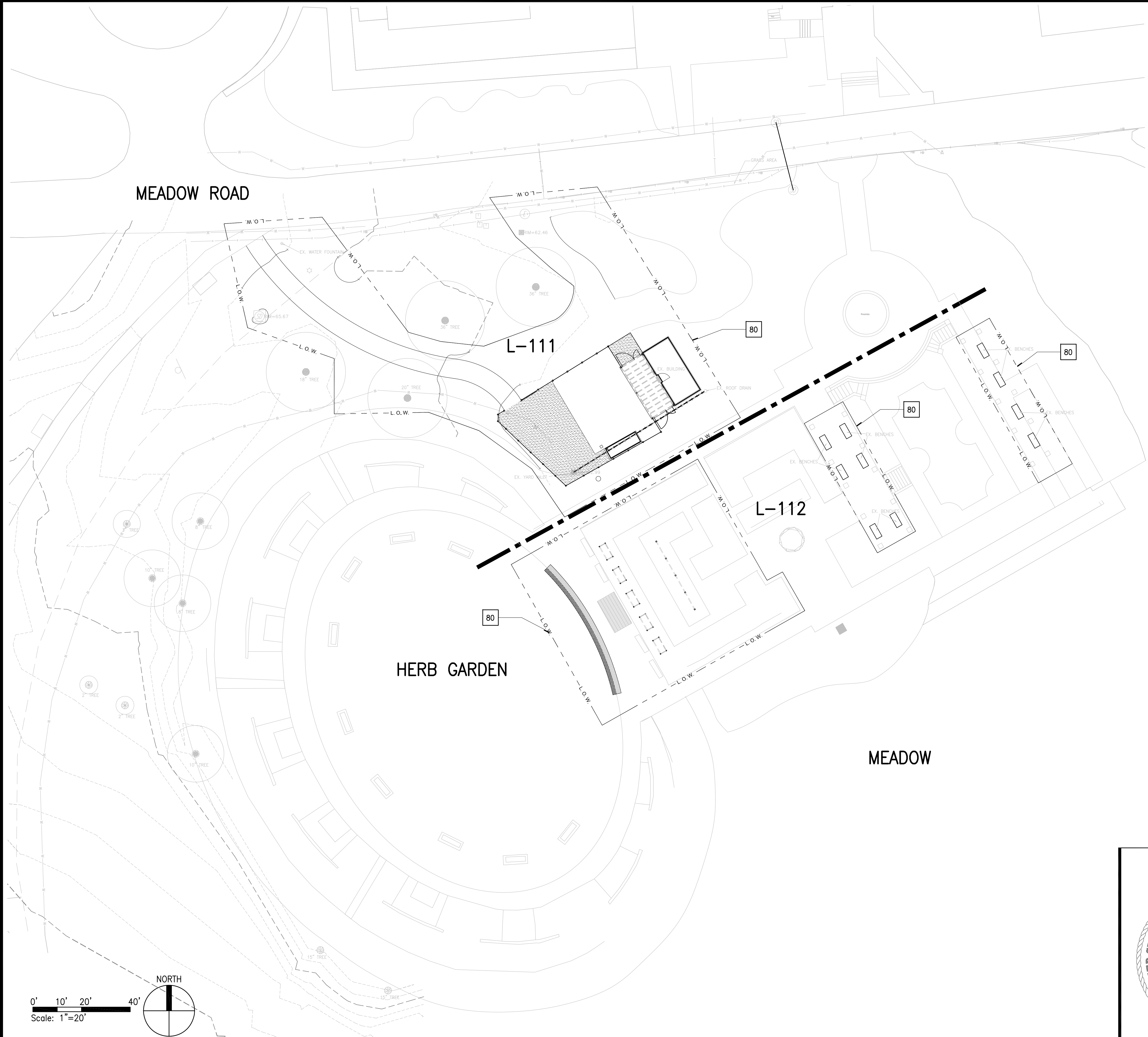


1 PIPE CONNECTION TO STORM STRUCTURE  
C-111 | C-161 SCALE NTS



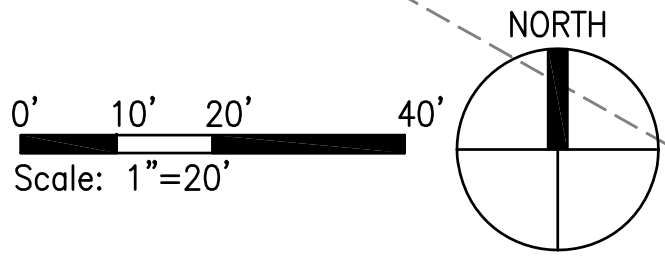
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 ALPHA CORPORATION 21351 RIDGETOP CIRCLE SUITE 200 DULLES, VA 20166 (703) 450-0800 FAX (703) 450-0463 www.alphacorporation.com			
NO.      DATE      BY      DESCRIPTION		REVISIONS	
ALPHA      USDA		Agricultural Research Service	
PROJECT MANAGER TM		EPM K. HUMPHREY	
DESIGNER SC/NT		PPM	
CHECKED BY TM		SAFETY & HEALTH	
DRAWN BY SC/NT		REAL PROPERTY LISA BYNUM	
SOLICITATION NO.		DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705		DWG. NO. <b>C-161</b> SHEET OF	





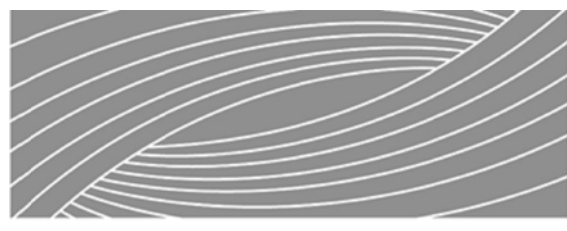
BOUNDARY LINES

80 LIMITS OF WORK  
(CONTRACTOR SHALL PRESERVE AND PROTECT ALL ELEMENTS  
AND STRUCTURES SCHEDULED TO REMAIN BOTH INSIDE  
AND OUTSIDE OF THE LIMITS OF WORK)



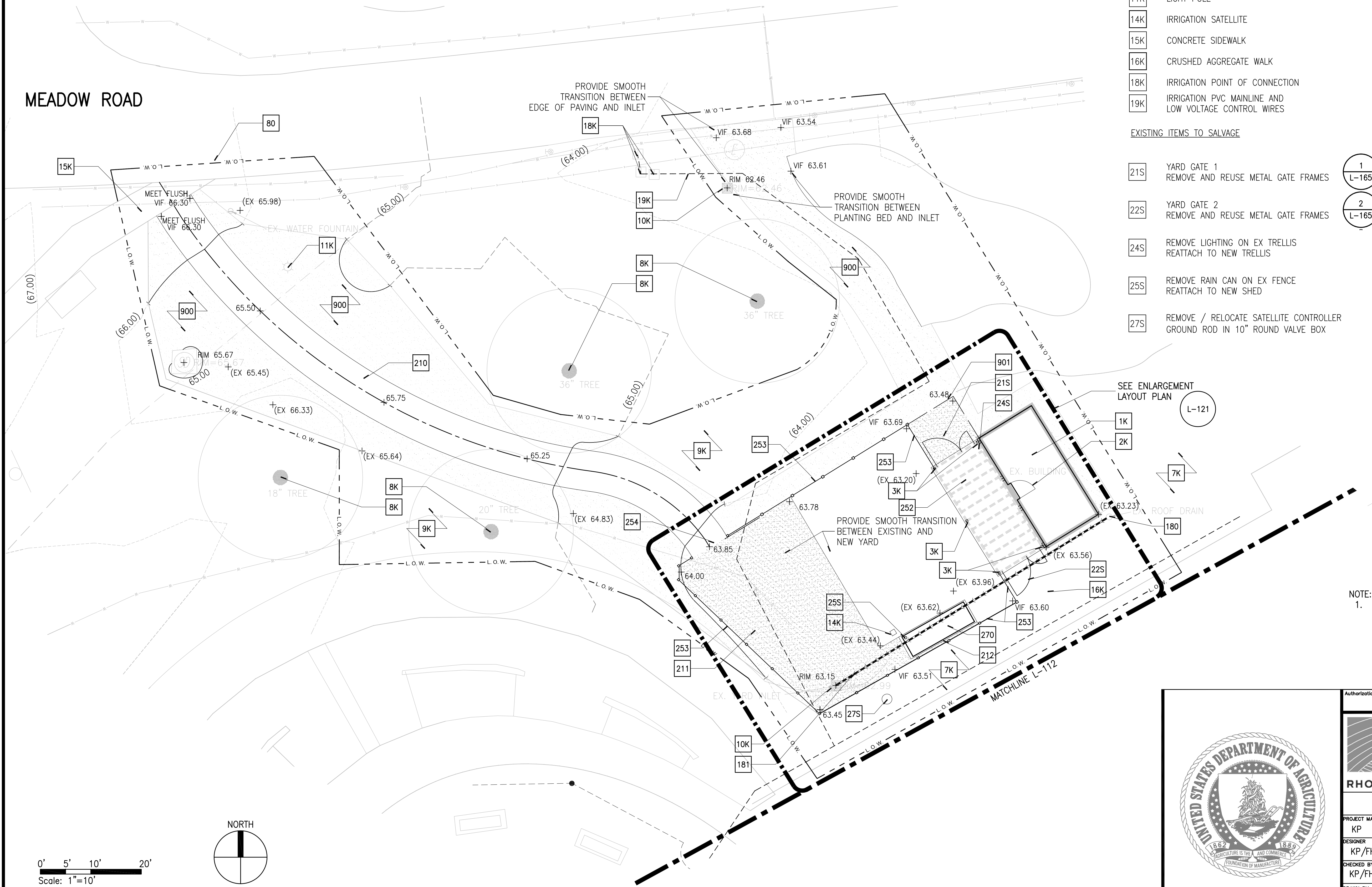
THIS PLAN FOR KEY REFERENCE ONLY



Authorization Signature			
			
NO. DATE BY DESCRIPTION			
REVISIONS			
RHODESIDE & HARWELL		USDA	
PROJECT MANAGER		EPM	
KP		K. HUMPHREY	
DESIGNER		PPM	
KP/FH			
CHECKED BY		SAFETY & HEALTH	
KP/FH			
DRAWN BY		REAL PROPERTY	
TW/DB		LISA BYNUM	
SOLICITATION NO.		DATE	
		07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705		DWG. NO L-101 SHEET OF	



MEADOW ROAD



EXISTING CONDITIONS TO REMAIN  
(PROTECT FROM DAMAGE)

- 1K HERB GARDEN OFFICE
- 2K OFFICE DOOR
- 3K YARD TRELLIS POST BRACKETS AND FOOTINGS
- 7K PLANTING BEDS
- 8K TREES
- 9K TURF GRASS
- 10K SURFACE DRAINAGE INLET
- 11K LIGHT POLE
- 14K IRRIGATION SATELLITE
- 15K CONCRETE SIDEWALK
- 16K CRUSHED AGGREGATE WALK
- 18K IRRIGATION POINT OF CONNECTION
- 19K IRRIGATION PVC MAINLINE AND LOW VOLTAGE CONTROL WIRES

EXISTING ITEMS TO SALVAGE

- 21S YARD GATE 1 REMOVE AND REUSE METAL GATE FRAMES 1 L-165
- 22S YARD GATE 2 REMOVE AND REUSE METAL GATE FRAMES 2 L-165
- 24S REMOVE LIGHTING ON EX TRELLIS REATTACH TO NEW TRELLIS
- 25S REMOVE RAIN CAN ON EX FENCE REATTACH TO NEW SHED
- 27S REMOVE / RELOCATE SATELLITE CONTROLLER GROUND ROD IN 10\"/>

BOUNDARY LINES

- 80 LIMITS OF WORK (CONTRACTOR SHALL PRESERVE AND PROTECT ALL ELEMENTS AND STRUCTURES SCHEDULED TO REMAIN BOTH INSIDE AND OUTSIDE OF THE LIMITS OF WORK)

SITE UTILITIES

- 180 CONNECT DOWNSPOUT TO STORM DRAIN SEE CIVIL DRAINAGE PLAN
- 181 UNDERDRAINAGE SEE CIVIL DRAINAGE PLAN

HARDSCAPE

- 210 PERMEABLE PAVING ALTERNATIVES 2 L-161
- 211 GRAVEL SURFACING GS-01 SEE PAVING SCHEDULE 3 L-161
- 212 CONCRETE SLAB DIMENSION TBD

SITE FEATURES

- 252 YARD TRELLIS 1 L-166
- 253 PRIVACY FENCE 1 L-164
- 254 VEHICULAR YARD GATE 3 L-167
- 270 YARD SHED - FURNISHED BY USNA, INSTALLED BY CONTRACTOR

PLANTING

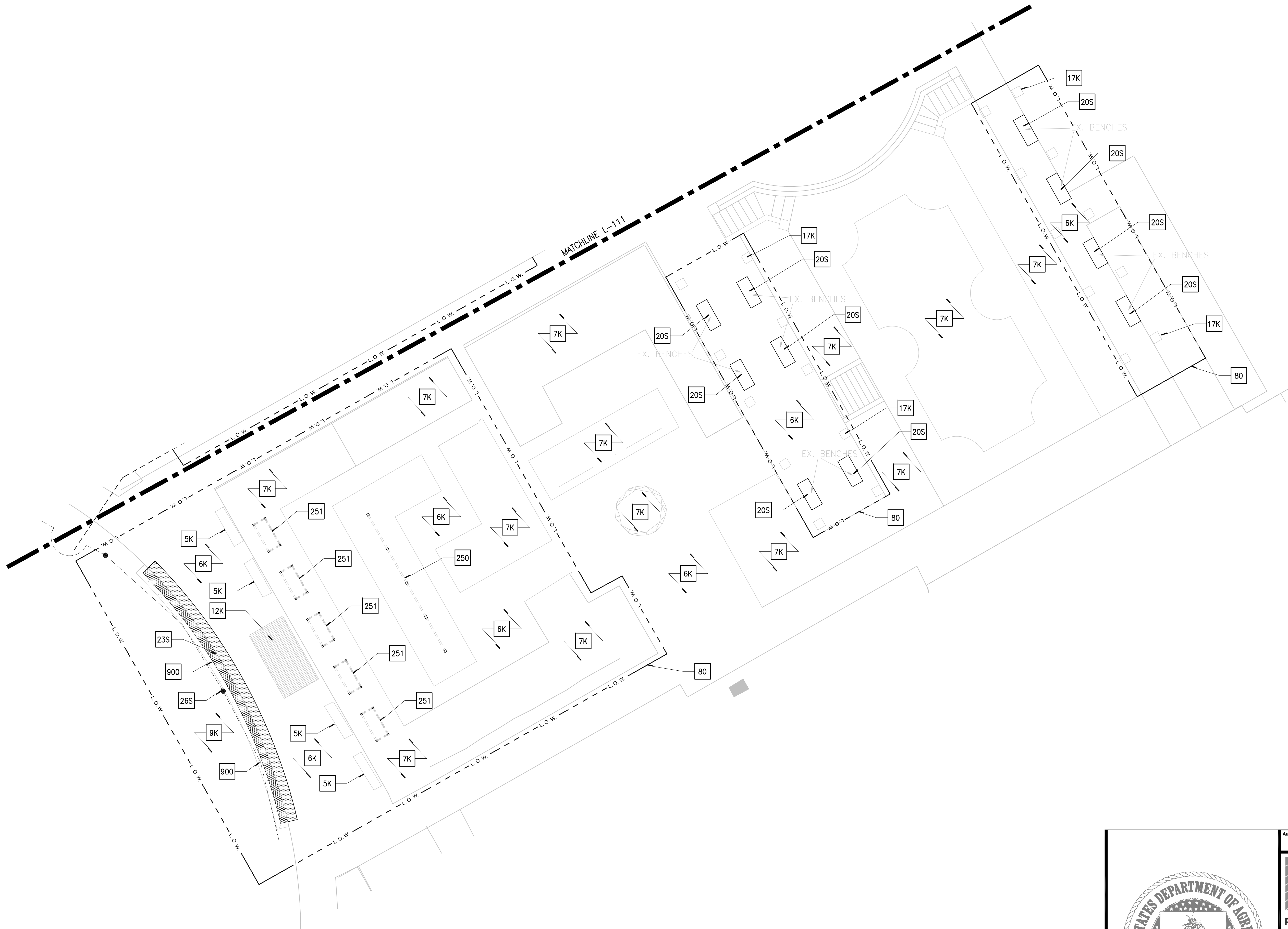
- 900 TURF SOD RENOVATION
- 901 STEEL BED DIVIDER 4 L-161

NOTE:  
1. YARD SHED TO BE FURNISHED BY USNA AND INSTALLED BY CONTRACTOR. CONCRETE PAD TO BE INSTALLED BY CONTRACTOR.



Authorization Signature			
REVISIONS			
NO.	DATE	BY	DESCRIPTION
USDA Agricultural Research Service			
USNA HERB GARDEN RENOVATIONS			
MATERIALS & GRADING PLAN			
PROJECT MANAGER KP	EPH K. HUMPHREY	SOLICITATION NO.	
DESIGNER KP/FH	PPH	DATE 07/03/2013	
CHECKED BY KP/FH	SAFETY & HEALTH	BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM	DWC NO. L-111	
		SHEET OF	





EXISTING CONDITIONS TO REMAIN  
(PROTECT FROM DAMAGE)

- 5K PEDESTRIAN BENCH
- 6K UNIT PAVERS
- 7K PLANTING BEDS
- 9K TURF GRASS
- 12K DISPLAY SHELTER
- 17K LARGE ARBOR STRUCTURE

EXISTING ITEMS TO SALVAGE

- 20S BENCH TYPE 'A'  
REMOVE AND REPLACE WOOD COMPONENTS,  
BASE AND FOOTERS TO REMAIN
- 23S REMOVE AND REPLACE BRICK PAVERS  
WITH REINFORCED EDGE
- 26S REPAIR / RELOCATE IRRIGATION AS NECESSARY  
FOR INSTALLATION OF NEW SUPPORTED TURF

BOUNDARY LINES

- 80 LIMITS OF WORK  
(CONTRACTOR SHALL PRESERVE AND PROTECT ALL ELEMENTS  
AND STRUCTURES SCHEDULED TO REMAIN BOTH INSIDE  
AND OUTSIDE OF THE LIMITS OF WORK)

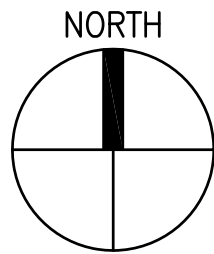
SITE FEATURES

- 250 LINEAR TRELLIS
- 251 FREESTANDING TRELLIS

PLANTING

- 900 TURF SOD RENOVATION

0' 5' 10' 20'  
Scale: 1"=10'

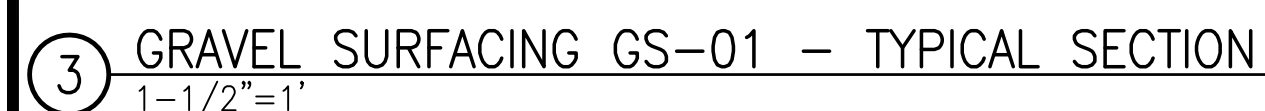
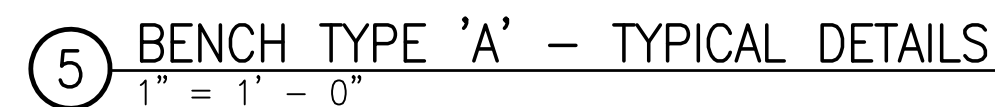
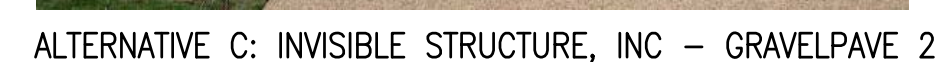
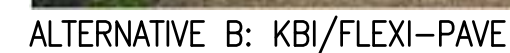
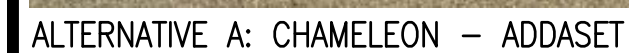


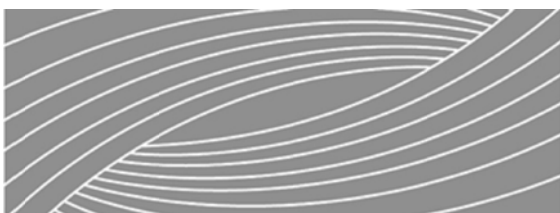

Authorization Signature	
RHODESIDE & HARWELL	
RHI	USDA
PROJECT MANAGER KP	EPM K. HUMPHREY
DESIGNER KP/FH	PPM
CHECKED BY KP/FH	SAFETY & HEALTH
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM
SOLICITATION NO.	
DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
DWG. NO L-112	
SHEET OF	



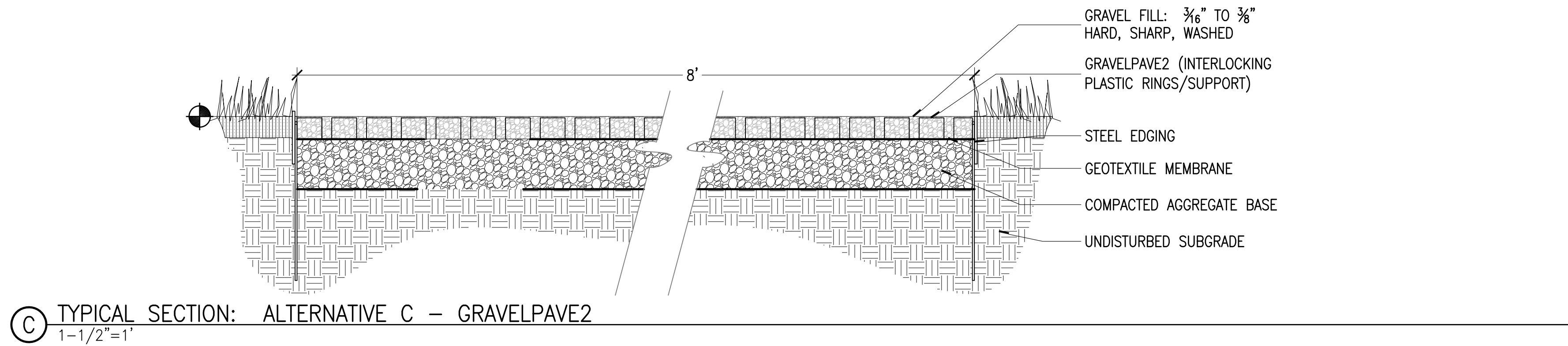
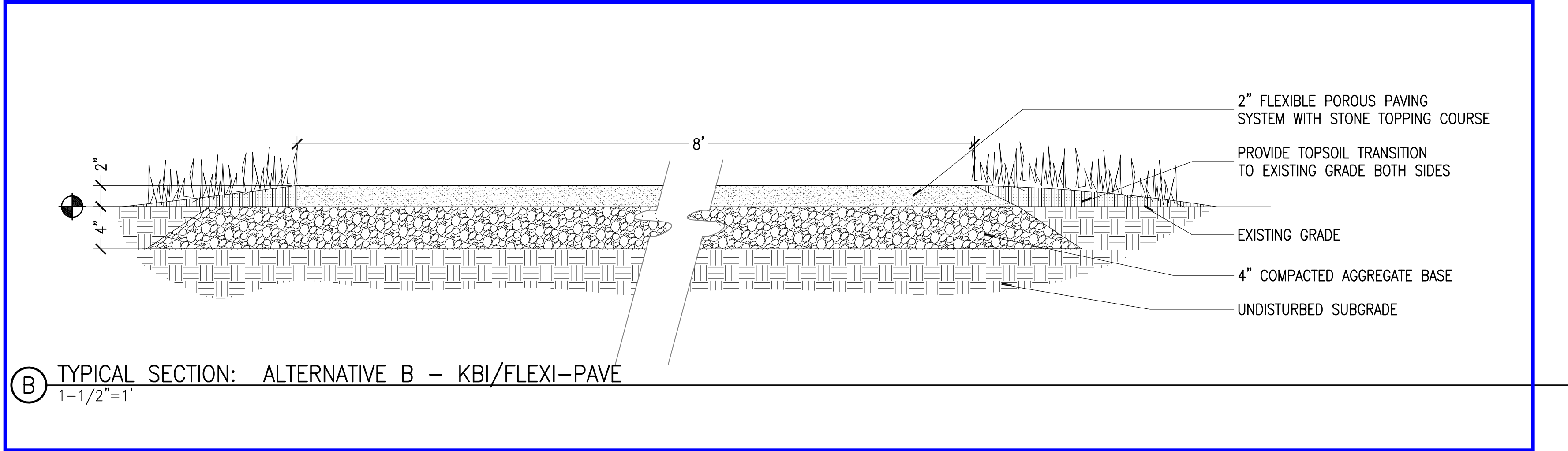
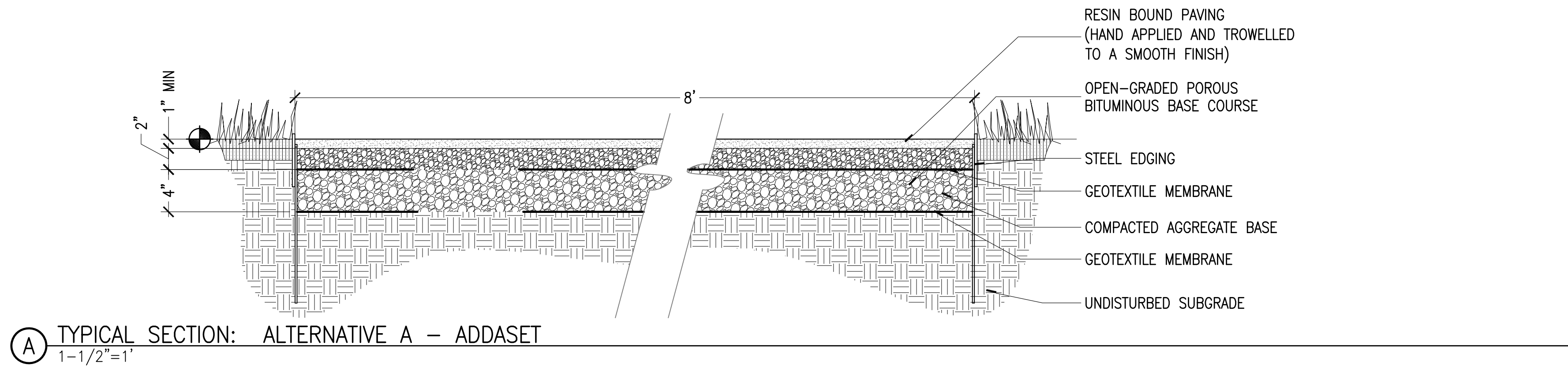


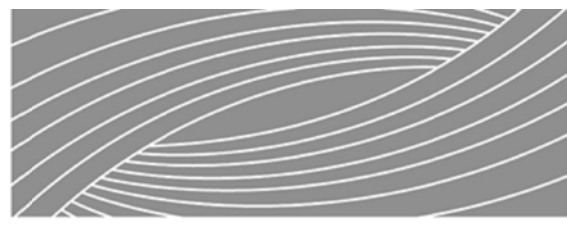




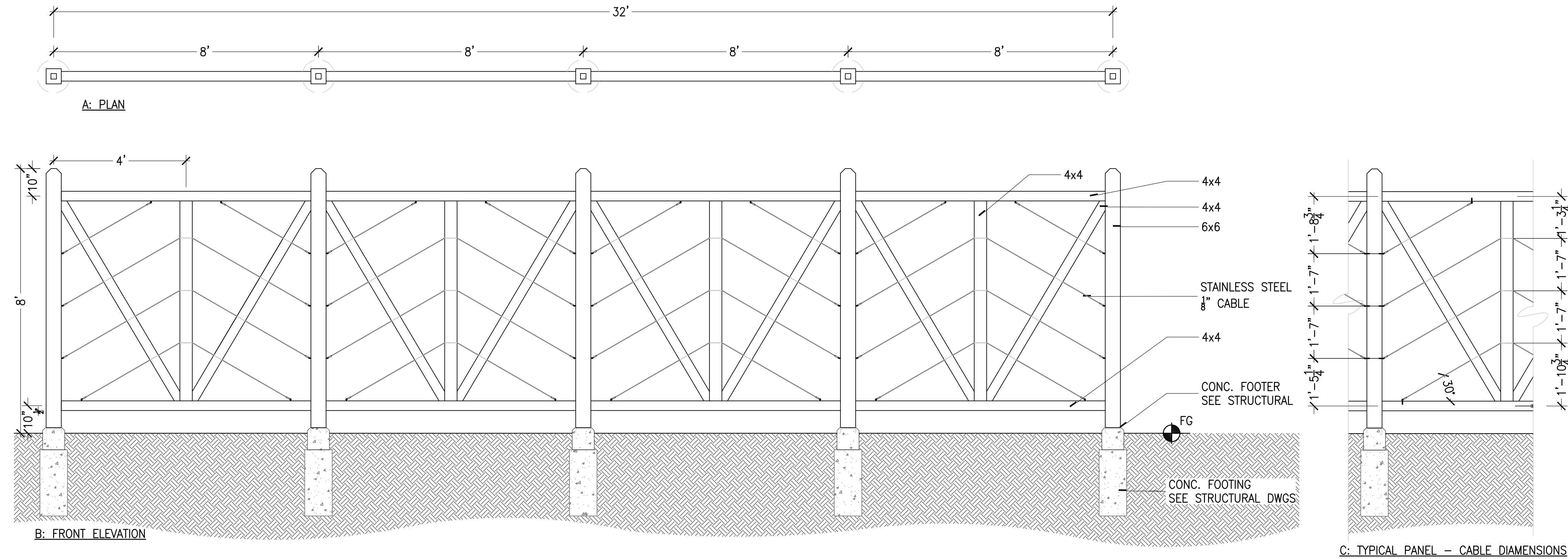
Authorization Signature									
									
		NO.	DATE	BY	DESCRIPTION				
		<div style="text-align: center;"> <b>REVISIONS</b> </div>							
<b>RHODESIDE &amp; HARWELL</b>		<div style="font-size: 2em; font-weight: bold; text-align: center;">U S D A</div>	<div style="text-align: center;">  <div style="display: inline-block; vertical-align: middle;"> Agricultural Research Service </div> </div>						
<div style="display: flex; justify-content: space-around;"> <div>RHI</div> <div>USDA</div> </div>			<div style="text-align: center;"> USNA HERB GARDEN RENOVATIONS   LANDSCAPE DETAILS </div>						
<div style="display: flex; justify-content: space-between;"> <div> PROJECT MANAGER KP   DESIGNER KP/FH </div> <div> EPM K. HUMPHREY   PPM </div> </div>									
CHECKED BY KP/FH		SAFETY & HEALTH		SOLICITATION NO.			DWG. NO.		
DRAWN BY TW/DB		REAL PROPERTY LISA BYNUM		DATE  07/03/2013			<div style="text-align: center;"> BELTSVILLE AREA  ENGINEERING CONSTRUCTION BRANCH  10300 BALTIMORE AVE.  BLDG.426A, BARC-EAST  BELTSVILLE,MARYLAND 20705 </div> <div style="text-align: right; font-size: 2em; font-weight: bold;">L-161</div>		
							SHEET OF		



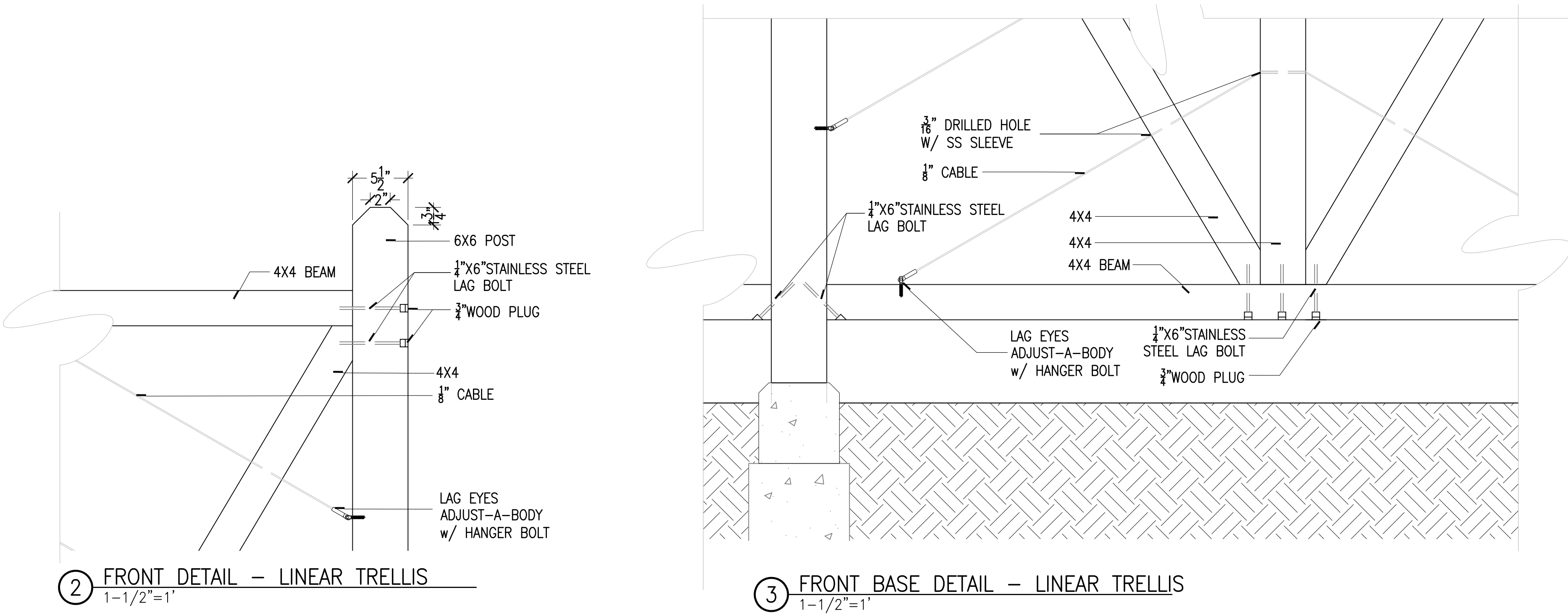


Authorization Signature			
			
NO. DATE BY DESCRIPTION			
REVISIONS			
PROJECT MANAGER KP		USDA K. HUMPHREY	
DESIGNER KP/FH		PPM	
CHECKED BY KP/FH		SAFETY & HEALTH	
DRAWN BY TW/DB		REAL PROPERTY LISA BYNUM	
SOLICITATION NO.		DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705		DWG. NO. L-161A SHEET OF	






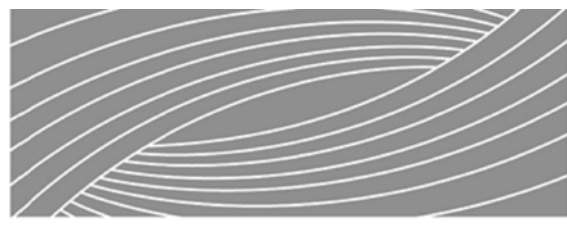

1 LINEAR TRELLIS – TYPICAL DETAILS  
1/2"=1'



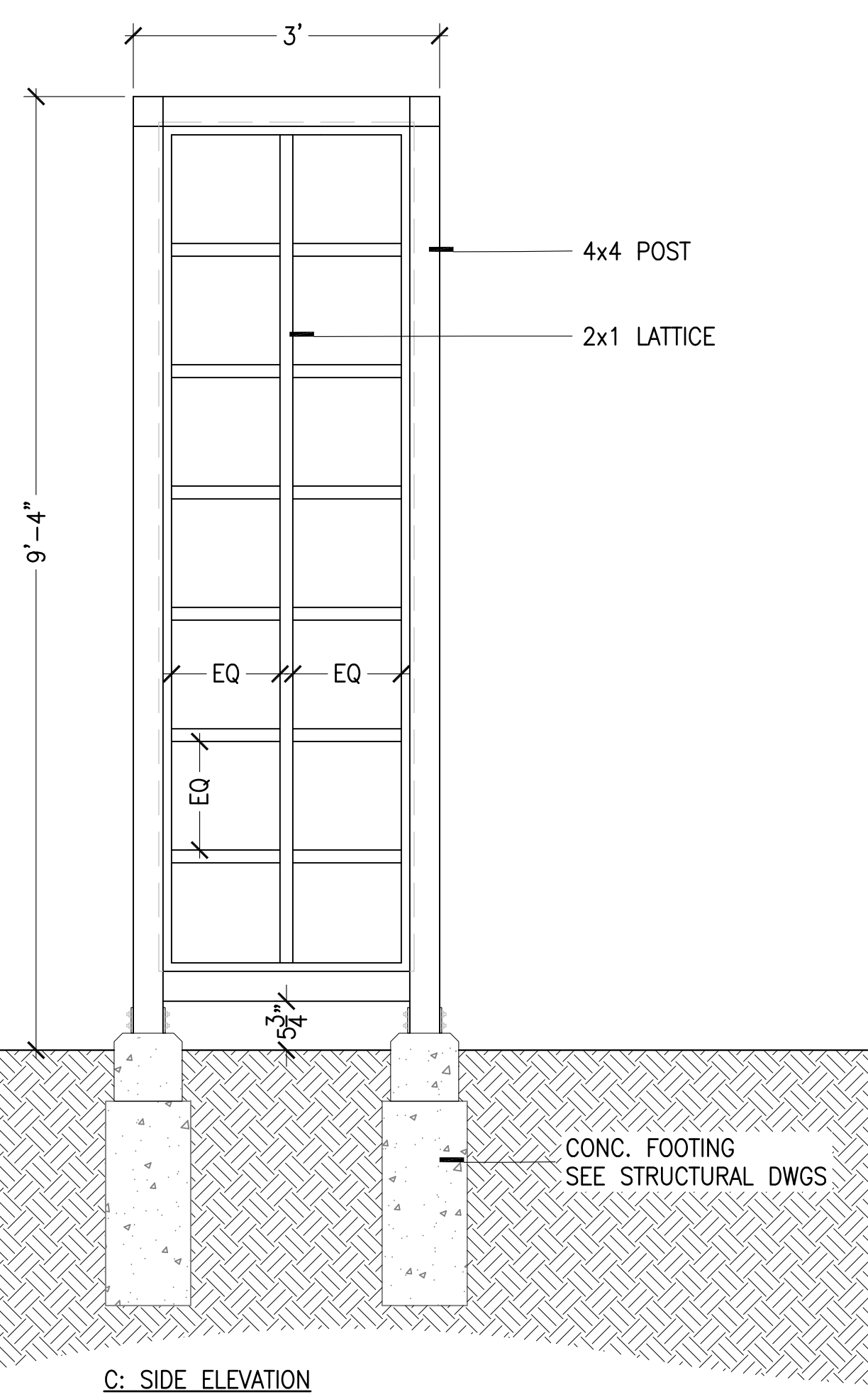
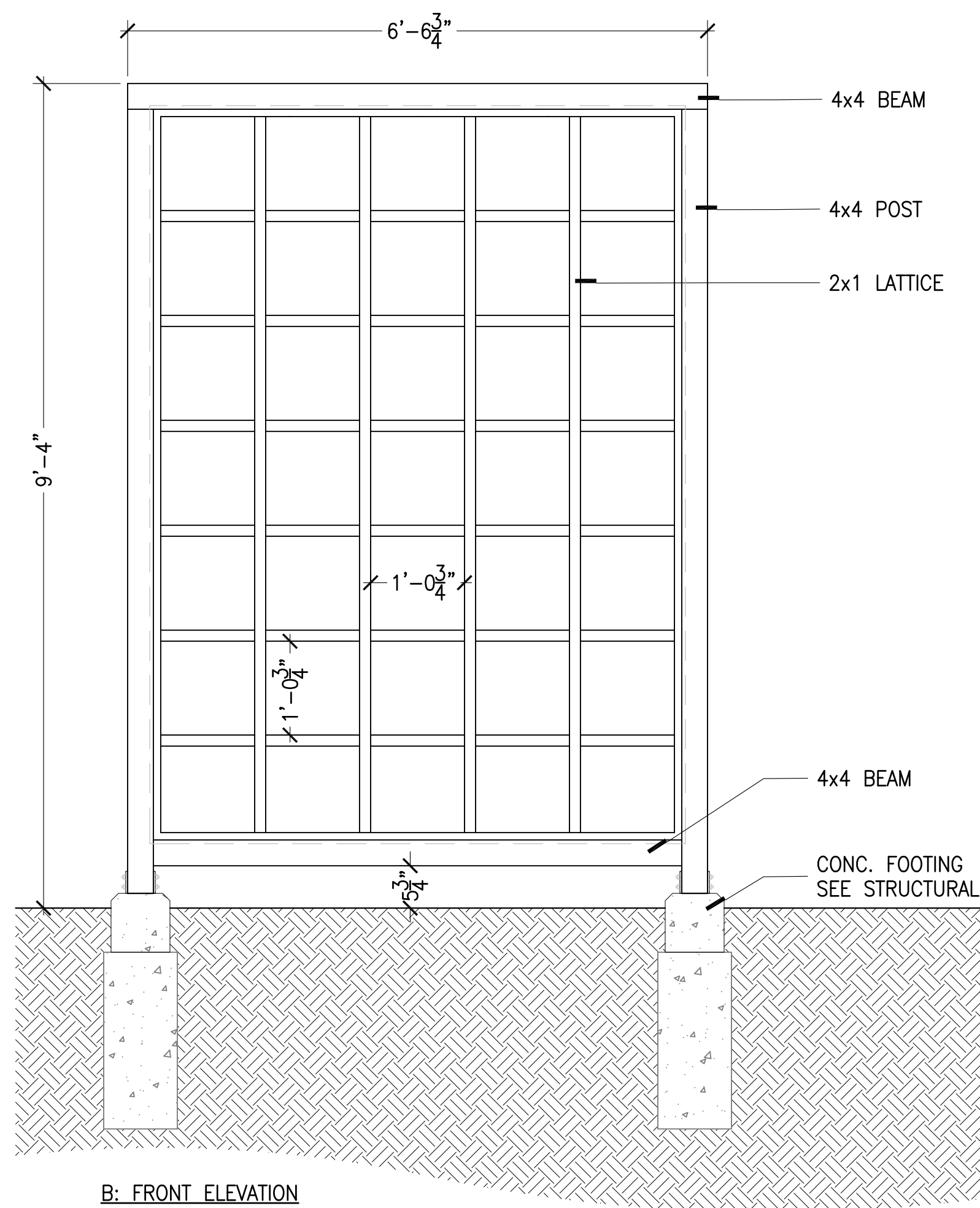
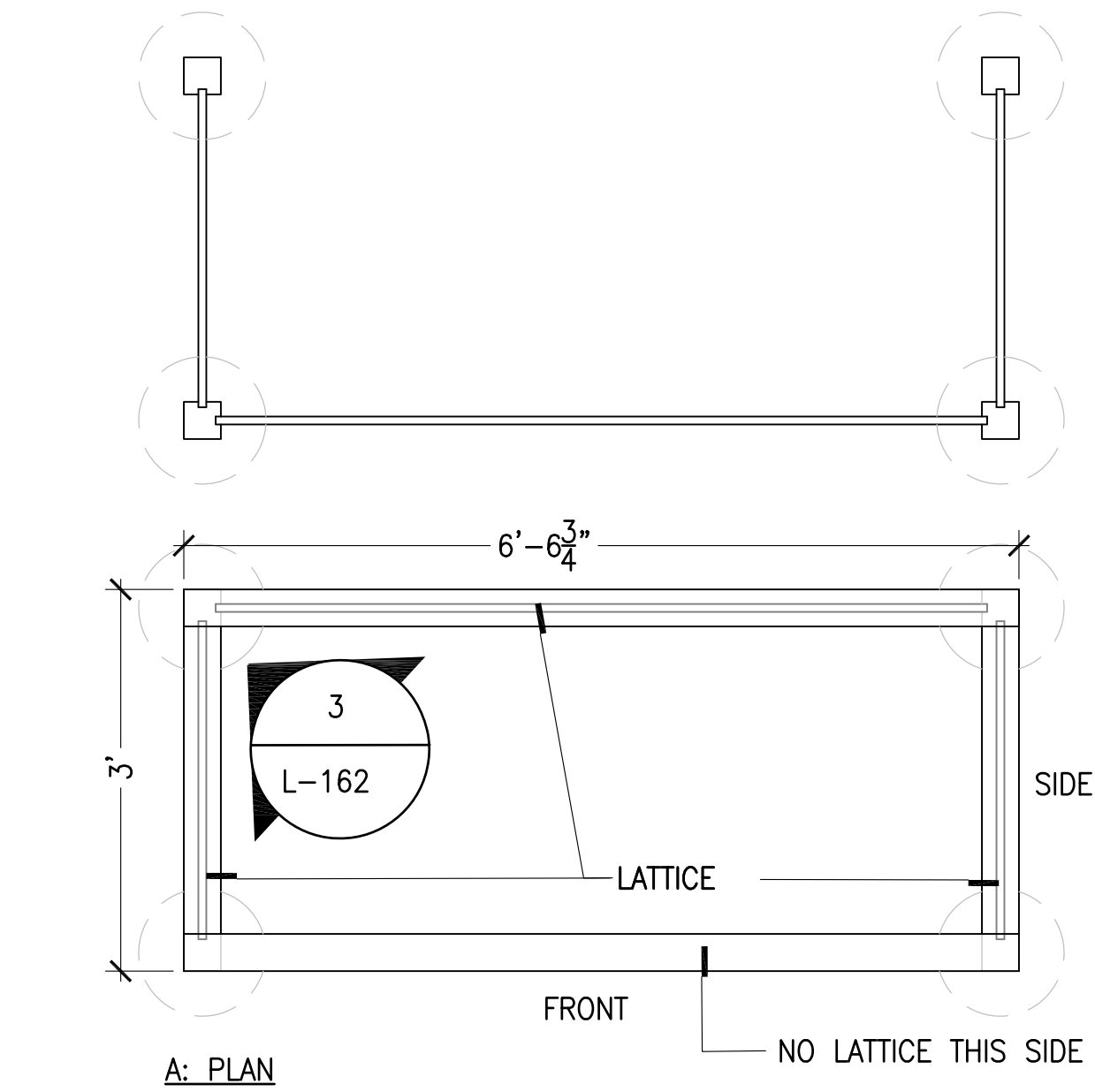
3 FRONT BASE DETAIL – LINEAR TRELLIS  
1-1/2"=1'

- NOTE:
1. ALL WOOD MEMBERS TO BE REDWOOD HEART B.
  2. ALL WOOD FASTENERS TO BE MADE OF STAINLESS STEEL

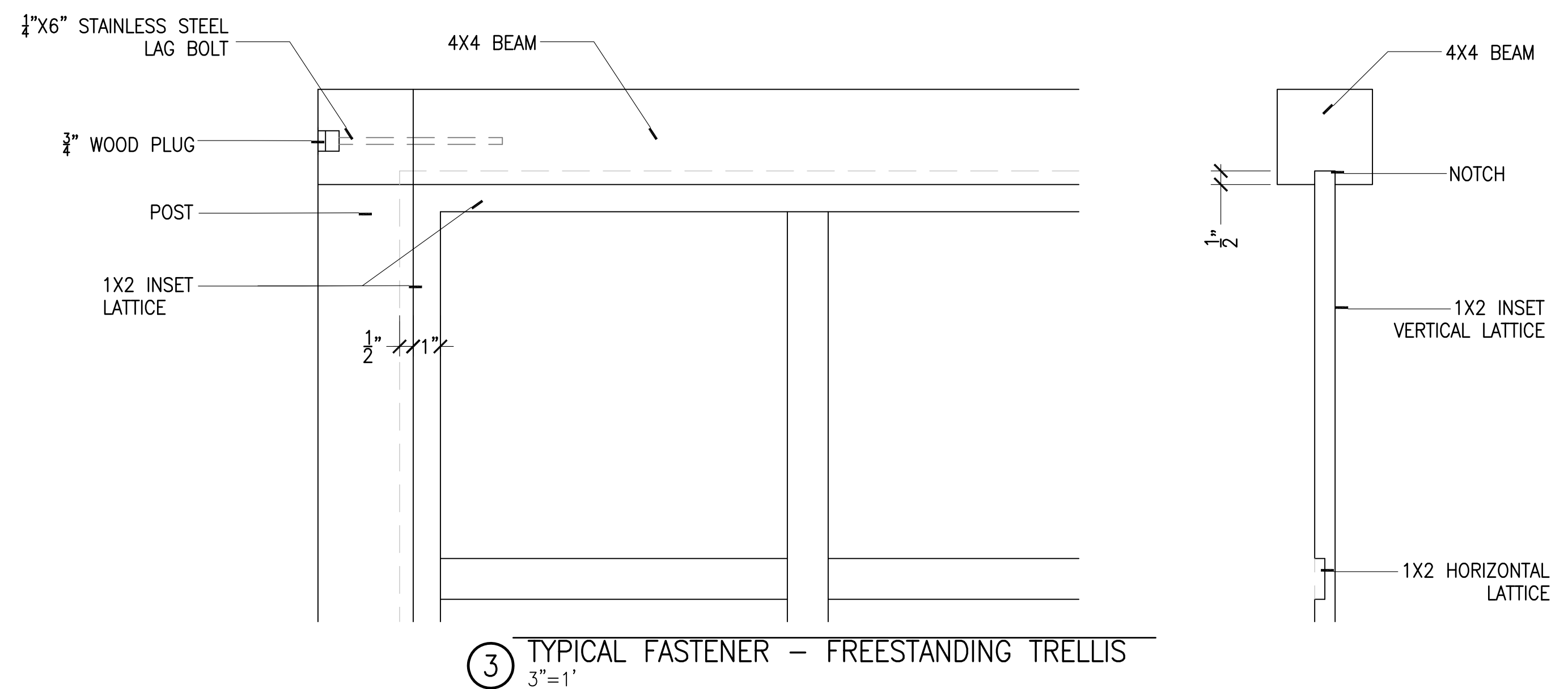
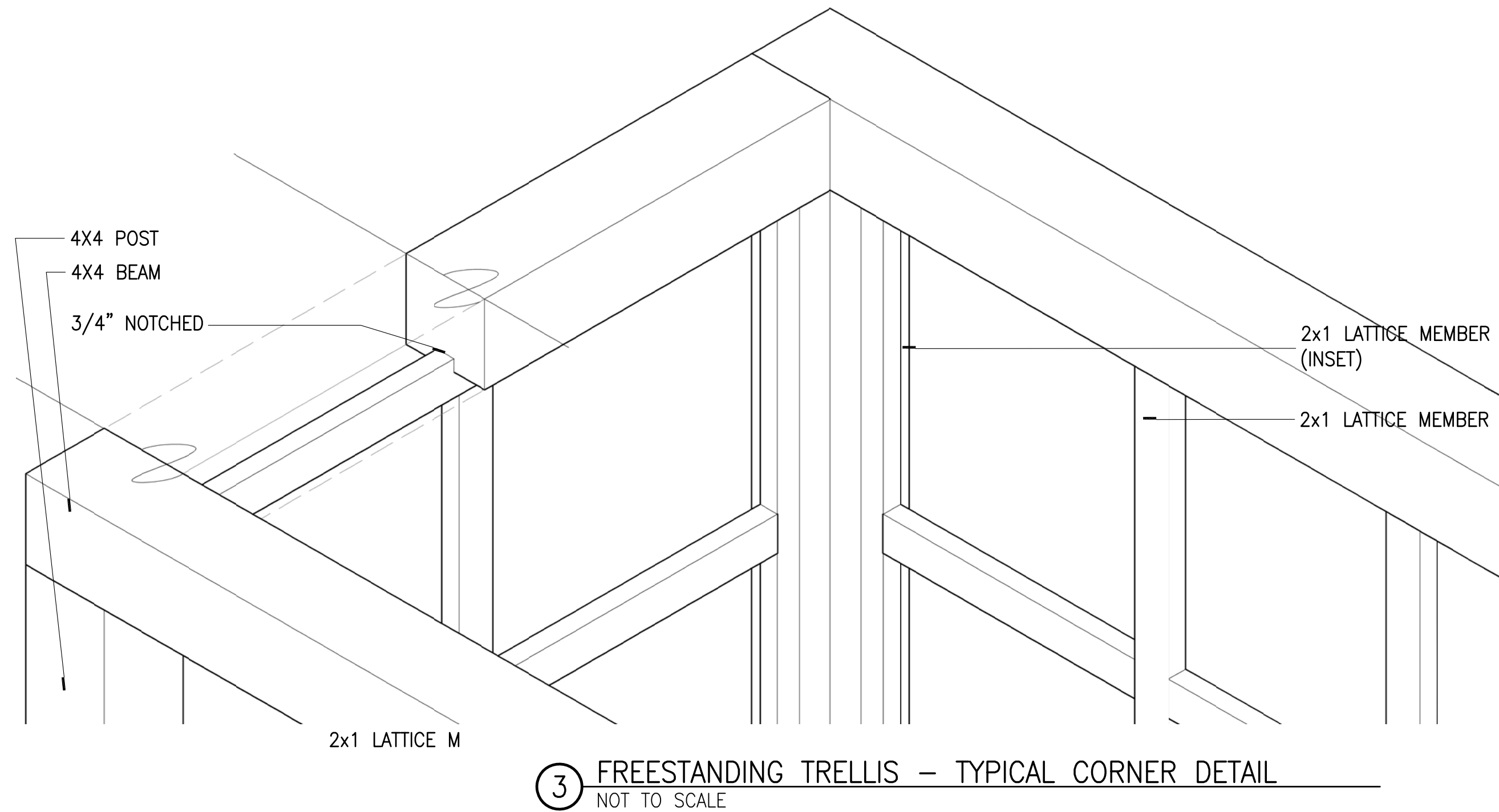


Authorization Signature			
			
		NO.	DATE
		BY	DESCRIPTION
		REVISIONS	
<b>U S D A</b>		Agricultural Research Service 	
RHODESIDE & HARWELL PROJECT MANAGER: KP DESIGNER: KP/FH CHECKED BY: KP/FH DRAWN BY: TW/DB		USDA EPM: K. HUMPHREY PPM: SAFETY & HEALTH REAL PROPERTY: LISA BYNUM	
		SOLICITATION NO. DATE: 07/03/2013	
		BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
		DWG. NO. L-162 SHEET OF	



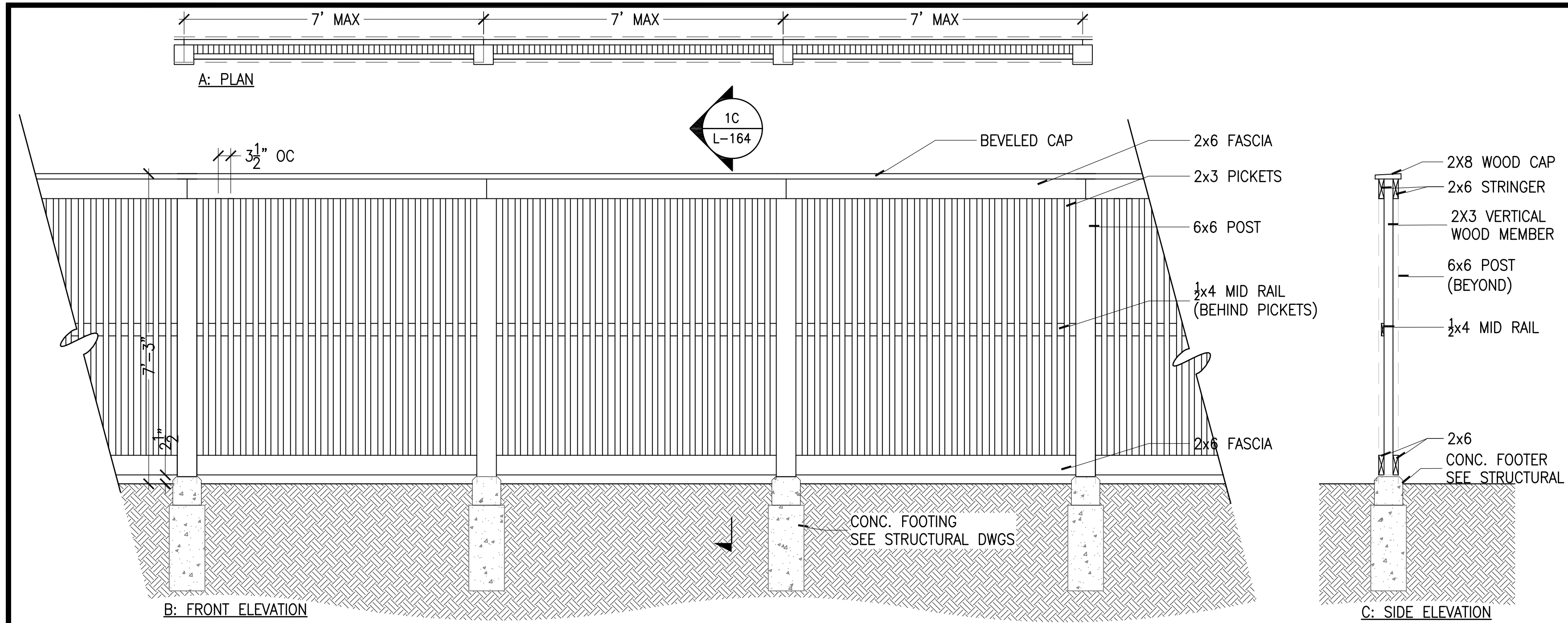


1 FREESTANDING TRELLIS – TYPICAL DETAILS  
3/4"=1'

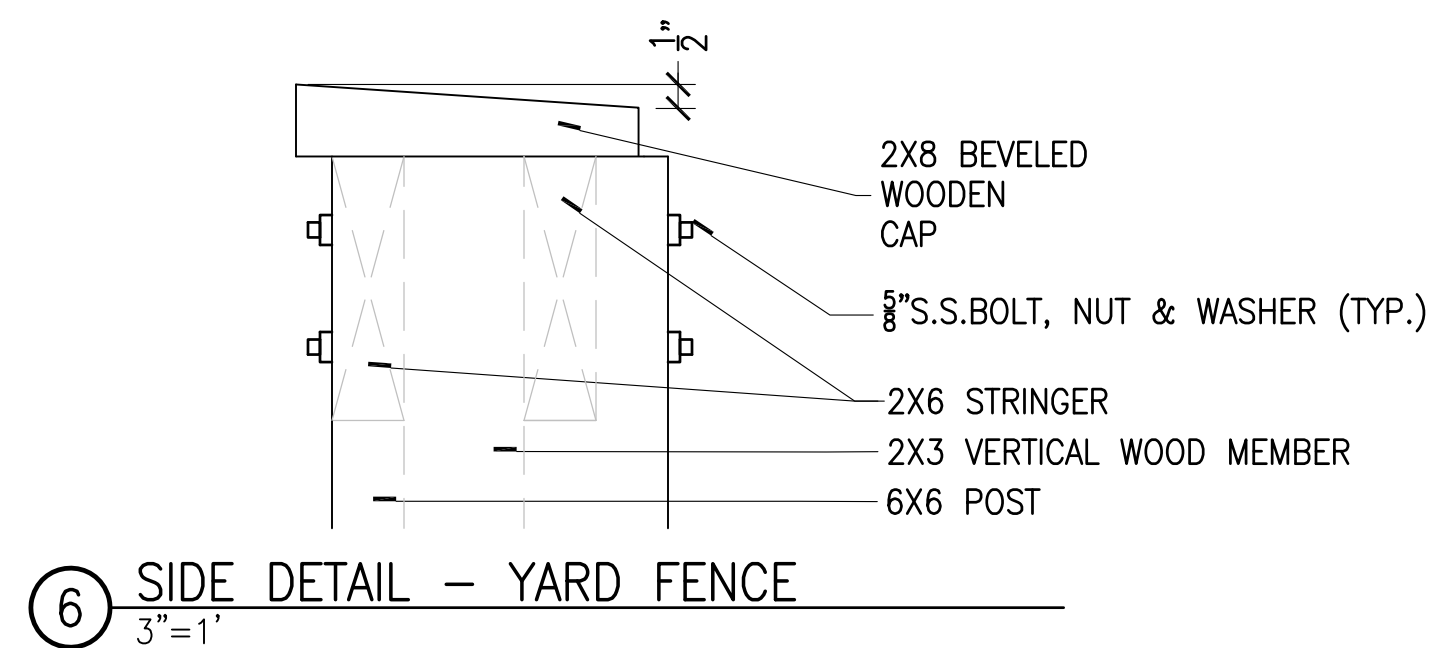
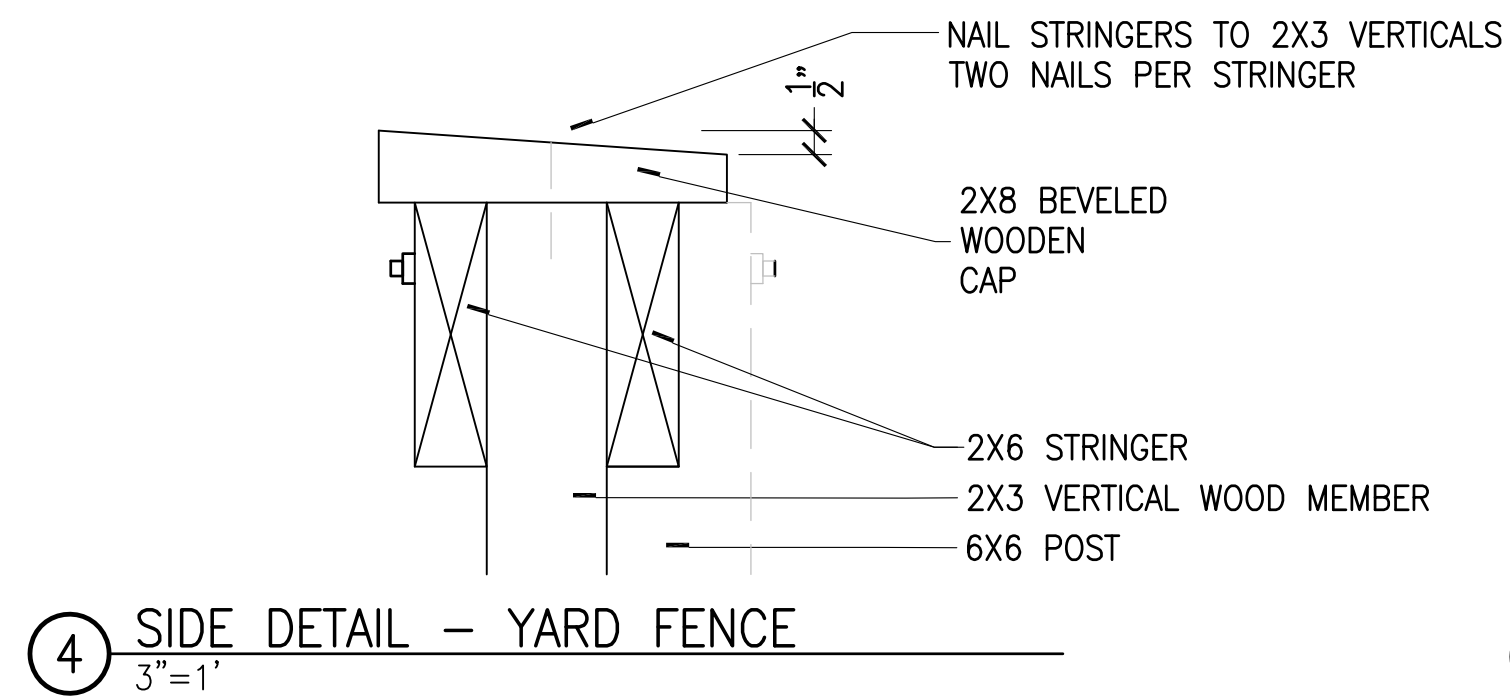
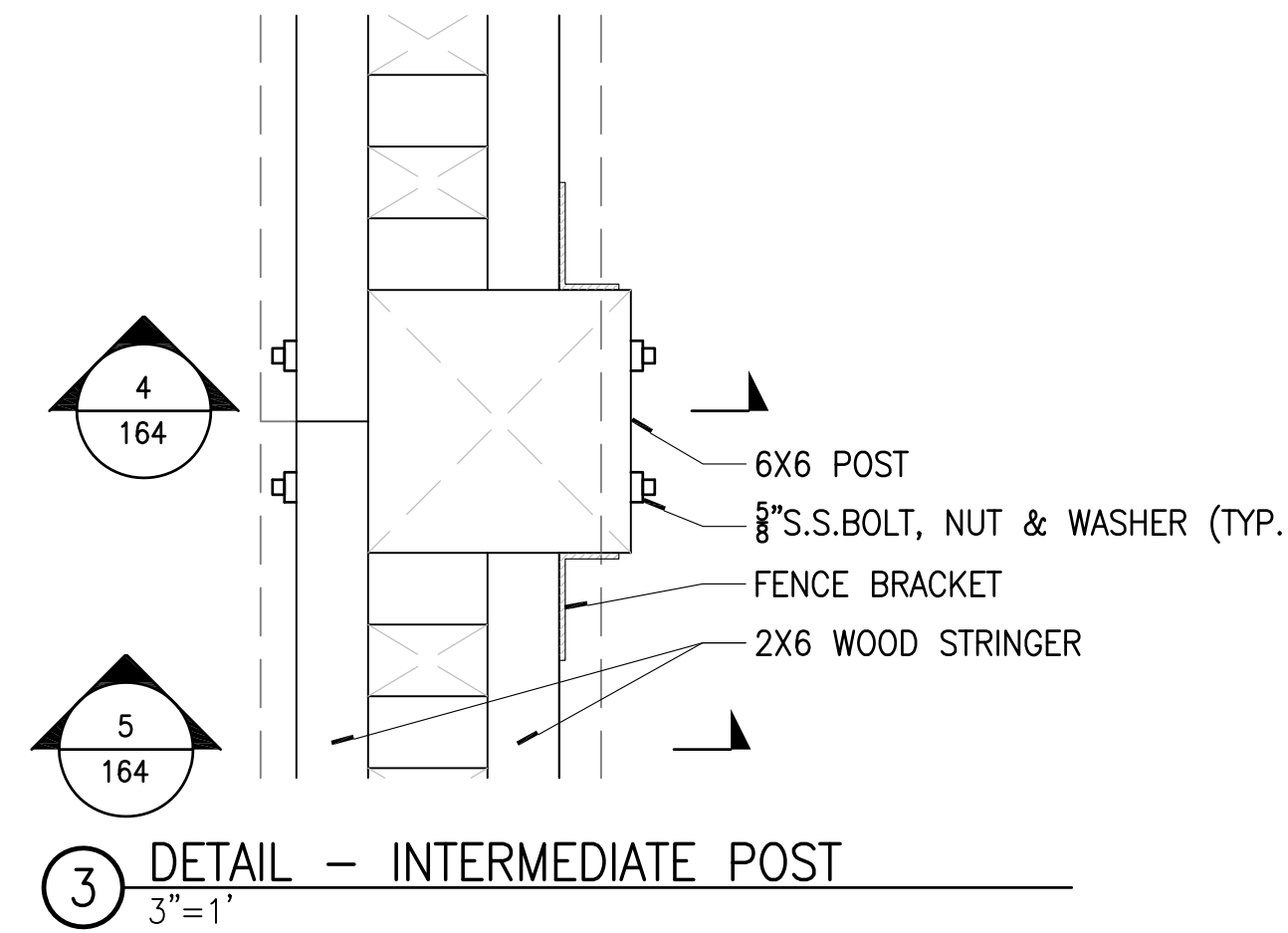
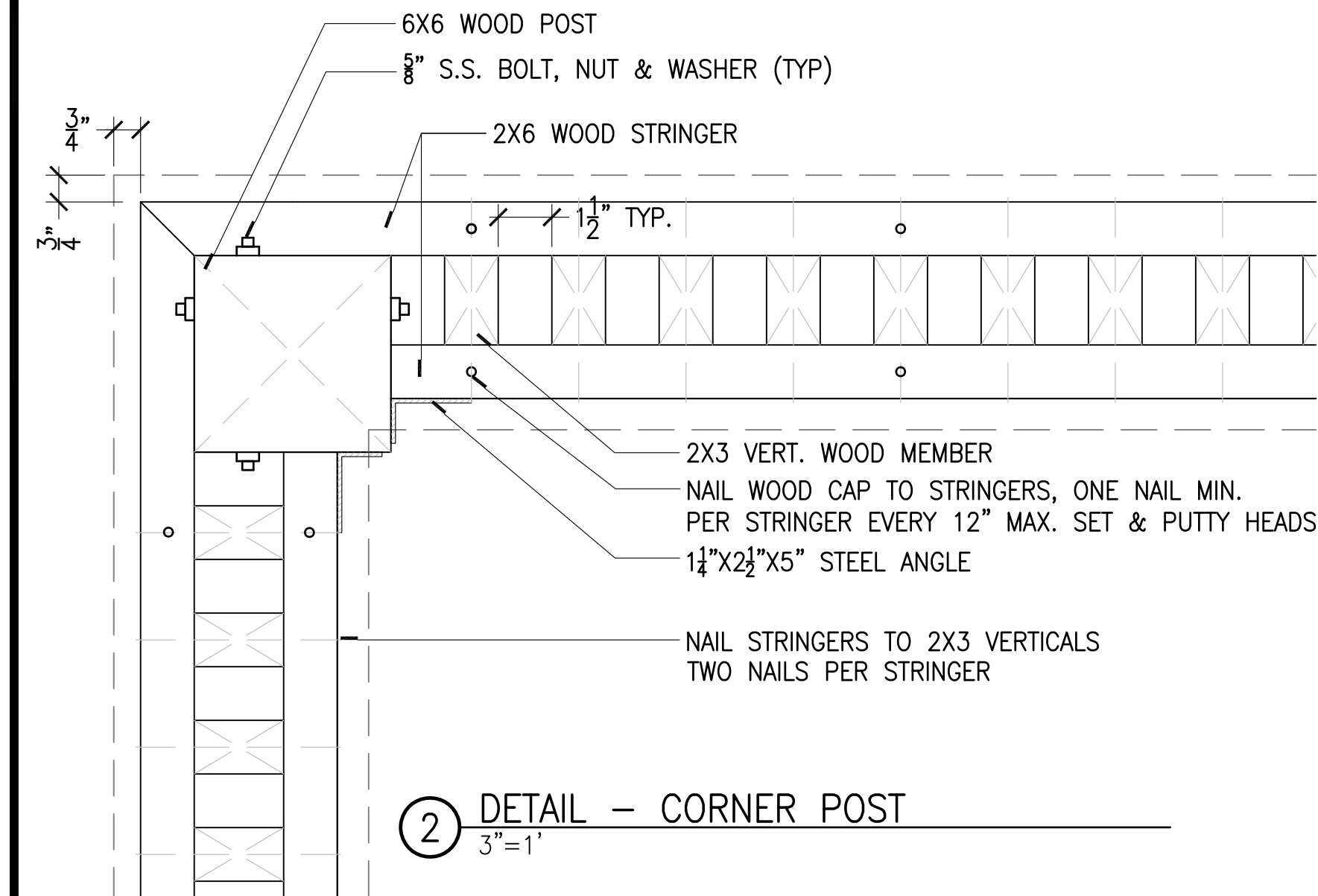


Authorization Signature			
RHODESIDE & HARWELL			
RHI	USDA		
PROJECT MANAGER	EPH		
KP	K. HUMPHREY		
DESIGNER	PPM		
KP/FH			
CHECKED BY	SAFETY & HEALTH		
KP/FH			
DRAWN BY	REAL PROPERTY		
TW/DB	LISA BYNUM		
		SOLICITATION NO.	
		DATE	07/03/2013
		BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	DWG. NO. L-163 SHEET OF

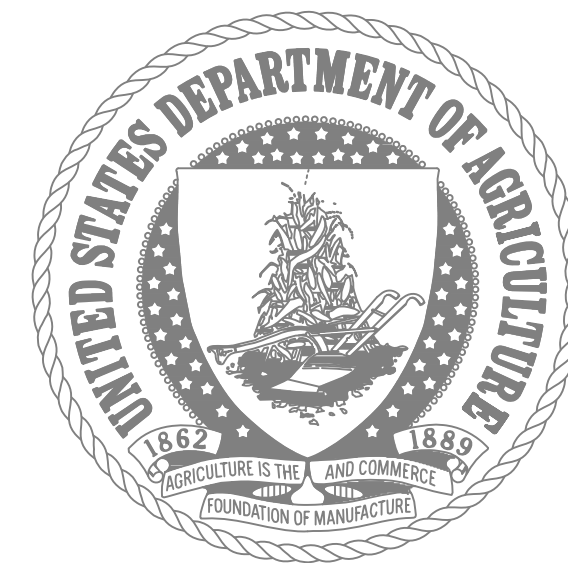




# 1 PRIVACY FENCE – TYPICAL DETAILS 1/2"=1'

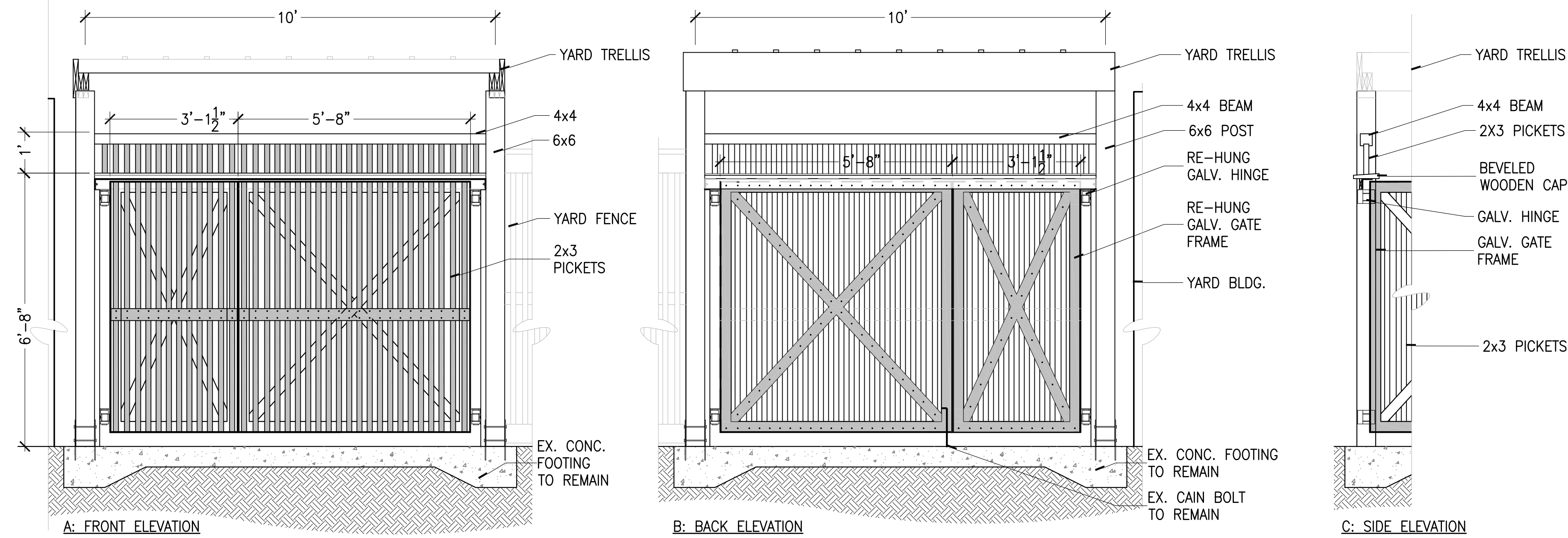


- NOTE:
- ALL WOOD MEMBERS TO BE REDWOOD HEART B.
  - ALL METAL GATE HARDWARE, GATE FRAMES, HINGES, CANE BOLTS TO BE REUSED
  - ALL WOOD FASTENERS TO BE STAINLESS STEEL
  - GATE HINGES MUST BE RE-HUNG AND ADJUSTED AS NEEDED

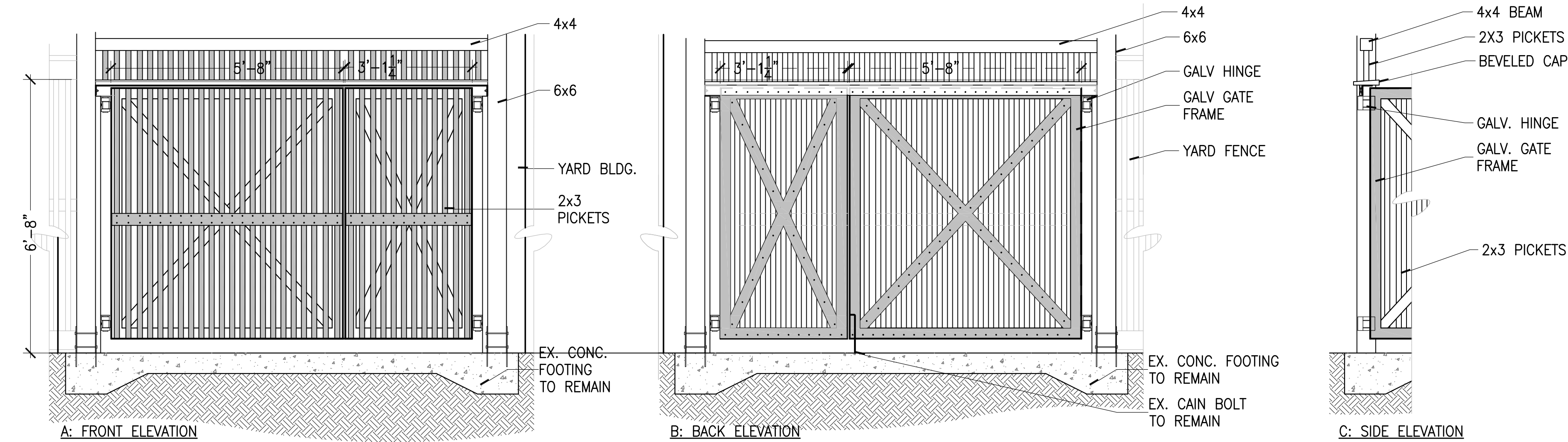


Authorization Signature			
 RHODESIDE & HARWELL		NO.	DATE
		BY	DESCRIPTION
<b>U S D A</b>		Agricultural Research Service USNA HERB GARDEN RENOVATIONS LANDSCAPE DETAILS	
PROJECT MANAGER KP	USDA EPM K. HUMPHREY	SOLICITATION NO.	BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705
DESIGNER KP/FH	PPM	DATE 07/03/2013	DWG. NO L-164 SHEET OF
CHECKED BY KP/FH	SAFETY & HEALTH		
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM		

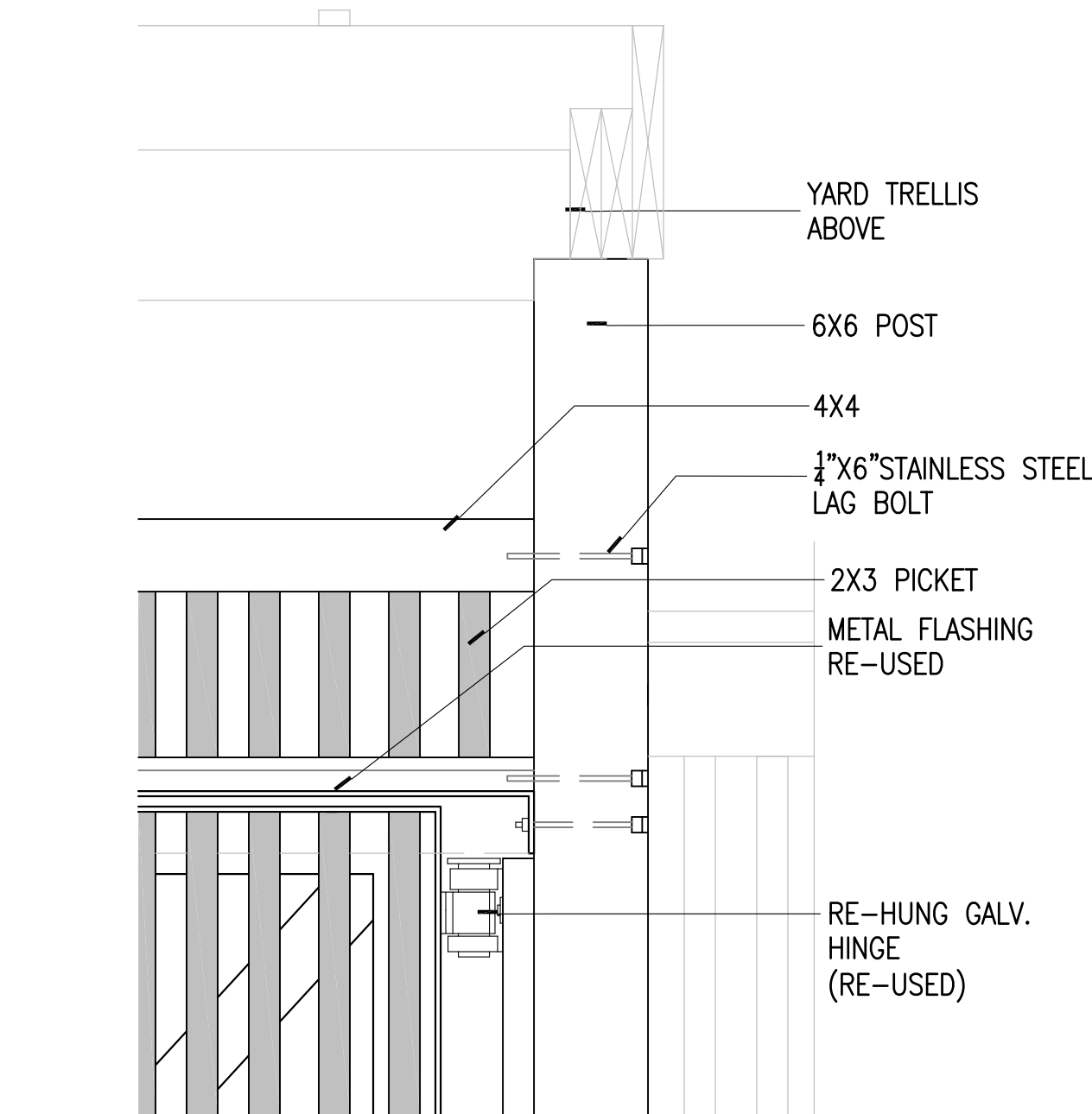




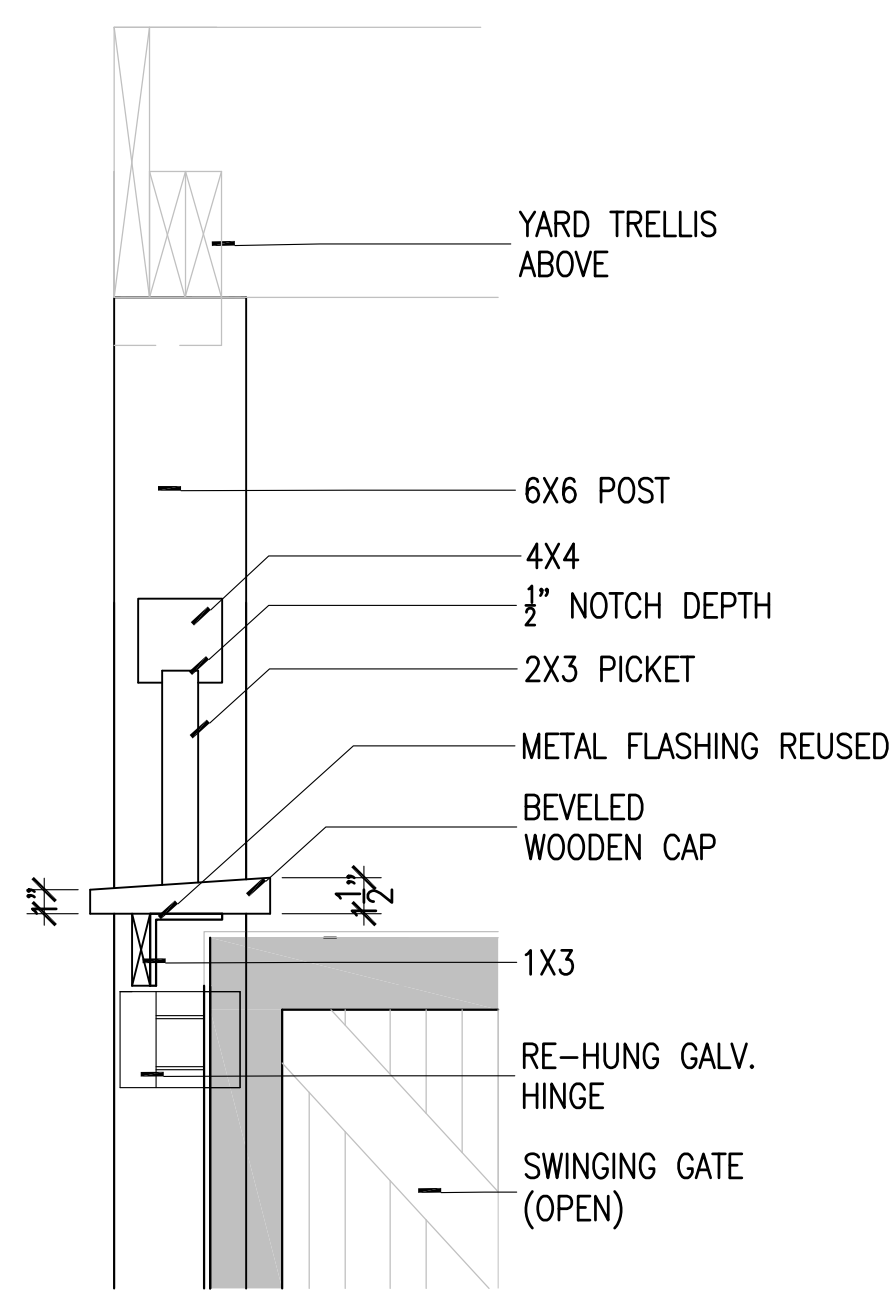
① YARD GATE 1 – TYPICAL DETAILS  
1/2"=1'



② YARD GATE 2 – TYPICAL DETAILS  
1/2"=1'

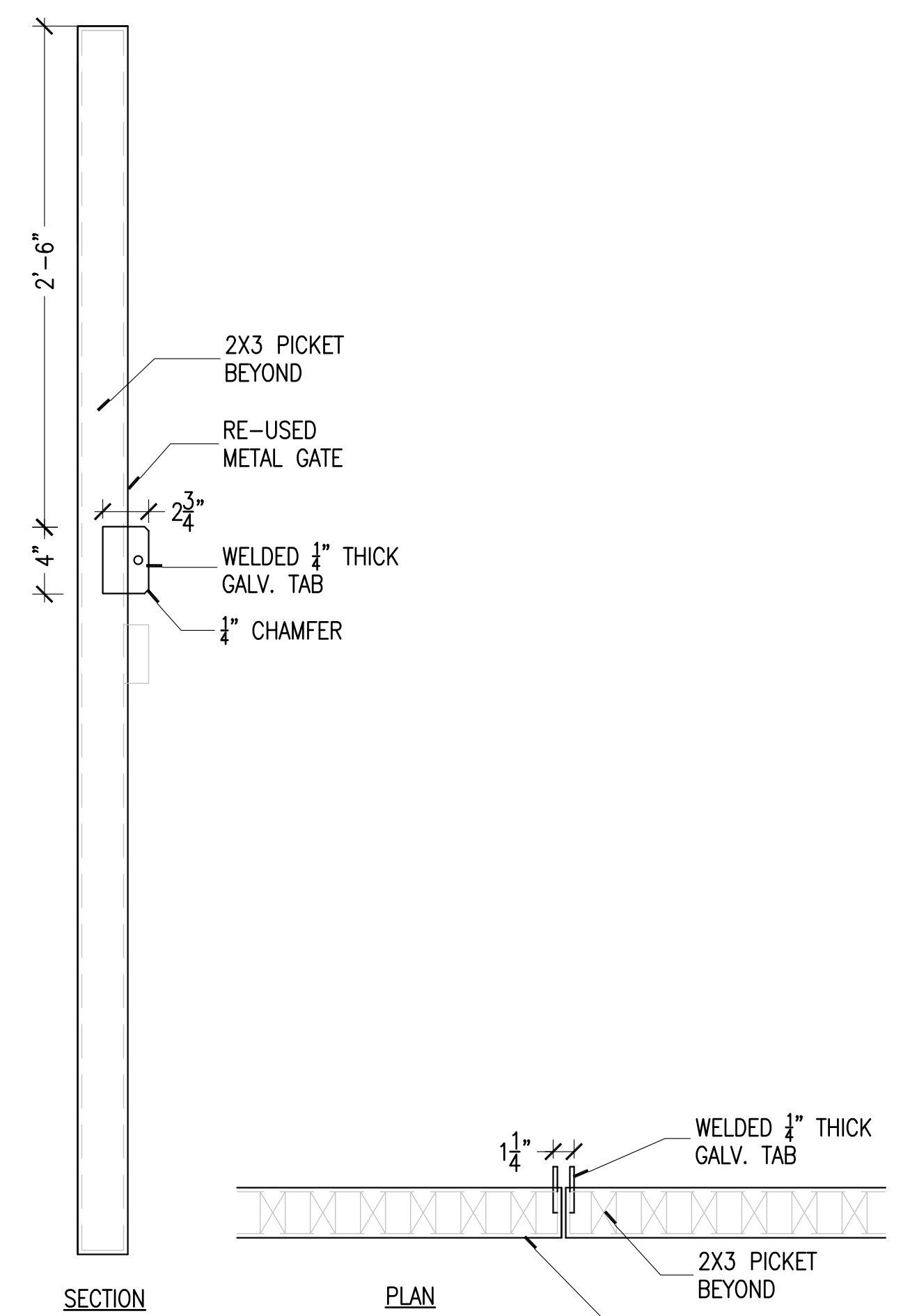
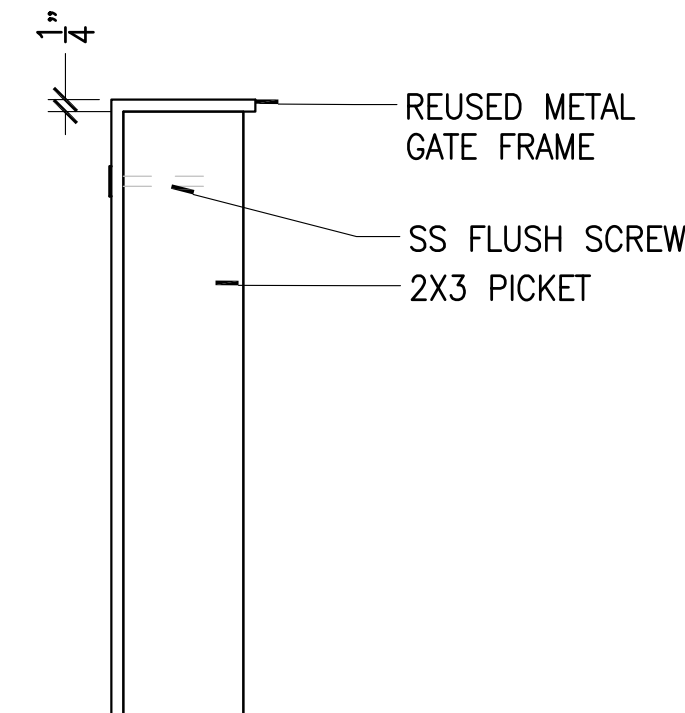


③ FRONT DETAIL –YARD GATE HINGE  
1-1/2"=1'



④ SIDE DETAIL – YARD GATE HINGE  
1-1/2"=1'

⑤ SIDE DETAIL – YARD FENCE  
3"=1'



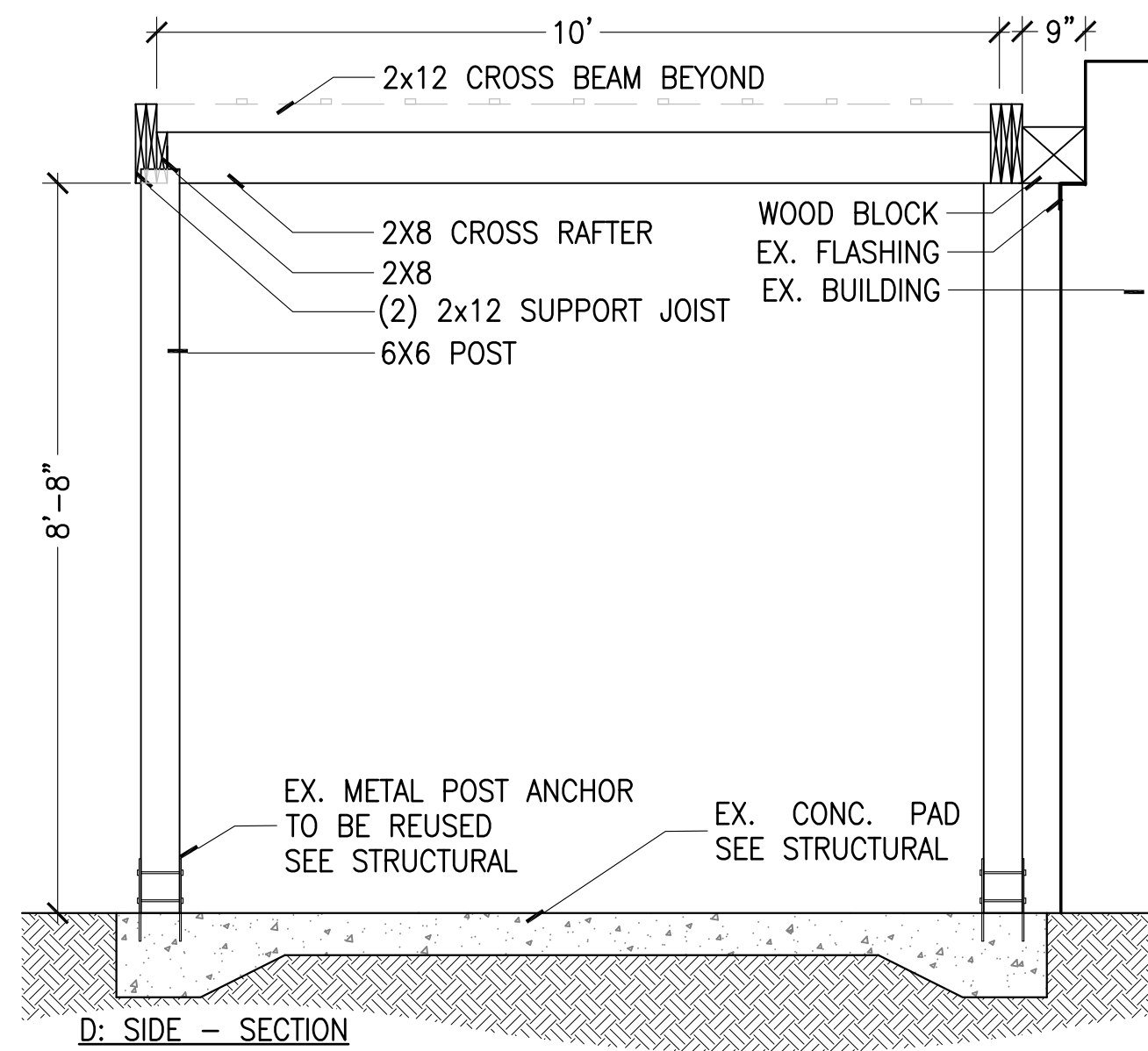
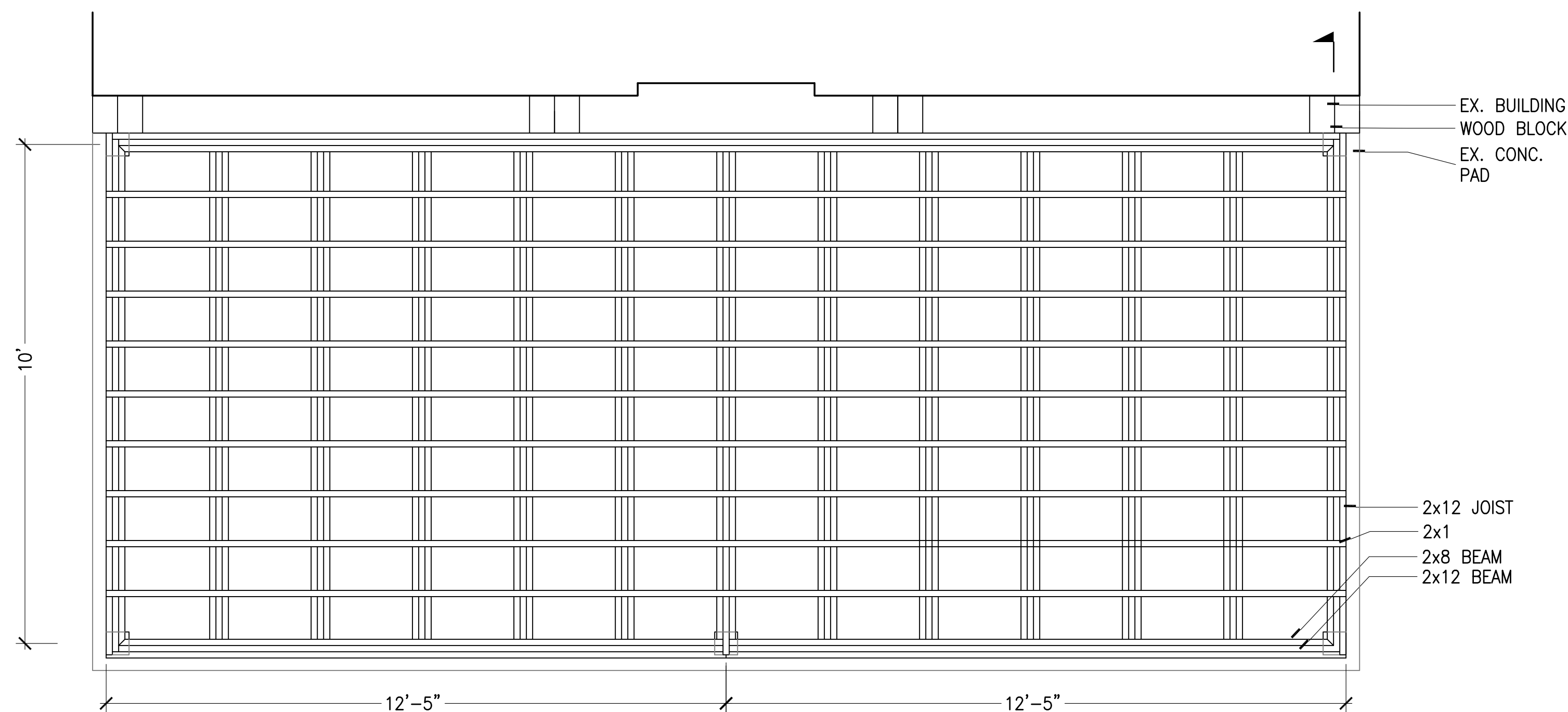
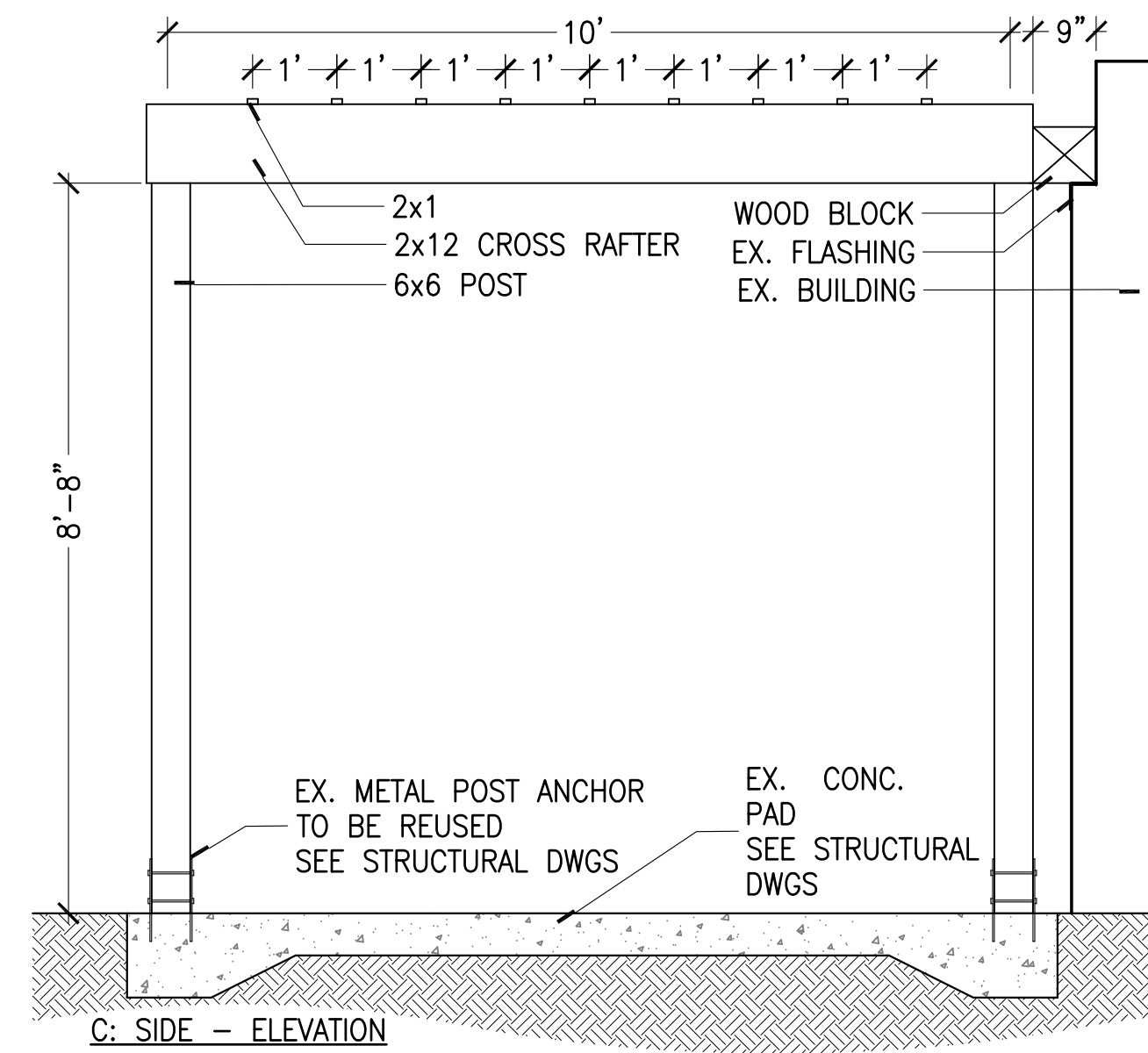
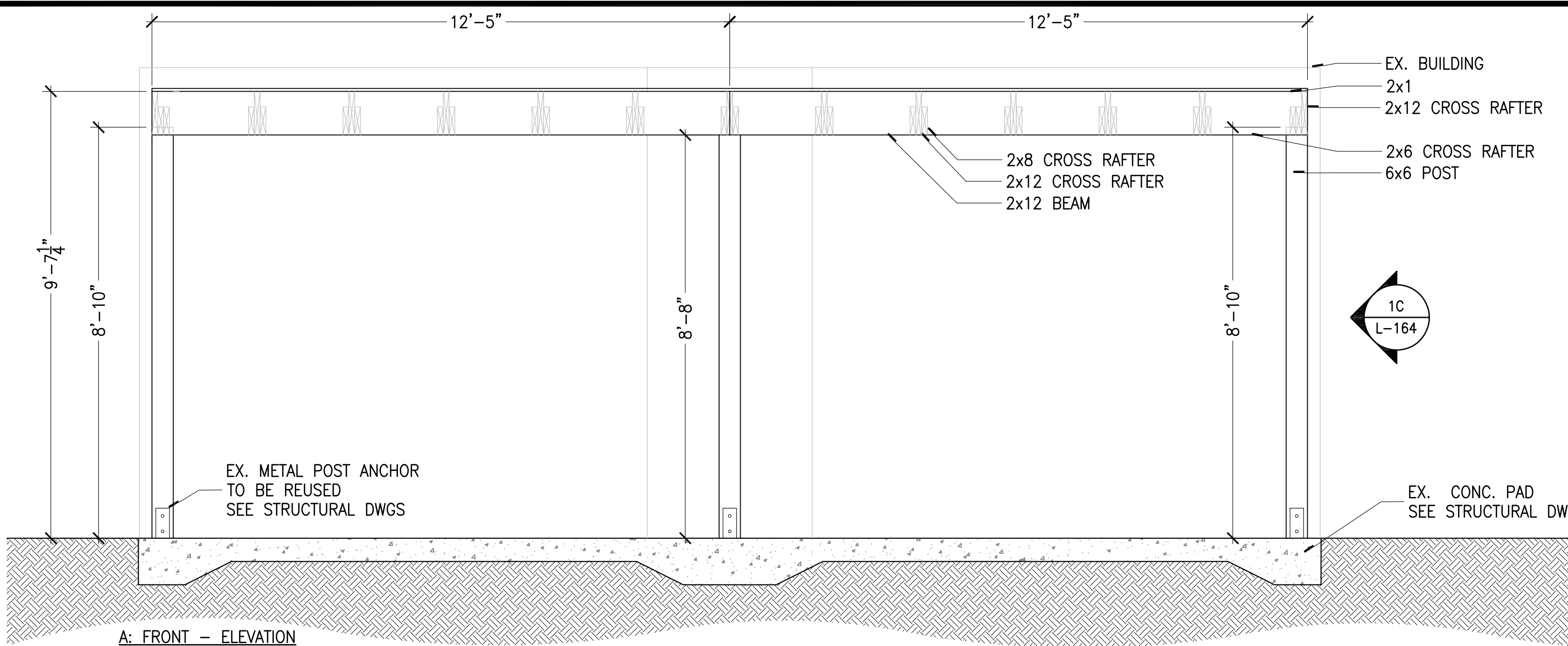
⑥ DETAIL –YARD GATE TAB  
1-1/2"=1'

- NOTE:
1. ALL WOOD MEMBERS TO BE REDWOOD HEART B.
  2. ALL METAL GATE HARDWARE, GATE FRAMES, HINGES, CANE BOLTS TO BE REUSED
  3. ALL WOOD FASTENERS TO BE STAINLESS STEEL
  4. GATE HINGES MUST BE RE-HUNG AND ADJUSTED AS NEEDED



Authorization Signature			
RHODESIDE & HARWELL			
RHI	USDA		
PROJECT MANAGER	EPH		
KP	K. HUMPHREY		
DESIGNER	PPM		
KP/FH			
CHECKED BY	SAFETY & HEALTH		
KP/FH			
DRAWN BY	REAL PROPERTY		
TW/DB	LISA BYNUM		
		SOLICITATION NO.	
		DATE	07/03/2013
		REAL PROPERTY	BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705
		DWG. NO.	L-165
		SHEET	OF



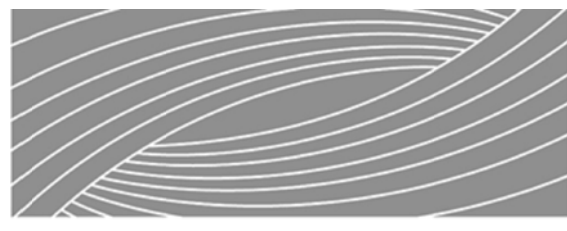


NOTE:

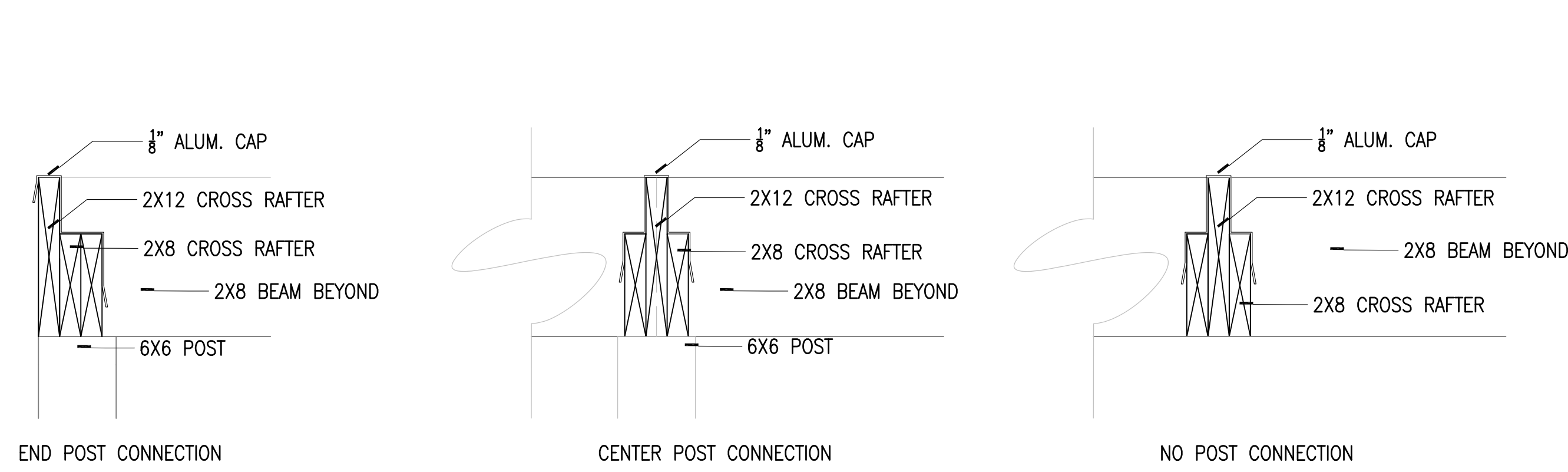
1. ALL WOOD MEMBERS TO BE REDWOOD HEART B.
2. ALL WOOD FASTENERS TO BE STAINLESS STEEL

# 1 YARD TRELLIS - TYPICAL DETAILS 1/2"=1'

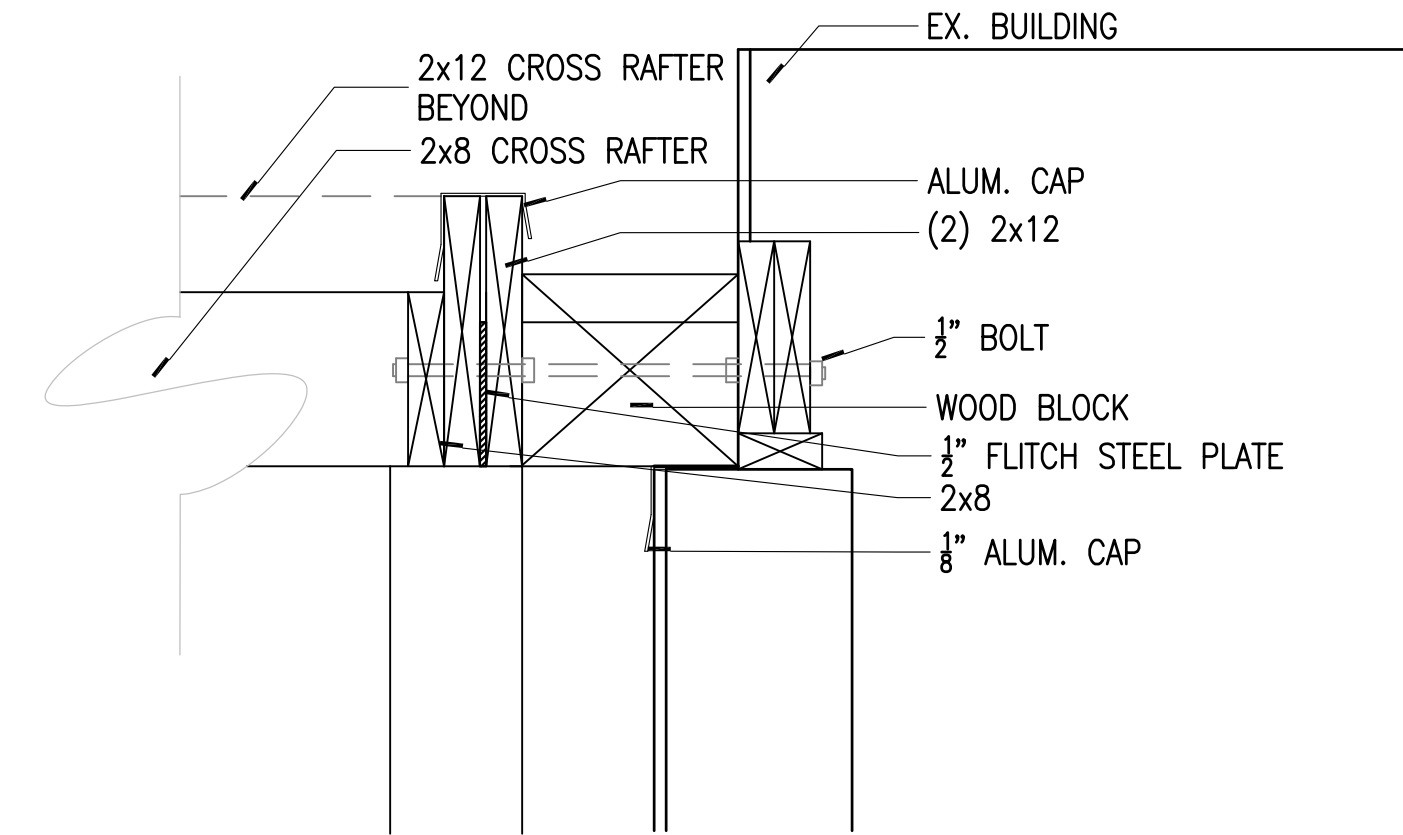


Authorization Signature			
			
RHODESIDE & HARWELL			
PROJECT MANAGER KP		USDA K. HUMPHREY	
DESIGNER KP/FH		PPM	
CHECKED BY KP/FH		SAFETY & HEALTH	
DRAWN BY TW/DB		REAL PROPERTY LISA BYNUM	
		SOLICITATION NO.	
		DATE 07/03/2013	
		BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
		DWG. NO L-166	
		SHEET OF	

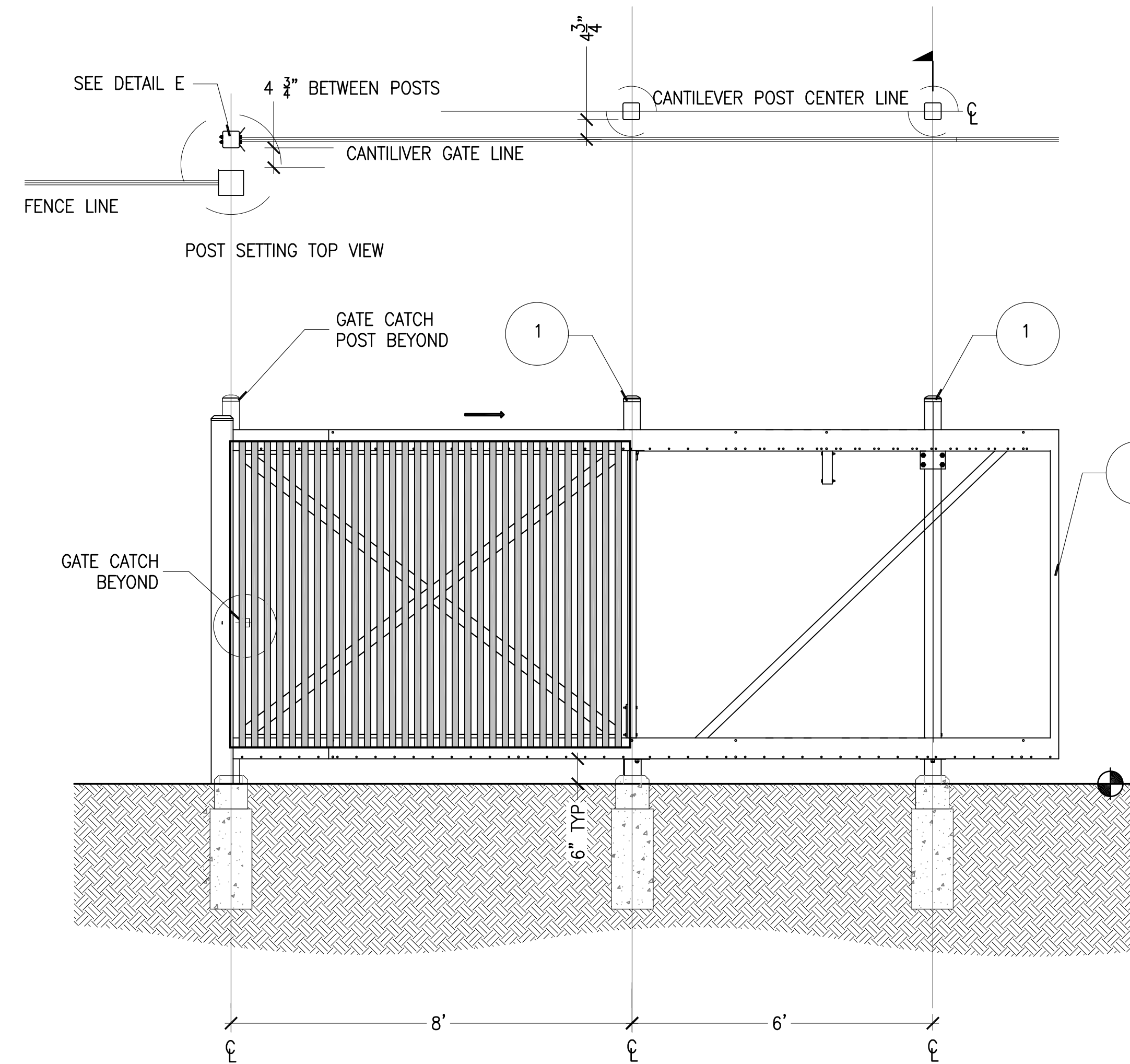




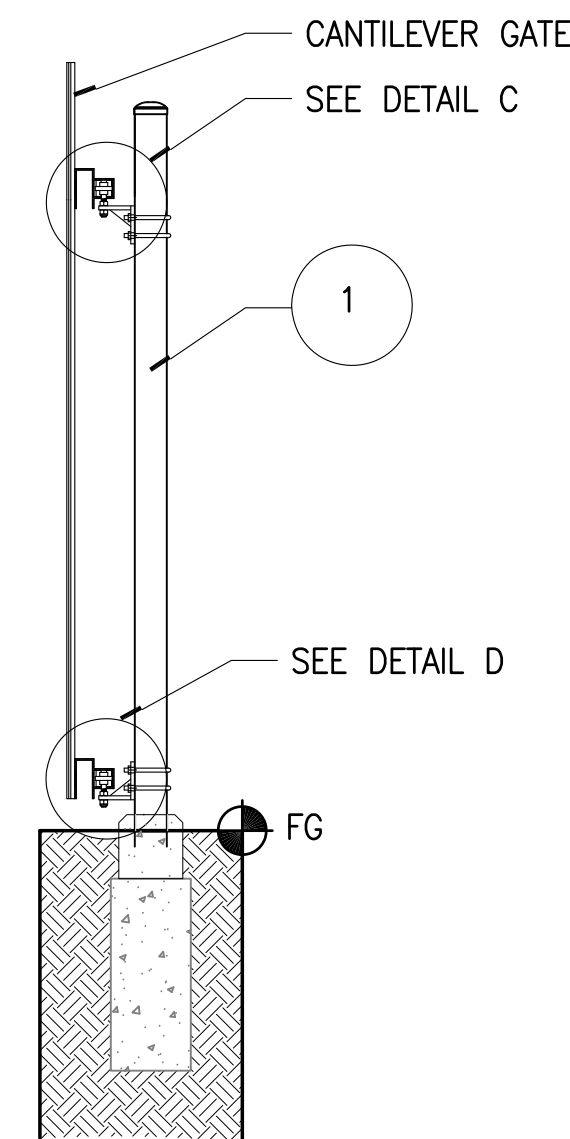
① DETAIL – JOIST / CROSS RAFTER CONNECTION  
1-1/2"=1'



② DETAIL – BUILDING CONNECTION  
1-1/2"=1'

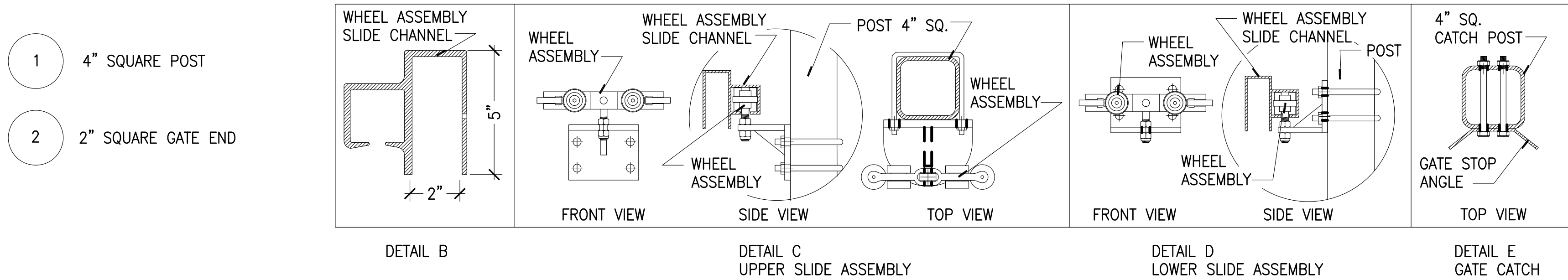


POST/GATE SECTION



④ POST/GATE – SECTION

NOTE:  
1. ALL WOOD MEMBERS TO BE REDWOOD HEART B.  
2. ALL WOOD FASTENERS TO BE STAINLESS STEEL

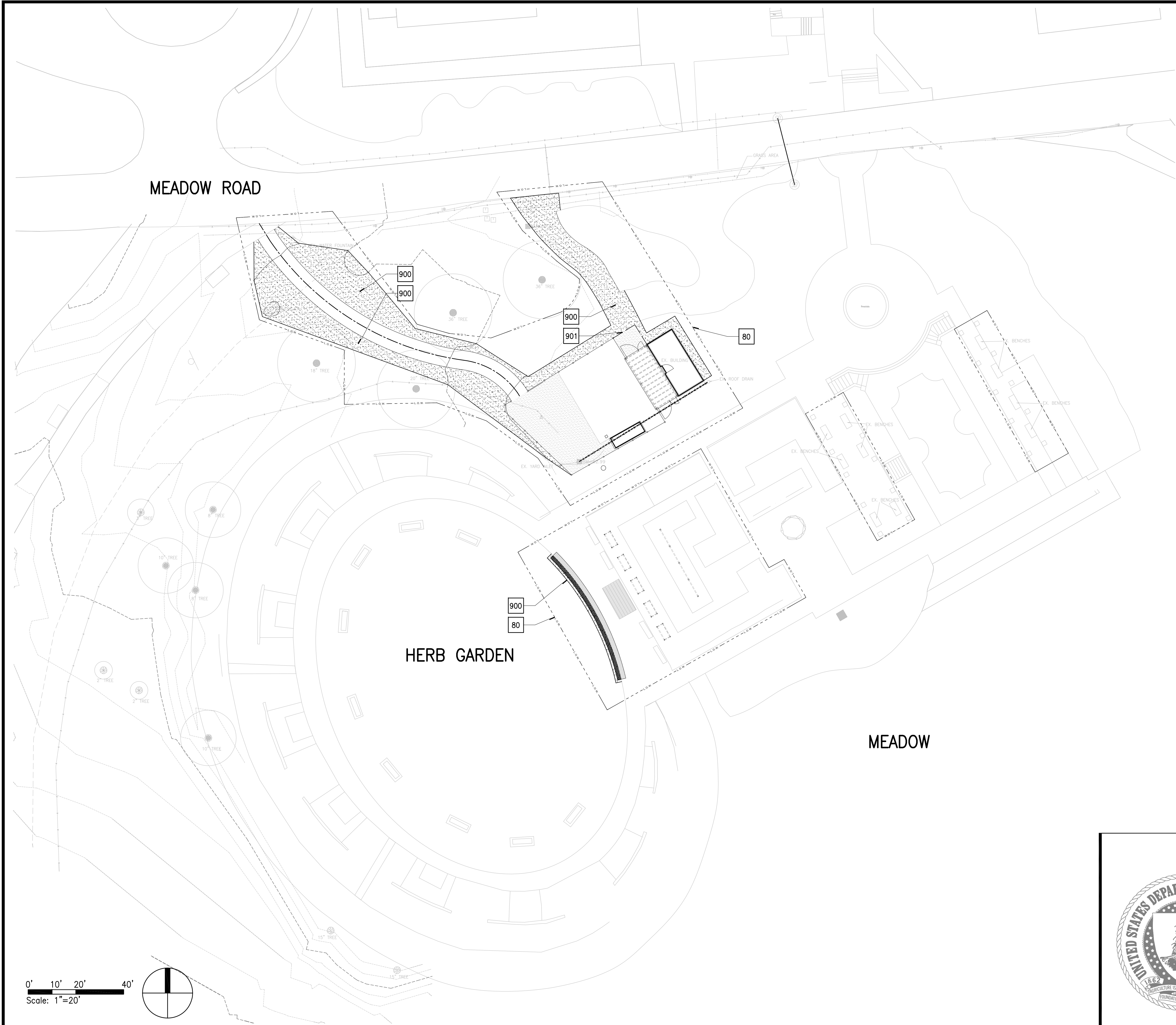


③ 8' CANTILEVER GATE  
1/2"=1'

Authorization Signature

NO.		DATE		BY		DESCRIPTION	
REVISIONS							
RHODESIDE & HARWELL				USDA			
PROJECT MANAGER KP				EPM K. HUMPHREY			
DESIGNER KP/FH				PPM			
CHECKED BY KP/FH				SAFETY & HEALTH		SOLICITATION NO.	
DRAWN BY TW/DB				REAL PROPERTY LISA BYNUM		DATE 07/03/2013	
						<b>USDA</b> Agricultural Research Service <b>USNA HERB GARDEN RENOVATIONS</b> <b>LANDSCAPE DETAILS</b>	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705						DWG. NO <b>L-167</b> SHEET OF	





BOUNDARY LINES

80 LIMITS OF WORK  
(CONTRACTOR SHALL PRESERVE AND PROTECT ALL ELEMENTS  
AND STRUCTURES SCHEDULED TO REMAIN BOTH INSIDE  
AND OUTSIDE OF THE LIMITS OF WORK)

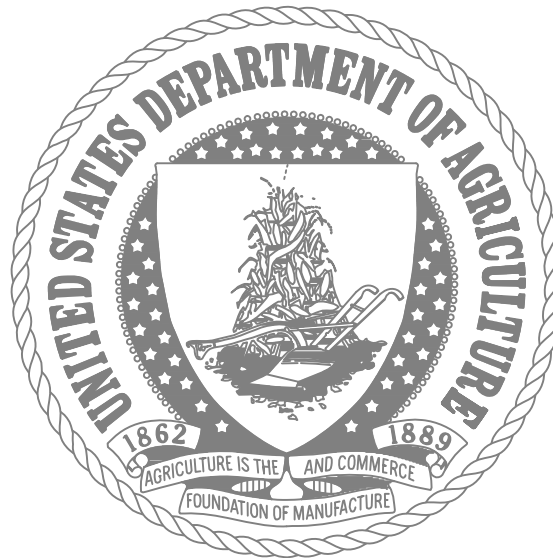
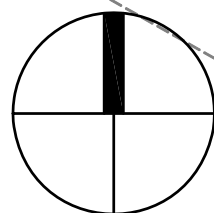
PLANTING

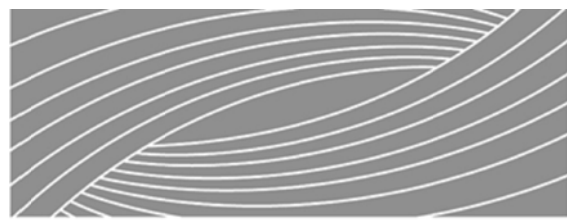
900 TURF SOD RENOVATION

901 STEEL BED DIVIDER

4  
L-161

0' 10' 20' 40'  
Scale: 1"=20'



Authorization Signature	
	
RHODESIDE & HARWELL	
RHI	USDA
PROJECT MANAGER KP	EPH K. HUMPHREY
DESIGNER KP/FH	PPH
CHECKED BY KP/FH	SAFETY & HEALTH
DRAWN BY TW/DB	REAL PROPERTY LISA BYNUM
SOLICITATION NO.	
DATE 07/03/2013	
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	
DWG. NO. LP-101	
SHEET OF	



GENERAL NOTES

1. ALL STRUCTURAL WORK SHALL BE COORDINATED WITH LANDSCAPE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SHALL CONFORM TO THE PROJECT SPECIFICATIONS, INCLUDING THE 2008 DCRA BUILDING CODE, BASED ON 2006 INTERNATIONAL BUILDING CODE.
2. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, BRACING, SHEETING AND MAKE SAFE ALL FLOORS, ROOFS, WALLS AND ADJACENT PROPERTY AS PROJECT CONDITIONS REQUIRE. SHORING AND SHEETING SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROJECT JURISDICTION HIRED BY THE CONTRACTOR WHO SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THE OWNER'S REVIEW.
3. DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION GIVEN IN STRUCTURAL DRAWINGS ARE BASED ON INFORMATION CONTAINED IN VARIOUS ORIGINAL DESIGN AND CONSTRUCTION DOCUMENTS PROVIDED BY THE OWNER, AND LIMITED FIELD OBSERVATIONS AND MEASUREMENTS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION PERTAINING TO EXISTING CONDITIONS BY ACTUAL MEASUREMENT AND OBSERVATION AT THE SITE. ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN IN THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER OF RECORD FOR HIS EVALUATION BEFORE THE AFFECTED CONSTRUCTION IS PUT IN PLACE.
4. THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. THESE NOTES HIGHLIGHT RATHER THAN REPLACE THE SPECIFICATIONS CONTAINED IN THE PROJECT MANUAL. PLEASE NOTIFY THE ENGINEER OF ANY CONFLICTS. REFER TO THE SPECIFICATION FOR WORK NOT SHOWN ON THE DRAWINGS.

FOUNDATIONS

1. BUILDING FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL HAVING MINIMUM BEARING CAPACITY OF 1500 PSF. AS SPECIFIED BY THE BUILDING CODE WHEN NO GEOTECHNICAL INVESTIGATION HAS BEEN PERFORMED, ADEQUACY OF BEARING STRATUM SHALL BE VERIFIED IN FIELD PRIOR TO PLACING CONCRETE. ADJUST BOTTOM OF FOOTING ELEVATIONS AS REQUIRED.
2. DO NOT PLACE BACKFILL AGAINST BASEMENT WALLS UNTIL ALL FLOORS BRACING THESE WALLS ARE IN PLACE AND HAVE ATTAINED THEIR 28 DAY STRENGTH.
3. ALL EXTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF 2'-6" BELOW FINAL GRADE.
4. CONCRETE SHALL BE POURED IN DRY EXCAVATIONS. CONTRACTOR SHALL NOTE SOIL AND WATER CONDITIONS AS SHOWN BY BORINGS AND DEPTHS OF FOOTING AS SHOWN ON FOUNDATION PLANS.

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE ACI FOLLOWING GOVERNING STANDARDS.

A. AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318), LATEST EDITION.

B. ACI "MANUAL OF CONCRETE PRACTICE" LATEST EDITION

C. CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE" LATEST EDITION.
2. ALL OTHER CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED.
3. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 OR A775 EPOXY COATED WHEN CALLED OUT ON PLAN. REINFORCING STEEL SHALL BE DETAILED ACCORDING TO THE ACI "DETAILS AND DETAILING OF REINFORCEMENT", (ACI 315), LATEST EDITION.
4. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185, WITH A MINIMUM YIELD STRENGTH OF 65,000 PSI.
5. COORDINATE SIZE AND LOCATION OF ALL OPENINGS AND PIPE SLEEVES WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. MINIMUM CONCRETE BETWEEN SLEEVES SHALL BE 6". CORE DRILLING OF WALLS AND SLABS SHALL NOT BE PERMITTED.
6. ALL GROUT SHALL BE NONSHRINK WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI.
7. PROVIDE CLEARANCE FROM FACE OF CONCRETE TO REINFORCEMENT AS FOLLOWS:

SLABS: ¾"

FOOTINGS: 3"
8. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. NO CONCRETE WORK SHALL COMMENCE WITHOUT APPROVED SHOP DRAWINGS.
9. CLEAN AND ROUGHEN TO ¼" AMPLITUDE ALL EXISTING CONCRETE SURFACES TO RECEIVE NEW CONCRETE PRIOR TO PLACEMENT.
10. SEE OTHER DRAWINGS IN THIS PROJECT FOR SIZE AND LOCATIONS OF EQUIPMENT PADS, INSERT AND EMBED ITEMS.
11. REINFORCING DOWELS, WATERSTOPS AND OTHER EMBED ITEMS SHALL BE INSTALLED AND SECURED PRIOR TO CONCRETE PLACEMENT. "WET-SETTING" OF EMBEDDED ITEMS IS NOT PERMITTED.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE FOLLOWING GOVERNING STANDARDS:

A. AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS," LATEST EDITION.

B. THE AMERICAN WELDING SOCIETY (AWS D1.1) "CODE FOR WELDING IN BUILDING CONSTRUCTION," LATEST EDITION.
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

A. ANGLES AND PLATES: ASTM A36 UNLESS OTHERWISE NOTED.

B. BOLTED CONNECTIONS OF BEAMS/GRIDERS ARE TO BE DESIGNED AS FOLLOWS:

a. STANDARD BEAM TO BEAM/GRIDER: A325 OR A490 BEARING TYPE BOLTS (¾" DIAMETER MINIMUM).

b. BEAM/GRIDER TO COLUMN CONNECTIONS: A325-SC OR A490-SC TYPE BOLTS (¾" DIAMETER MINIMUM).

C. ANCHOR BOLTS: ASTM F1554, GRADE 36.
3. MINIMUM WELD SIZE IS ¼" FILLET UNLESS NOTED OTHERWISE.
4. FIELD CUTTING OR BURNING OF STEEL IS PROHIBITED EXCEPT WITH THE EXPRESSED WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.
5. WELDING SHALL BE PERFORMED BY CERTIFIED LICENSED, AWS-QUALIFIED WELDERS. ELECTRODES SHALL BE AWS E.1, CLASS E70XX (USE LOW HYDROGEN ELECTRODES FOR A572, GRADE 50 STEEL).
6. HOT DIP GALVANIZING SHALL CONFORM TO ASTM A123, REPAIR SCRATCHES OR ABRADED GALVANIZED SURFACE WITH ZINC RICH PAINT. ALL EXTERIOR EXPOSED STEEL AND STEEL SUPPORTING EXTERIOR SHALL BE HOT DIPPED GALVANIZED.
7. SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. NO FABRICATION OF STEEL SHALL COMMENCE WITHOUT APPROVED SHOP DRAWINGS.
8. PROVIDE MECHANICALLY GALVANIZED BOLTS FOR EXTERIOR APPLICATIONS.

FRAMING LUMBER

1. ALL FRAMING LUMBER WORK SHALL CONFORM TO THE FOLLOWING GOVERNING STANDARDS:

A. AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, "TIMBER CONSTRUCTION MANUAL" LATEST EDITION.

B. NATIONAL FOREST PRODUCTS ASSOCIATION "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION," LATEST EDITION.
2. LUMBER SHALL CONFORM TO THE FOLLOWING SPECIE AND GRADE:

POST AND TIMBER: REDWOOD HEART B (#2 MIN.)

BEAMS AND STRINGERS: REDWOOD HEART B (#2 MIN.)
3. ALL WOOD FRAMING INCLUDING DETAILS FOR BRIDGING, BLOCKING, FIRE STOPPING, ETC., SHALL CONFORM TO THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND ITS SUPPLEMENTS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NFPA "MANUAL FOR HOUSE FRAMING" OR THE GOVERNING LOCAL/STATE BUILDING CODE.
4. FASTENING SHALL BE IN ACCORDANCE WITH THE MOST RESTRICTIVE OF: THE DISTRICT OF COLUMBIA BUILDING CODE, (LATEST EDITION), OR THE MANUFACTURER'S RECOMMENDED FASTENING SCHEDULES.
5. BUILT UP BEAMS LESS THAN 8" DEEP SHALL BE SPIKED TOGETHER WITH 2 - 16D NAILS @16"o/c. BUILT UP BEAMS GREATER THAN 8" DEEP SHALL BE SPIKED TOGETHER WITH 3 - 16D NAILS @16" O/C.
6. NO NEW OR EXISTING BEAMS SHALL BE CUT OR NOTCHED WITHOUT APPROVAL.

RSA STANDARD ABBREVIATIONS

ADD'L	ADDITIONAL	INFO	INFORMATION
ADJ.	ADJACENT	INT	INTERIOR
A/E	DESIGN TEAM OF RECORD	JT.	JOINT
ALT.	ALTERNATE	K	KIPS
ANCH.	ANCHOR	LB.	POUND
APPROX.	APPROXIMATE/APPROXIMATELY	LL.	LIVE LOAD
ARCH.	ARCHITECTURAL/ARCHITECT	LLH	LONG LEG HORIZONTAL
B.O.	BOTTOM OF	LLV	LONG LEG VERTICAL
BLDG.	BUILDING	L.P.	LOW POINT
BM.	BEAM	L.W.	LIGHTWEIGHT
BOT.	BOTTOM	MAS	MASONRY
BRG.	BEARING	MAX	MAXIMUM
BSMT.	BASEMENT	MECH	MECHANICAL
CANT.	CANTILEVER	MEP	MECH., ELECT., PLUMBING, & F.P.
CFS.	COLD FORMED STEEL	MFR	MANUFACTURER
C.I.P.	CAST IN PLACE	MIN	MINIMUM
C.J.	CONTRACTION JOINT	MISC	MISCELLANEOUS
CLG.	CEILING	M.O.	MASONRY OPENING
CLR.	CLEAR	N.F.	NEAR FACE
CMU	CONCRETE MASONRY UNIT	N.I.C.	NOT IN CONTRACT
COL.	COLUMN	NO.	NUMBER
COMPS.	COMPOSITE	N.S.	NEAR SIDE
CONC.	CONCRETE	N.T.S.	NOT TO SCALE
CONST.	CONSTRUCTION	N.W.	N.W. NORMAL WEIGHT
CONT.	CONTINUOUS	O/C.	ON CENTER
COORD.	COORDINATE/COORDINATION	O.D.	OUTSIDE DIAMETER
CONTR.	CONTRACTOR	O.F.	OUTSIDE FACE
COTR.	CONTRACT OFFICER'S TECHNICAL REP.	OPNG	OPENING
CTR.	CENTER	OPP	OPPOSITE
DBL.	DOUBLE	PC.	PIECE
DEMO	DEMOLITION/DEMOLISH	PED	PEDESTAL
DTL.	DETAIL	PERP	PERPENDICULAR
DIA.	DIAMETER	PL.	PLATE
DIAG.	DIAGONAL	PLF	POUNDS PER LINEAR FOOT
DM.	DIMENSION	PREFAB	PREFABRICATED
D.L.	DEAD LOAD	PSF	POUNDS PER SQUARE FOOT
DN.	DOWN	PSI	POUNDS PER SQUARE INCH
DWG(S)	DRAWING(S)	REINF	REINFORCE(D), REINFORCEMENT
DWL.	DOWEL	REQ'D	REQUIRED
EA.	EACH	REV	REVISION
E.O.	EDGE OF	SCHED	SCHEDULE
E.F.	EACH FACE	SECT	SECTION
EXP. JT.	EXPANSION JOINT	SIM	SIMILAR
EL.	ELEVATION	S.O.G.	SLAB ON GRADE
ELEC.	ELECTRICAL	SPEC	SPECIFICATION
ELEV.	ELEVATOR	SQ.	SQUARE
EMBED.	EMBEDMENT	S.S.	STAINLESS STEEL
ENGR.	ENGINEER	STD	STANDARD
E.O.R.	ENGINEER OF RECORD	STIFF	STIFFENER
EQ.	EQUAL	STL.	STEEL
EXP.	EXPANSION	S-W	SHORT WAY
EXT.	EXTERIOR	SYM.	SYMMETRIC
E.W.	EACH WAY	T.O.	TOP OF
FDN.	FOUNDATION	T & B	TOP & BOTTOM
FIN.	FINISH	TEMP.	TEMPORARY/TEMPERATURE
FLR.	FLOOR	TYP.	TYPICAL
FRMG.	FRAMING	U.N.O.	UNLESS NOTED OTHERWISE
F.S.	FAR SIDE	VERT.	VERTICAL
FT.	FEET	W/	WITH
FTG.	FOOTING	W.P.	WORK POINT
GA.	GAGE	W.W.F.	WELDED WIRE FABRIC
GALV.	GALVANIZED	#	NUMBER/SIZE
G.B.	GRADE BEAM	CL	CENTERLINE
HDR.	HANGER	Ø	DIAMETER
HORIZ.	HORIZONTAL	PL	PLATE/PROPERTY LINE
H.P.	HIGH POINT		
HT.	HEIGHT		
HVAC	HEATING, VENTILATION, & AIR CONDITIONING		
I.D.	INSIDE DIAMETER		
I.F.	INSIDE FACE		
I.J.	ISOLATION JOINT		

RSA STANDARD ABBREVIATIONS FOR EXISTING STRUCTURES

C.I.	CAST IRON	T.C.	TERRACOTTA
(E)	EXISTING MEMBER OR DIMENSION	V.I.F.	VERIFY IN FIELD
EXIST.	EXISTING		

RSA STANDARD ABBREVIATIONS FOR WOOD STRUCTURES

ACT.	ACTUAL	P.T.	PRESERVATIVE TREATED
C-LAM	GLUELAMINATED LUMBER	R.O.	ROUGH OPENING
LSL	LAMINATED STRAND LUMBER	SQ.	SQUARE
LVL	LAMINATED VENEER LUMBER	T & G	TONGUE AND GROOVE
NOM.	NOMINAL		
PSL	PARALLEL STRAND LUMBER		

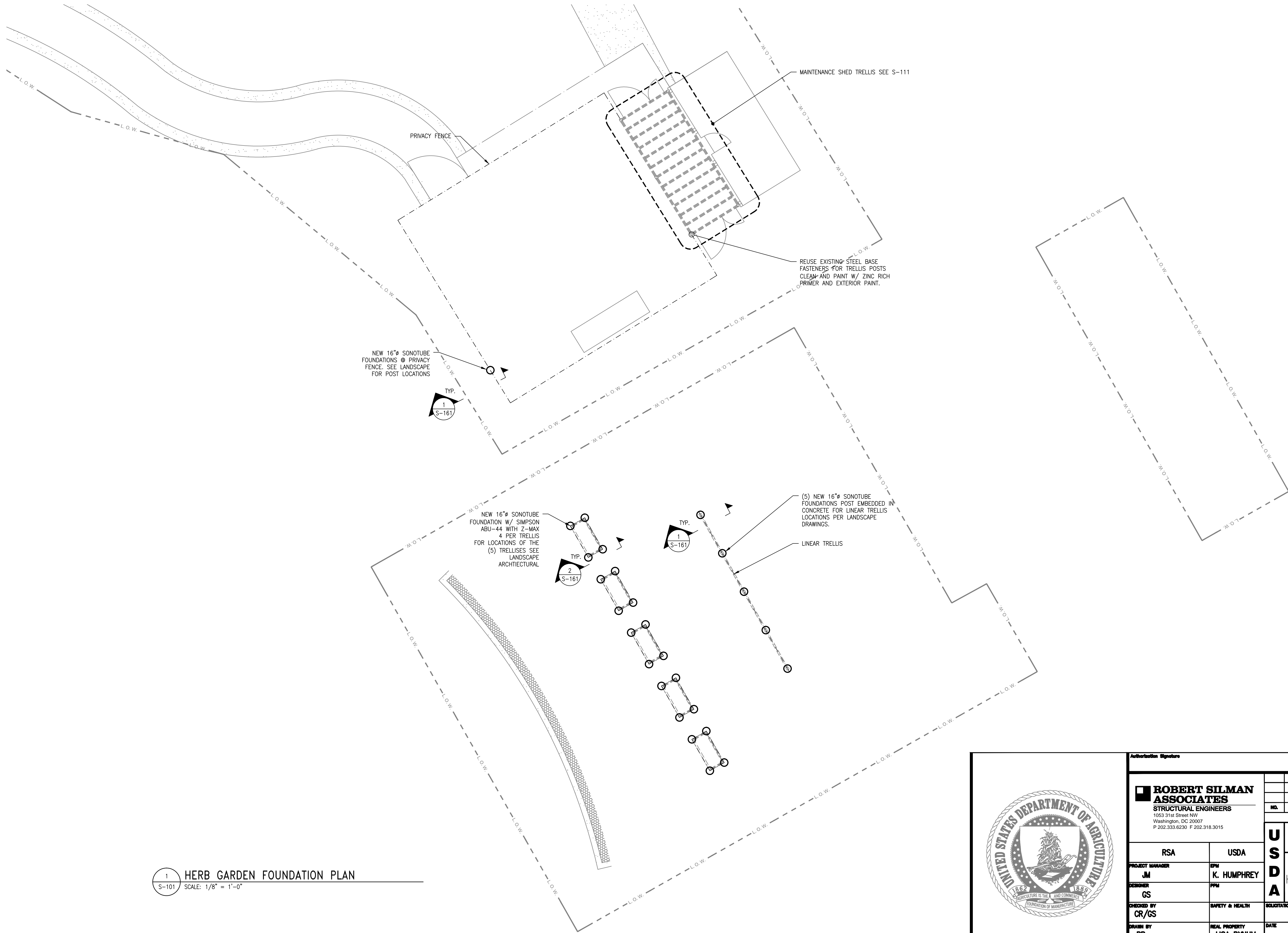
LEGEND

	EXIST. CONCRETE FOOTING		COLUMN DOWN
	CONCRETE FOOTING		WOOD COLUMN
	EXIST. CONCRETE MASONRY (CMU)	(##'-##')	INDICATES BOTTOM OF FOOTING ELEVATION
	CONCRETE MASONRY (CMU)		COLUMN LINE
	EXIST. CONCRETE WALL		EXIST. COLUMN LINE (DIMENSIONS BETWEEN EXIST. COLUMN LINES ARE FOR REFERENCE ONLY)
	CONCRETE WALL		WOOD CONNECTION. SEE SCHEDULE.
	WOOD BEAM	(E)	EXIST. DIMENSION OR ELEVATION BASED ON ORIGINAL DIMENSIONS, V.I.F. (TO CLARIFY ALTERATIONS CONDITIONS.)
	SHEAR CONNECTION		



Authorization Signature			
<div><div><div><div><div></div><div>ROBERT SILMAN ASSOCIATES</div></div><div>STRUCTURAL ENGINEERS</div><div>1053 31st Street NW Washington, DC 20007 P 202.333.6230 F 202.318.3015</div></div><div><div><div>RSA</div><div>USDA</div></div><div><div>PROJECT MANAGER</div><div>DESIGNER</div><div>CHECKED BY</div><div>DRAWN BY</div></div><div><div>JM</div><div>GS</div><div>CR/GS</div><div>BB</div></div><div><div>EPN</div><div>PPM</div><div>SAFETY &amp; HEALTH</div><div>REAL PROPERTY</div></div><div><div>K. HUMPHREY</div><div>LISA BYNUM</div></div></div></div></div>			
NO.		DATE	BY
REVISIONS			
USDA Agricultural Research Service			
USNA HERB GARDEN RENOVATIONS			
STRUCTURAL GENERAL NOTES, SYMBOLS & ABBREVIATIONS			
SOLICITATION NO.		DATE	DWG. NO.
BELTSVILLE AREA		07/03/2013	S-001
ENGINEERING CONSTRUCTION BRANCH		SHEET OF	
10300 BALTIMORE AVE.			
BLDG.426A, BARC-EAST			
BELTSVILLE,MARYLAND 20705			

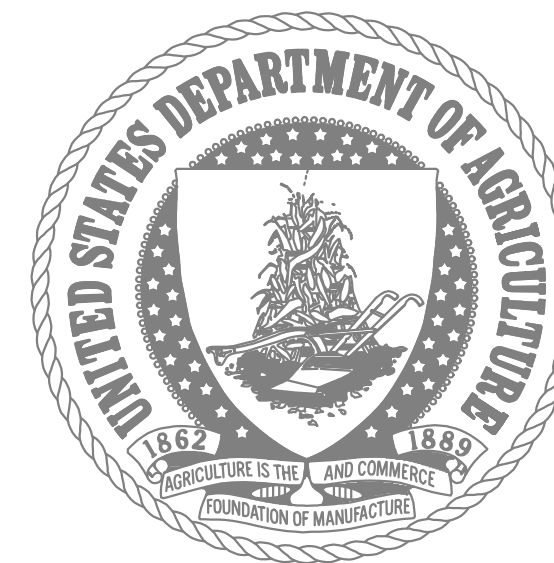




1  
S-101

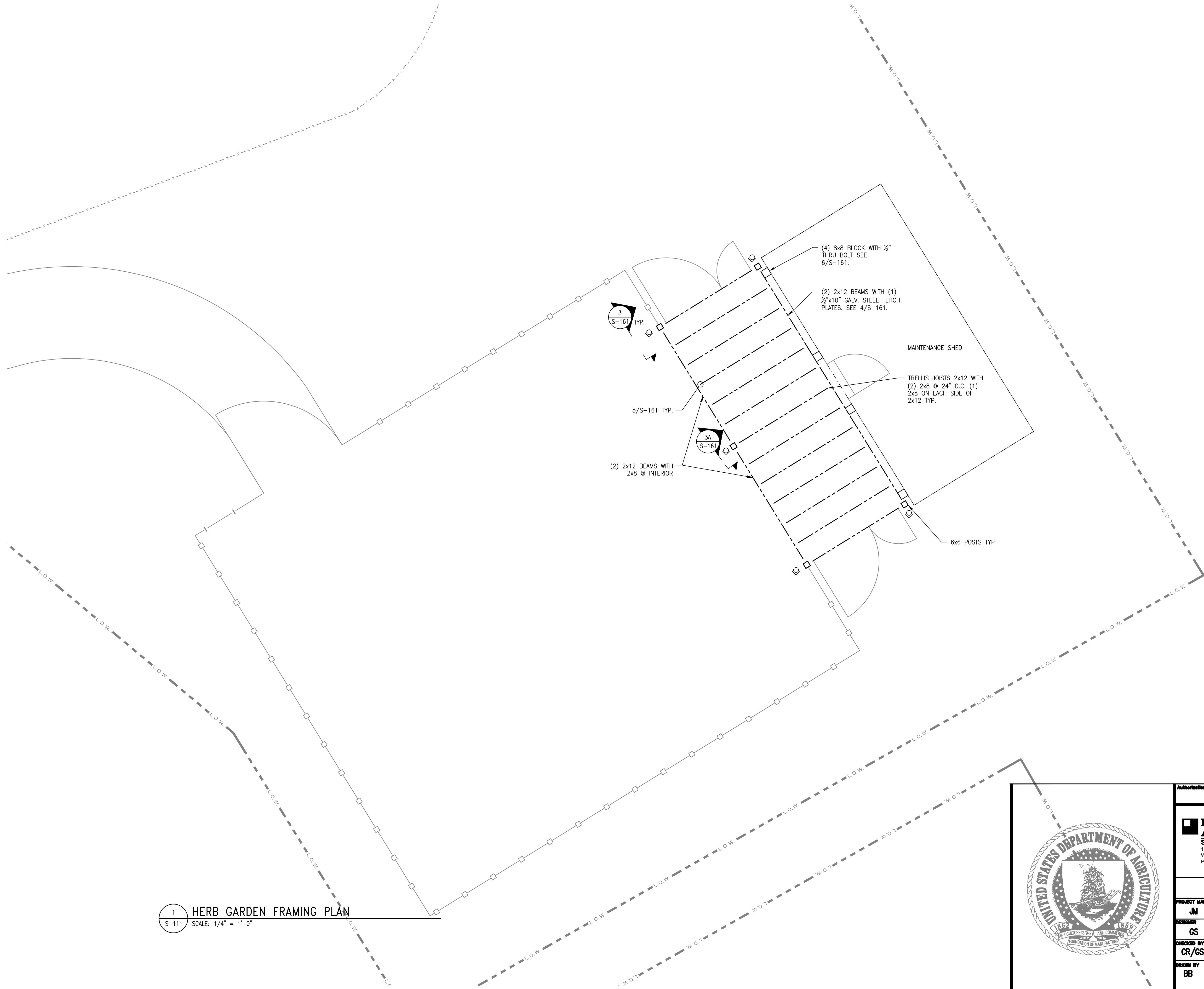
HERB GARDEN FOUNDATION PLAN

SCALE: 1/8" = 1'-0"



Authorizing Signature	
<b>ROBERT SILMAN ASSOCIATES</b> STRUCTURAL ENGINEERS 1053 31st Street NW Washington, DC 20007 P 202.333.6230 F 202.318.3015	
NO. DATE BY DESCRIPTION	
REVISIONS	
USDA Agricultural Research Service	
USNA HERB GARDEN RENOVATIONS	
HERB GARDEN FOUNDATION PLAN	
RSA	USDA
PROJECT MANAGER JM	SPM K. HUMPHREY
DESIGNER GS	PPM
CHECKED BY CR/GS	SAFETY & HEALTH
DRAWN BY BB	REAL PROPERTY LISA BYNUM
SOLICITATION NO.	DATE 07/03/2013
BELTSVILLE AREA ENGINEERING CONSTRUCTION BRANCH 10300 BALTIMORE AVE. BLDG. 426A, BARC-EAST BELTSVILLE, MARYLAND 20705	DWG. NO. <b>S-101</b> SHEET OF





1  
S-111

HERB GARDEN FRAMING PLAN  
SCALE: 1/4" = 1'-0"



Authorizing Signature	
<b>ROBERT SILMAN ASSOCIATES</b> STRUCTURAL ENGINEERS 1053 31st Street NW Washington, DC 20007 P 202.333.6230 F 202.318.3015	
RSA	USDA
PROJECT MANAGER JM	SPM K. HUMPHREY
DESIGNER GS	PPM
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