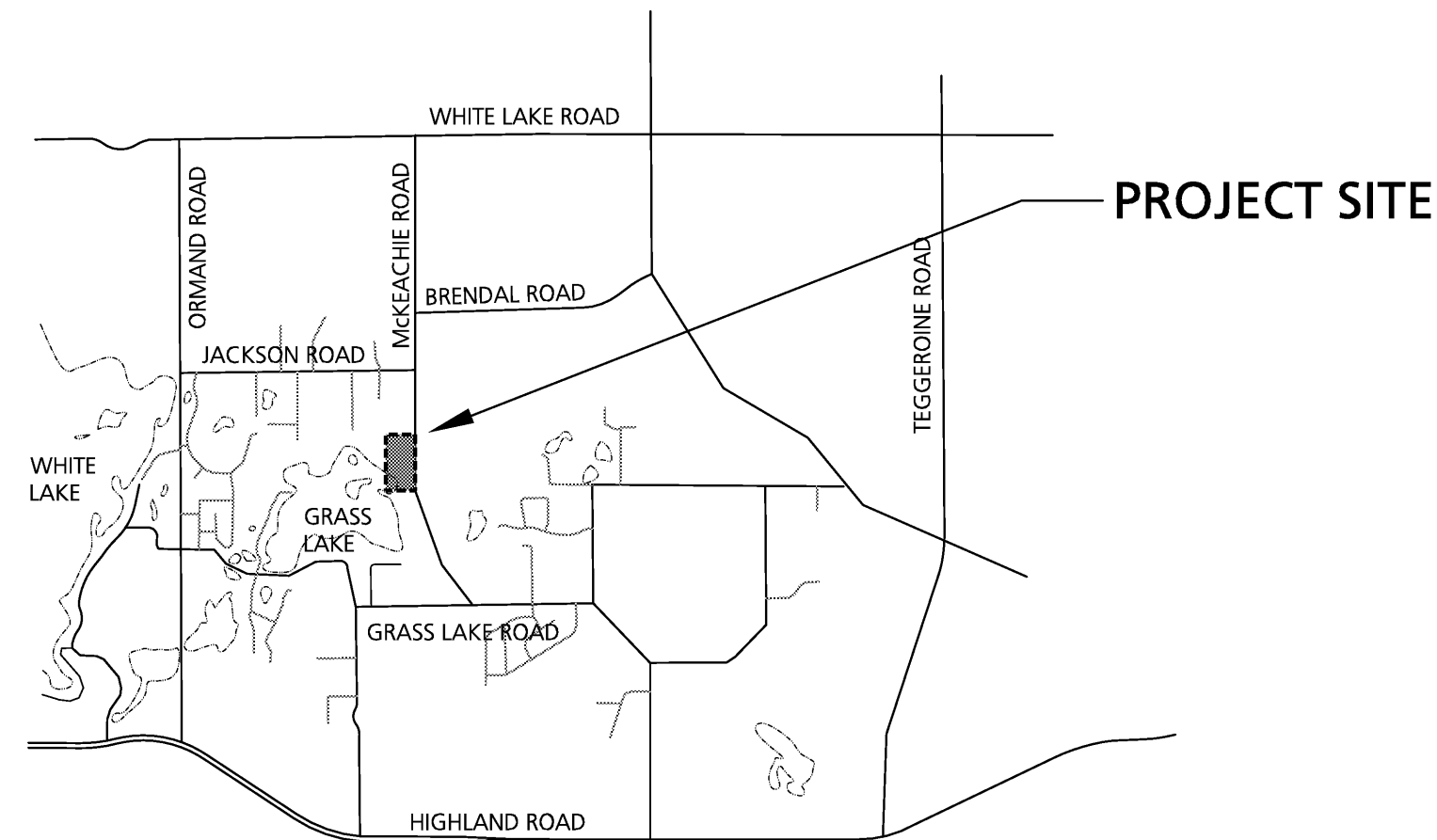


BLOOMER PARK IMPROVEMENTS

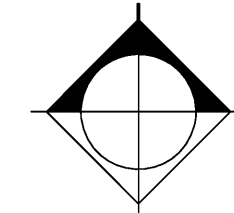
Date Issued: August 1, 2012

White Lake Township

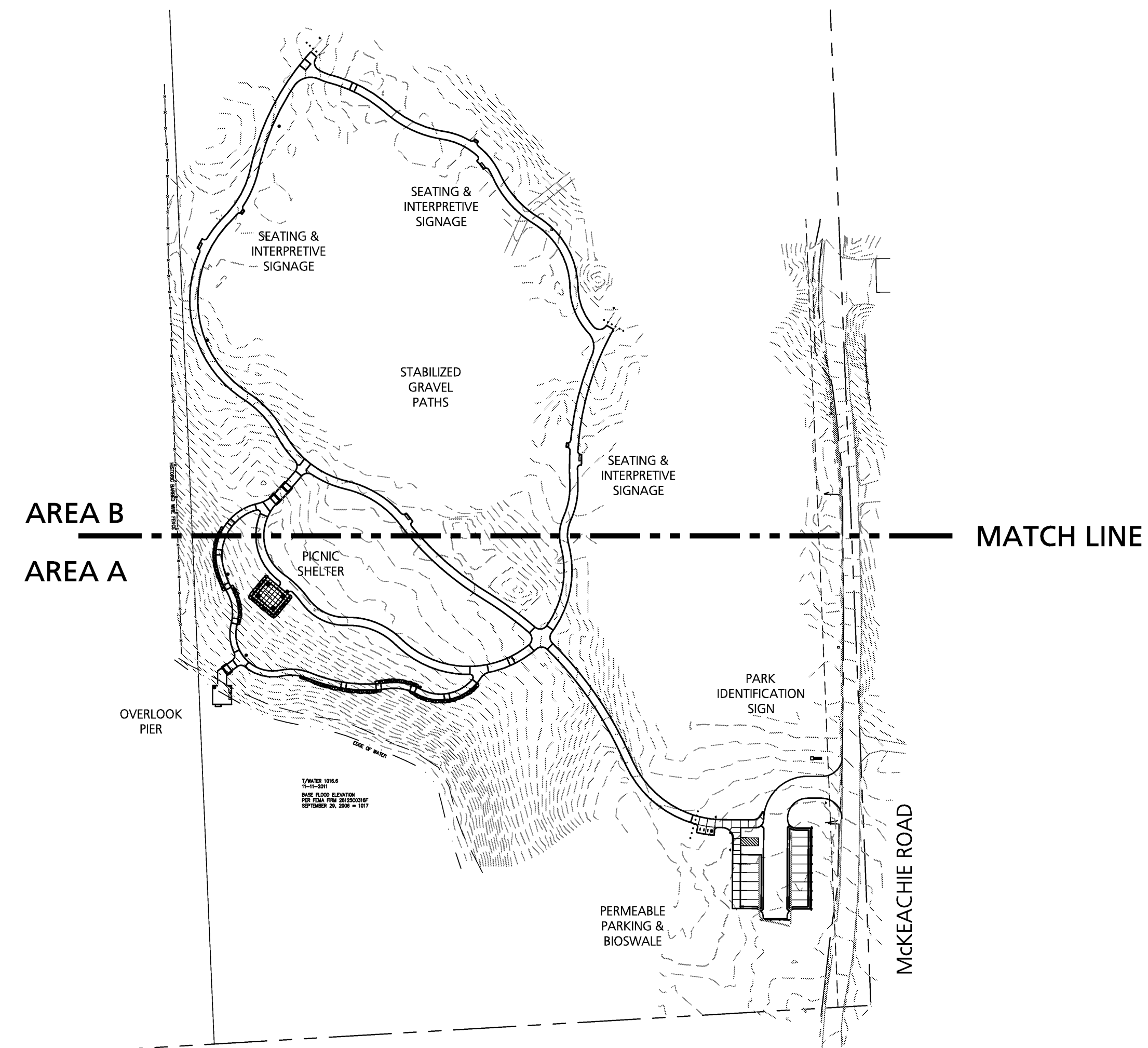
BIDS



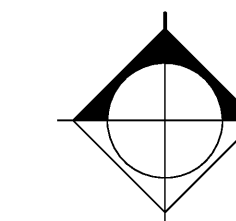
Location Map



1" = 4000'



Index Map



1" = 100'

Sheet Index

- C-000 Cover Sheet
- C-101 Existing Conditions - Area A
- C-102 Existing Conditions - Area B
- C-201 Demolition Plan - Area A
- C-202 Demolition Plan - Area B
- C-301 Layout & Materials Plan - Area A
- C-302 Layout & Materials Plan - Area B
- C-401 Grading & Utilities Plan - Area A
- C-402 Grading & Utilities Plan - Area B
- C-501 Site Details
- C-502 Site Details
- C-503 Site Details
- C-504 Site Details
- S-101 Overlook Pier Framing Plans and Details
- L-101 Landscape Plan - Area A
- L-102 Landscape Plan - Area B

Consultant Team

Beckett & Raeder
Landscape Architecture
Planning & Engineering

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734.663.2622 ph
734.663.6759 fx

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Fax 1-734-669-2961

sdi structures
275 E Liberty | Ann Arbor, MI 48104
734-213-6091
sdi@sdistructures.com

Miss Dig Notes

Contractor shall call Miss Dig (1.800.482.7171) a minimum of three working days prior to start of construction, excluding weekends and holidays.

Consultants

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 275 E Liberty | Ann Arbor, MI 48104
 734-213-6091
 sdi@sdistructures.com

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Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Existing Conditions - Area A

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

Drawn: NB/BB
 Checked: BB
 Approved: BB

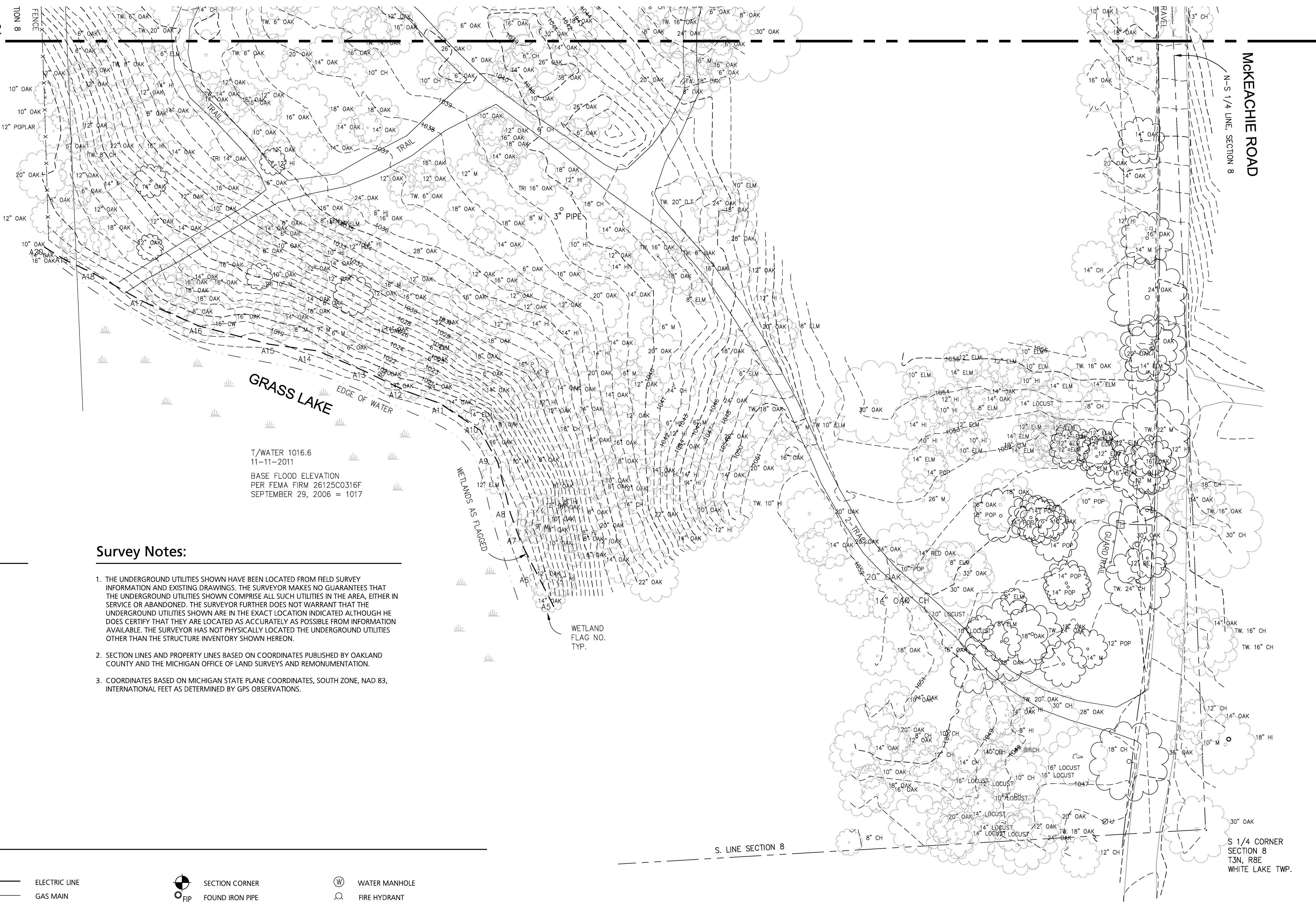
Project Number

201133.06

Sheet Number

C-101

MATCH LINE C-102



T/WATER 1016.6
 11-11-2011
 BASE FLOOD ELEVATION
 PER FEMA FIRM 26125C0316F
 SEPTEMBER 29, 2006 = 1017

Tree Legend

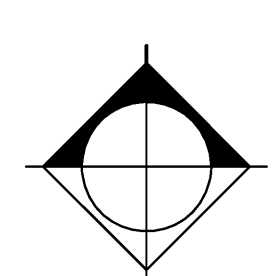
AP	APPLE
AS	ASPEN
B	BIRCH
BB	BURNING BUSH
BE	BOX ELDER
BC	BIRCH
CA	CRAB APPLE
CAT	CATALPA
CH	CHERRY
CS	CONIFEROUS SHRUB
CW	COTTONWOOD
DS	DECIDUOUS SHRUB
DT	DECIDUOUS TREE
HI	HICKORY
L	LOCUST
M	MAPLE
P	PINE
POP	POPLAR
SAS	SASSAFRAS
SP	SPRUCE
SYC	SYCAMORE
W	WILLOW
WAL	WALNUT

Survey Notes:

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.
2. SECTION LINES AND PROPERTY LINES BASED ON COORDINATES PUBLISHED BY OAKLAND COUNTY AND THE MICHIGAN OFFICE OF LAND SURVEYS AND REMONUMENTATION.
3. COORDINATES BASED ON MICHIGAN STATE PLANE COORDINATES, SOUTH ZONE, NAD 83, INTERNATIONAL FEET AS DETERMINED BY GPS OBSERVATIONS.

Legend

	ELECTRIC LINE		SECTION CORNER		WATER MANHOLE
	GAS MAIN		FOUND IRON PIPE		FIRE HYDRANT
	WATER MAIN		FOUND IRON ROD		GATE VALVE
	STORM LINE		SET IRON PIPE		BEEHIVE CATCH BASIN
	SANITARY LINE		SET MAG NAIL		CURB CATCH BASIN
	CABLE TV LINE		FOUND MAG NAIL		STORM MANHOLE
	PHONE LINE		CONTROL POINT		CULVERT / END SECTION
	CHAIN LINK FENCE		MEASURED DIMENSION		SANITARY MANHOLE
	WOOD FENCE		RECORDED DIMENSION		LIGHT POLE
	BARBED WIRE FENCE		SURFACE FLOW		UTILITY POLE
					TELEPHONE RISER
					GAS MAIN RISER

Consultants

sdi structures

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 734-213-6091
 sdi@sdistructures.com

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Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Existing Conditions - Area B

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

Drawn: NB/BB

Checked: BB

Approved: BB

Project Number

201133.06

Sheet Number

C-102



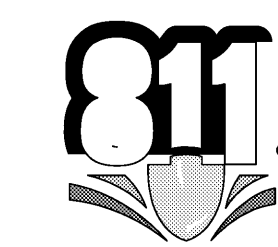
MATCH LINE C-101

Survey Notes:

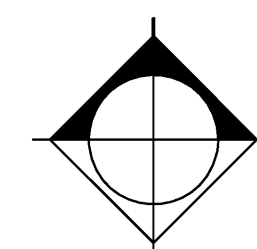
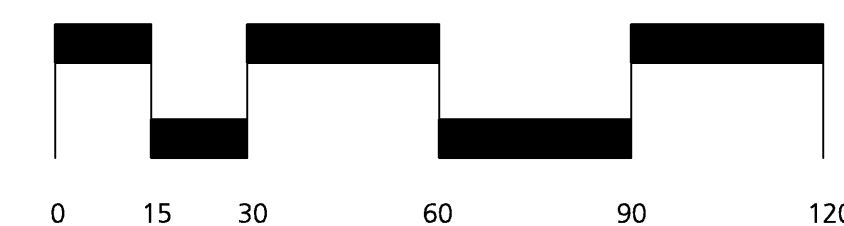
1. SEE SHEET C-101 FOR SURVEY NOTES

Legend

1. SEE SHEET C-101 FOR LEGEND



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Consultants

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 275 E Liberty | Ann Arbor, MI 48104
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Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Demolition Plan - Area A

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

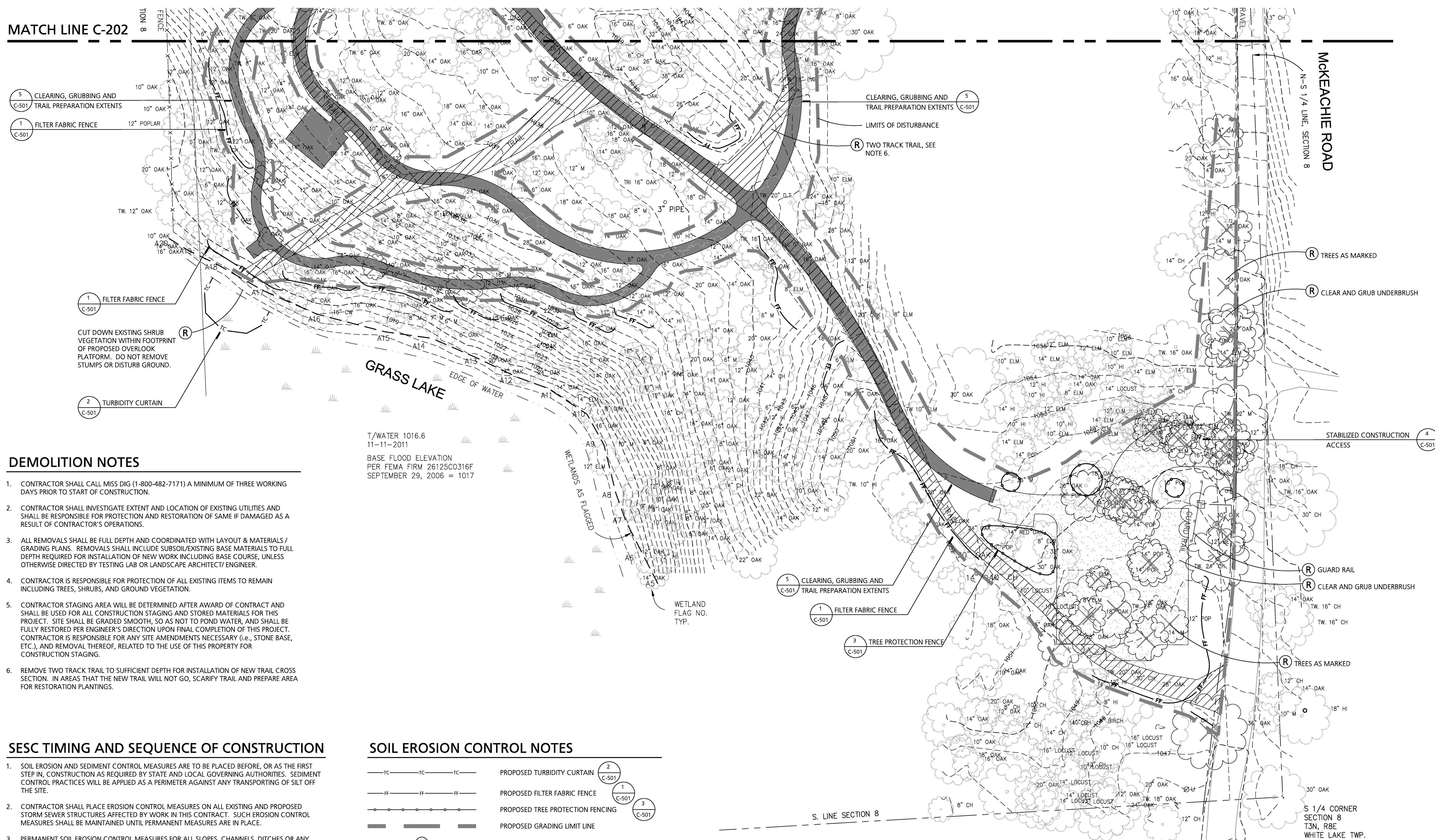
Drawn:	NB/BB
Checked:	BB
Approved:	BB

Project Number

201133.06

Sheet Number

C-201



MATCH LINE C-202

5 CLEARING, GRUBBING AND TRAIL PREPARATION EXTENTS C-501

1 FILTER FABRIC FENCE C-501

1 FILTER FABRIC FENCE C-501

2 TURBIDITY CURTAIN C-501

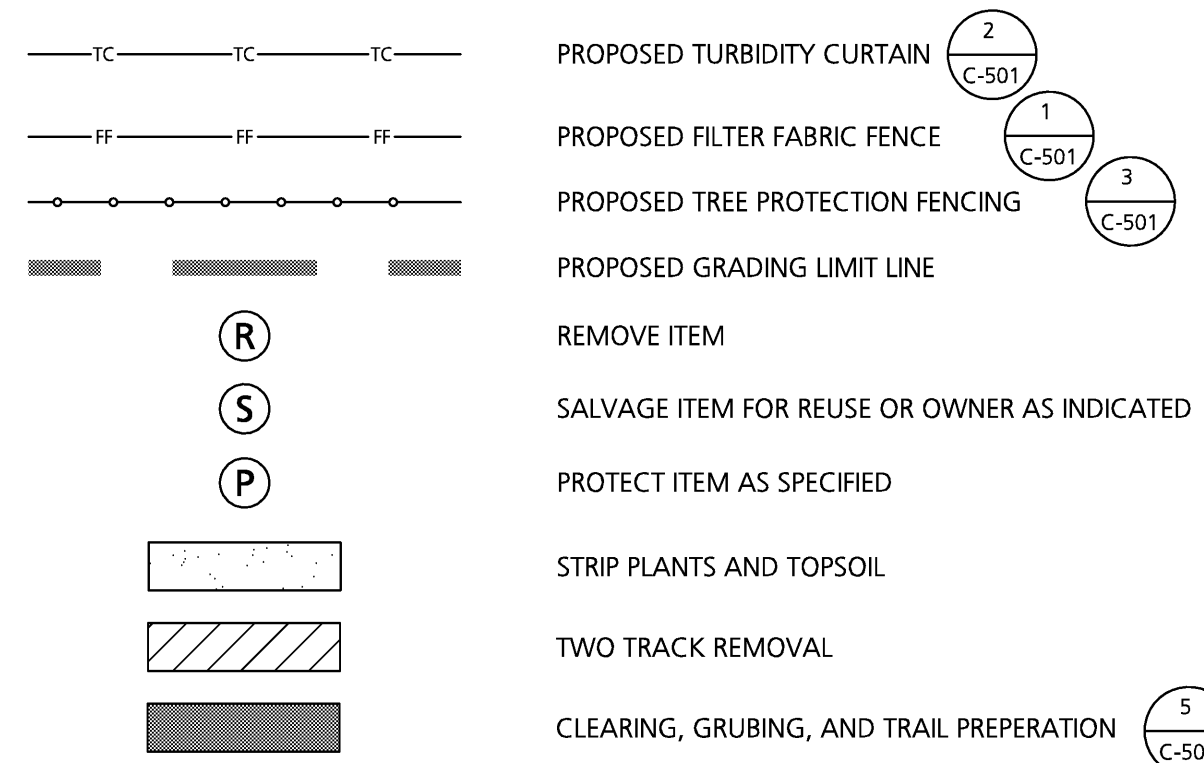
DEMOLITION NOTES

- CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL INVESTIGATE EXTENT AND LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR PROTECTION AND RESTORATION OF SAME IF DAMAGED AS A RESULT OF CONTRACTOR'S OPERATIONS.
- ALL REMOVALS SHALL BE FULL DEPTH AND COORDINATED WITH LAYOUT & MATERIALS / GRADING PLANS. REMOVALS SHALL INCLUDE SUBSOIL/EXISTING BASE MATERIALS TO FULL DEPTH REQUIRED FOR INSTALLATION OF NEW WORK INCLUDING BASE COURSE, UNLESS OTHERWISE DIRECTED BY TESTING LAB OR LANDSCAPE ARCHITECT/ENGINEER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING ITEMS TO REMAIN INCLUDING TREES, SHRUBS, AND GROUND VEGETATION.
- CONTRACTOR STAGING AREA WILL BE DETERMINED AFTER AWARD OF CONTRACT AND SHALL BE USED FOR ALL CONSTRUCTION STAGING AND STORED MATERIALS FOR THIS PROJECT. SITE SHALL BE GRADED SMOOTH, SO AS NOT TO POND WATER, AND SHALL BE FULLY RESTORED PER ENGINEER'S DIRECTION UPON FINAL COMPLETION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ANY SITE AMENDMENTS NECESSARY (i.e., STONE BASE, ETC.), AND REMOVAL THEREOF, RELATED TO THE USE OF THIS PROPERTY FOR CONSTRUCTION STAGING.
- REMOVE TWO TRACK TRAIL TO SUFFICIENT DEPTH FOR INSTALLATION OF NEW TRAIL CROSS SECTION. IN AREAS THAT THE NEW TRAIL WILL NOT GO, SCARIFY TRAIL AND PREPARE AREA FOR RESTORATION PLANTINGS.

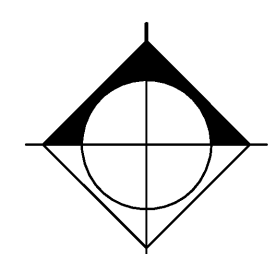
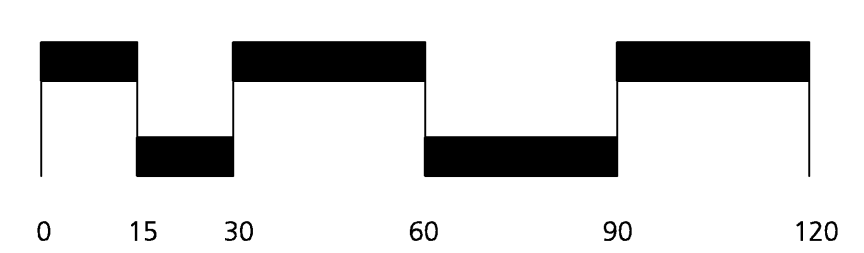
SESC TIMING AND SEQUENCE OF CONSTRUCTION

- SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED BEFORE, OR AS THE FIRST STEP IN, CONSTRUCTION AS REQUIRED BY STATE AND LOCAL GOVERNING AUTHORITIES. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
- CONTRACTOR SHALL PLACE EROSION CONTROL MEASURES ON ALL EXISTING AND PROPOSED STORM SEWER STRUCTURES AFFECTED BY WORK IN THIS CONTRACT. SUCH EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE.
- PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGES HAVE BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED WITHIN 15 CALENDAR DAYS.
- DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF SOIL EROSION AND SEDIMENT CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY.
- SEE SHEET C401 FOR EROSION CONTROL BLANKET LOCATIONS.

SOIL EROSION CONTROL NOTES



T/WATER 1016.6
 11-11-2011
 BASE FLOOD ELEVATION
 PER FEMA FIRM 26125C0316F
 SEPTEMBER 29, 2006 = 1017



Consultants

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 Tel 1-734-669-2960
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Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Demolition Plan - Area B

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

Drawn:	NB/BB
Checked:	BB
Approved:	BB

Project Number

201133.06

Sheet Number

C-202



5 CLEARING, GRUBBING AND TRAIL PREPARATION EXTENTS C-501

1 FILTER FABRIC FENCE C-501

5 CLEARING, GRUBBING AND TRAIL PREPARATION EXTENTS C-501

1 FILTER FABRIC FENCE C-501

5 CLEARING, GRUBBING AND TRAIL PREPARATION EXTENTS C-501

MATCH LINE C-201

Demolition Notes:

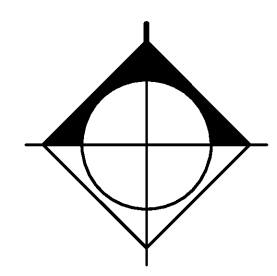
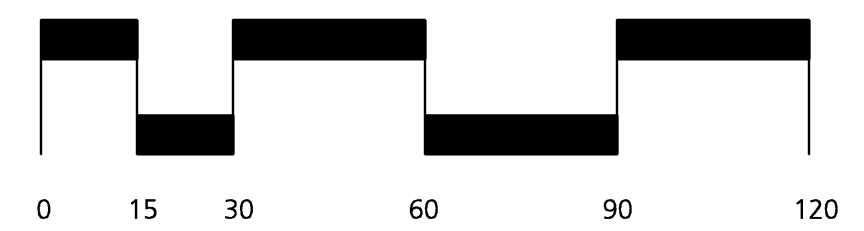
1. SEE SHEET C-201 FOR NOTES

Legend

1. SEE SHEET C-201 FOR LEGEND



Know what's below.
 Call before you dig.



Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Layout & Materials Plan - Area A

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

Drawn: NB/BB

Checked: BB

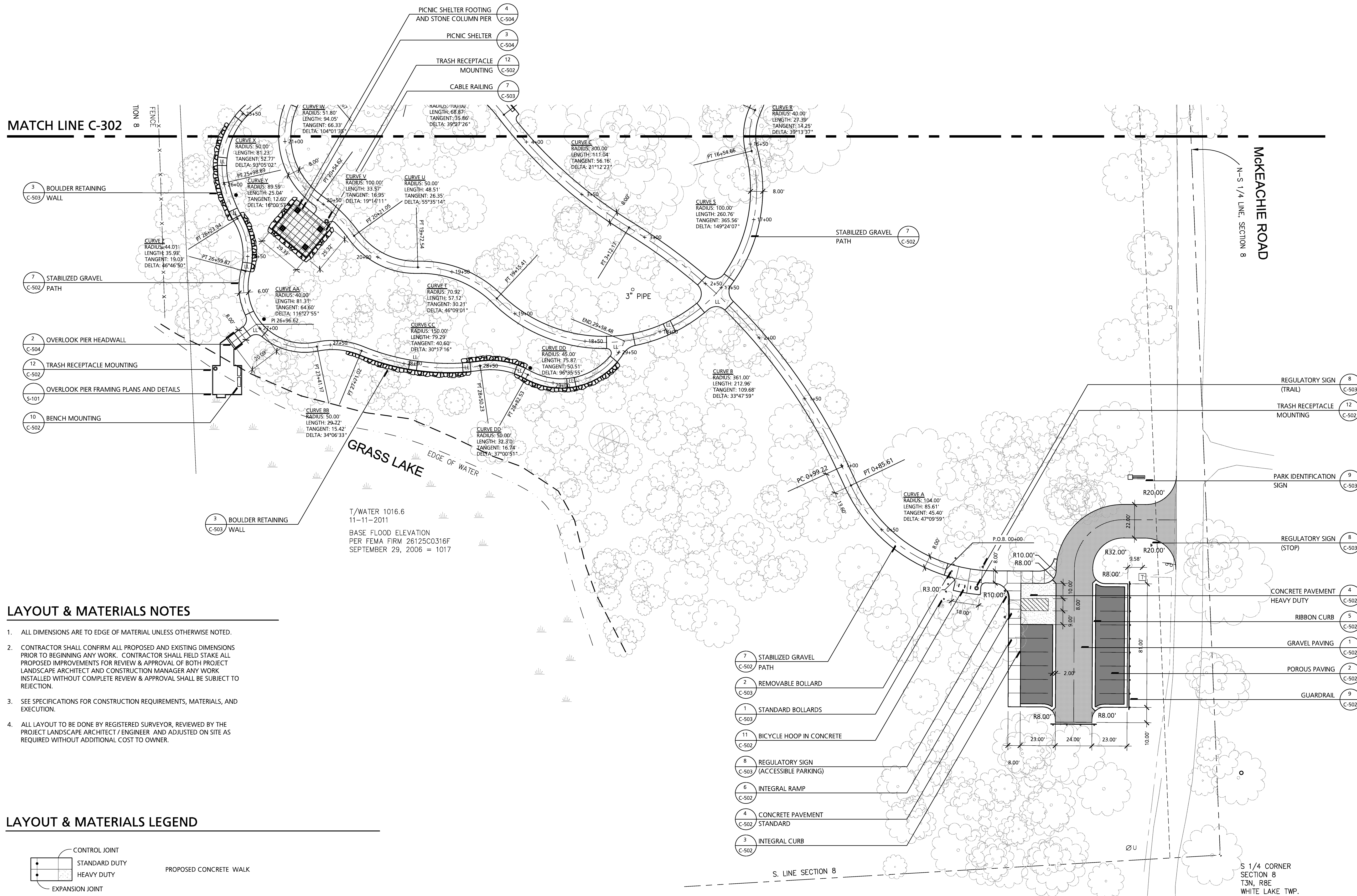
Approved: BB

Project Number

201133.06

Sheet Number

C-301



MATCH LINE C-302

SECTION 8

McKEACHIE ROAD
 N-S 1/4 LINE, SECTION 8

S. LINE SECTION 8

S 1/4 CORNER
 SECTION 8
 T3N, R8E
 WHITE LAKE TWP.

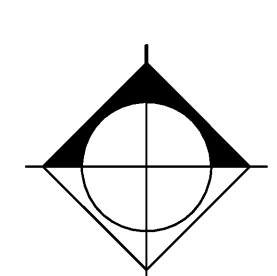
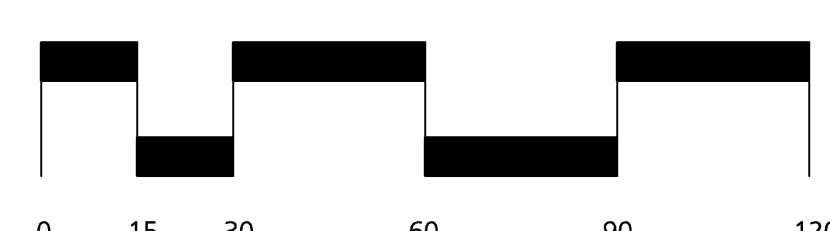
LAYOUT & MATERIALS NOTES

- ALL DIMENSIONS ARE TO EDGE OF MATERIAL UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL CONFIRM ALL PROPOSED AND EXISTING DIMENSIONS PRIOR TO BEGINNING ANY WORK. CONTRACTOR SHALL FIELD STAKE ALL PROPOSED IMPROVEMENTS FOR REVIEW & APPROVAL OF BOTH PROJECT LANDSCAPE ARCHITECT AND CONSTRUCTION MANAGER ANY WORK INSTALLED WITHOUT COMPLETE REVIEW & APPROVAL SHALL BE SUBJECT TO REJECTION.
- SEE SPECIFICATIONS FOR CONSTRUCTION REQUIREMENTS, MATERIALS, AND EXECUTION.
- ALL LAYOUT TO BE DONE BY REGISTERED SURVEYOR, REVIEWED BY THE PROJECT LANDSCAPE ARCHITECT / ENGINEER AND ADJUSTED ON SITE AS REQUIRED WITHOUT ADDITIONAL COST TO OWNER.

LAYOUT & MATERIALS LEGEND

	CONTROL JOINT STANDARD DUTY HEAVY DUTY EXPANSION JOINT		PROPOSED CONCRETE WALK
	PROPOSED FIELDSTONE WALL		PROPOSED BIKEHOOP
	PROPOSED BOLLARD		PROPOSED TRASH RECEPTICAL
	PROPOSED BENCH		PROPOSED GUARDRAIL

- 7 STABILIZED GRAVEL PATH (C-502)
- 2 REMOVABLE BOLLARD (C-503)
- 1 STANDARD BOLLARDS (C-503)
- 11 BICYCLE HOOP IN CONCRETE (C-502)
- 8 REGULATORY SIGN (ACCESSIBLE PARKING) (C-503)
- 6 INTEGRAL RAMP (C-502)
- 4 CONCRETE PAVEMENT STANDARD (C-502)
- 3 INTEGRAL CURB (C-502)
- 8 REGULATORY SIGN (TRAIL) (C-503)
- 12 TRASH RECEPTACLE MOUNTING (C-502)
- 9 PARK IDENTIFICATION SIGN (C-503)
- 8 REGULATORY SIGN (STOP) (C-503)
- 4 CONCRETE PAVEMENT HEAVY DUTY (C-502)
- 5 RIBBON CURB (C-502)
- 1 GRAVEL PAVING (C-502)
- 2 POROUS PAVING (C-502)
- 9 GUARDRAIL (C-502)



Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

1" = 30.00'

Drawn: NB/BB
 Checked: BB
 Approved: BB

201133.06

C-302



MATCH LINE C-301

Layout Notes:

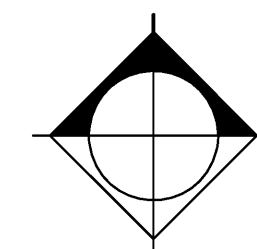
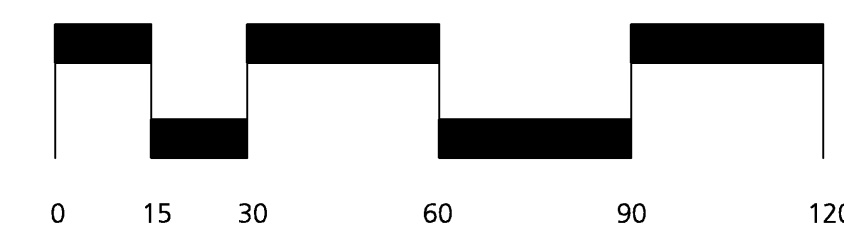
- SEE SHEET C-301 FOR NOTES

Legend

- SEE SHEET C-301 FOR LEGEND



Know what's below.
 Call before you dig.



Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Grading and Utility Plan - Area A

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

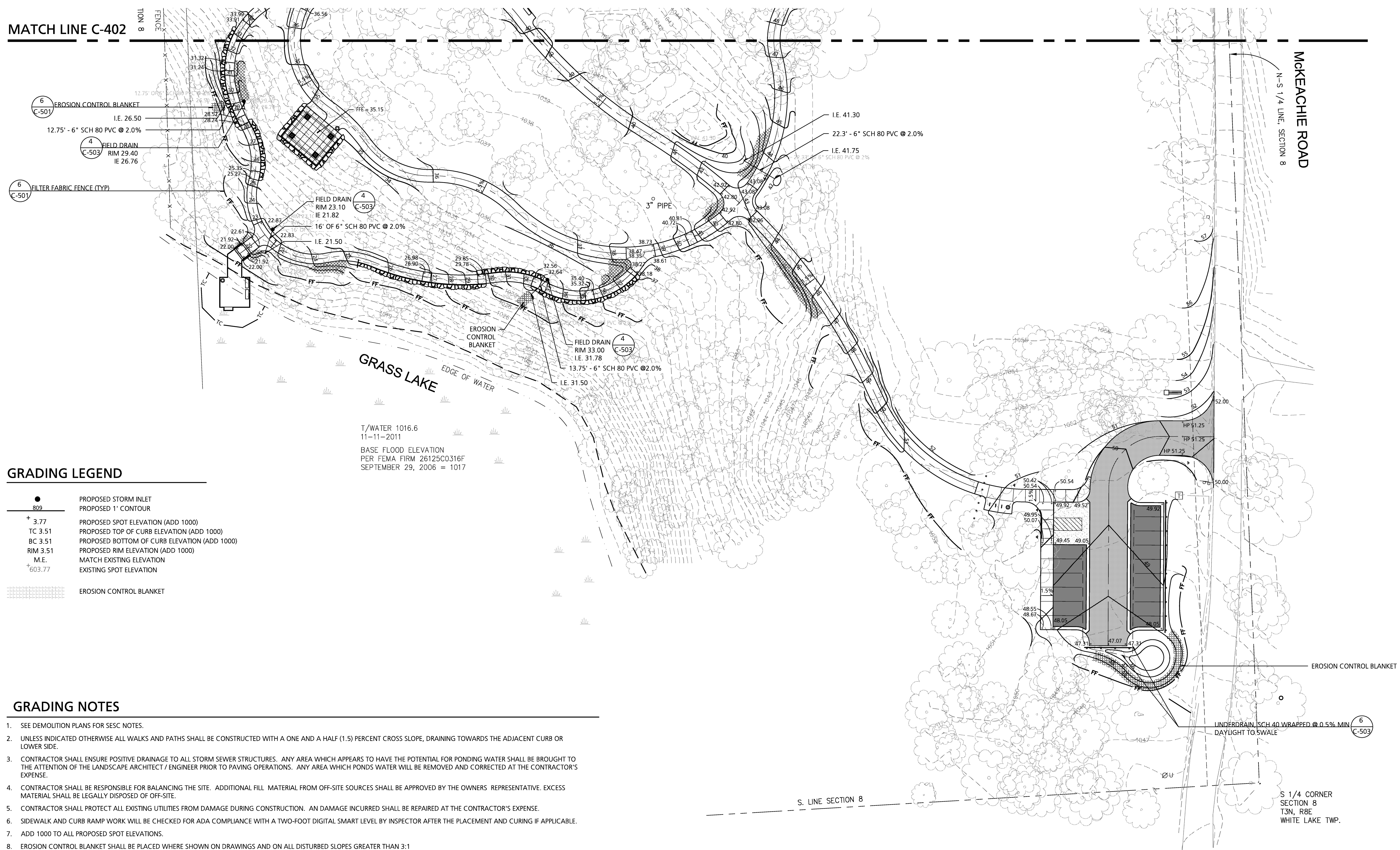
Drawn:	NB/BB
Checked:	BB
Approved:	BB

Project Number

201133.06

Sheet Number

C-401



GRADING LEGEND

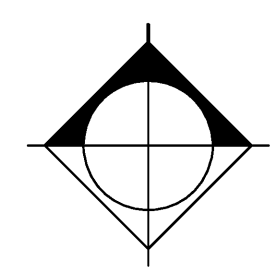
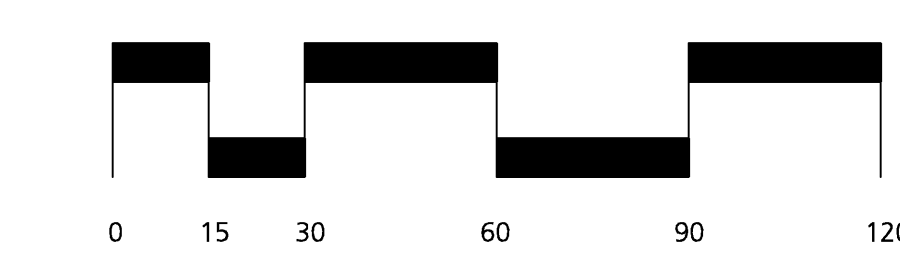
● 809	PROPOSED STORM INLET
○ 100	PROPOSED 1' CONTOUR
+ 3.77	PROPOSED SPOT ELEVATION (ADD 1000)
TC 3.51	PROPOSED TOP OF CURB ELEVATION (ADD 1000)
BC 3.51	PROPOSED BOTTOM OF CURB ELEVATION (ADD 1000)
RIM 3.51	PROPOSED RIM ELEVATION (ADD 1000)
M.E.	MATCH EXISTING ELEVATION
+603.77	EXISTING SPOT ELEVATION
[Pattern]	EROSION CONTROL BLANKET

GRADING NOTES

- SEE DEMOLITION PLANS FOR SESC NOTES.
- UNLESS INDICATED OTHERWISE ALL WALKS AND PATHS SHALL BE CONSTRUCTED WITH A ONE AND A HALF (1.5) PERCENT CROSS SLOPE, DRAINING TOWARDS THE ADJACENT CURB OR LOWER SIDE.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TO ALL STORM SEWER STRUCTURES. ANY AREA WHICH APPEARS TO HAVE THE POTENTIAL FOR PONDING WATER SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT / ENGINEER PRIOR TO PAVING OPERATIONS. ANY AREA WHICH PONDS WATER WILL BE REMOVED AND CORRECTED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR BALANCING THE SITE. ADDITIONAL FILL MATERIAL FROM OFF-SITE SOURCES SHALL BE APPROVED BY THE OWNERS REPRESENTATIVE. EXCESS MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE.
- CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. AN DAMAGE INCURRED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- SIDEWALK AND CURB RAMP WORK WILL BE CHECKED FOR ADA COMPLIANCE WITH A TWO-FOOT DIGITAL SMART LEVEL BY INSPECTOR AFTER THE PLACEMENT AND CURING IF APPLICABLE.
- ADD 1000 TO ALL PROPOSED SPOT ELEVATIONS.
- EROSION CONTROL BLANKET SHALL BE PLACED WHERE SHOWN ON DRAWINGS AND ON ALL DISTURBED SLOPES GREATER THAN 3:1

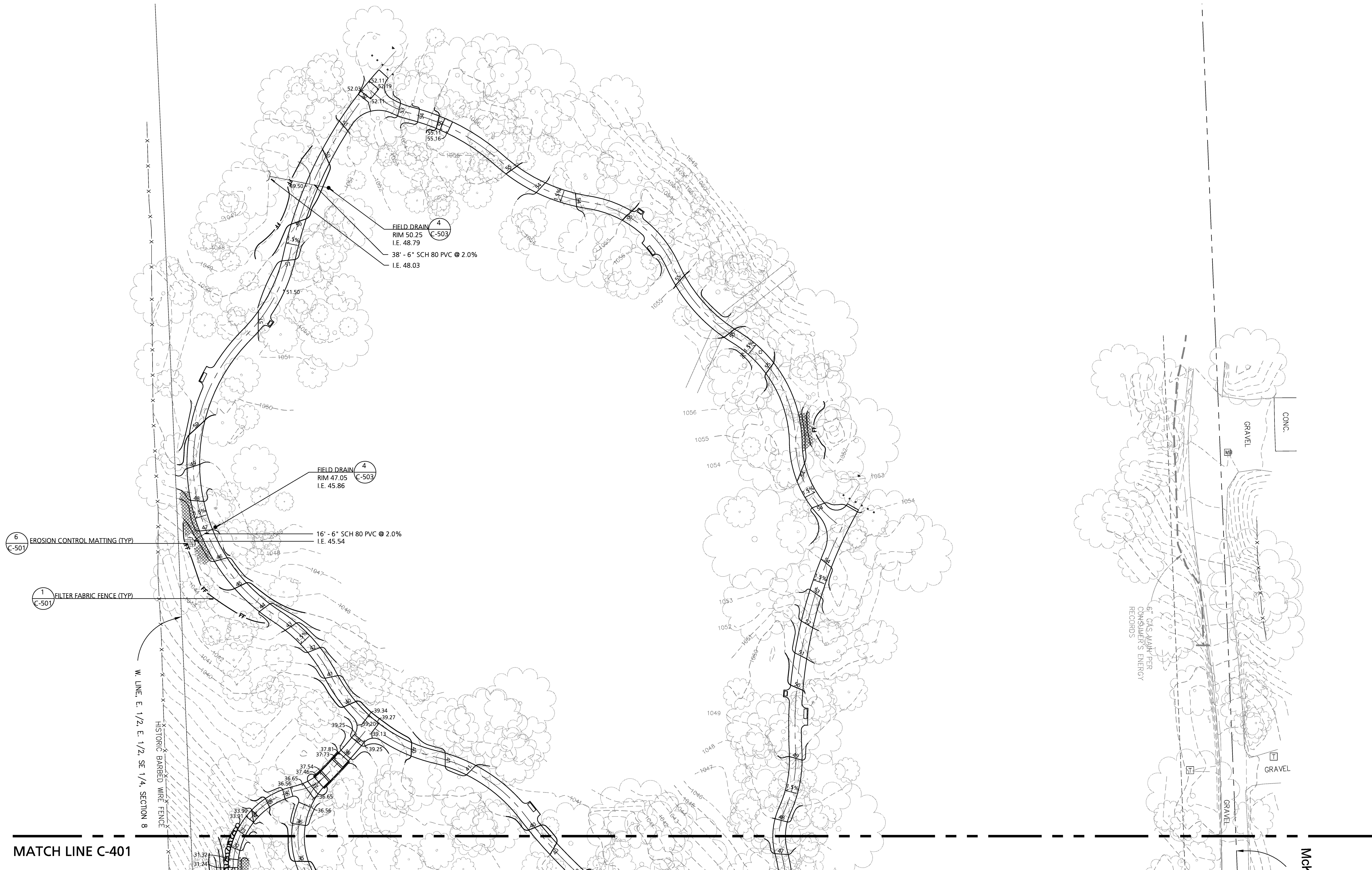
SOIL EROSION CONTROL NOTES

- SEE SHEET C201 FOR SOIL EROSION CONTROL NOTES.



Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Drawn:	NB/BB
Checked:	BB
Approved:	BB



MATCH LINE C-401

Grading Notes:

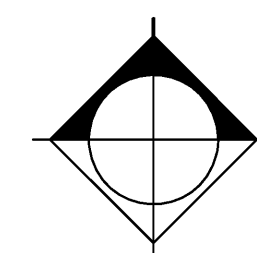
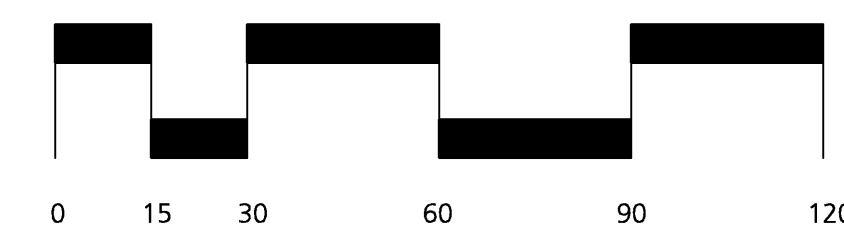
1. SEE SHEET C-401 FOR NOTES

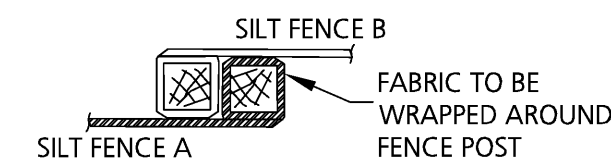
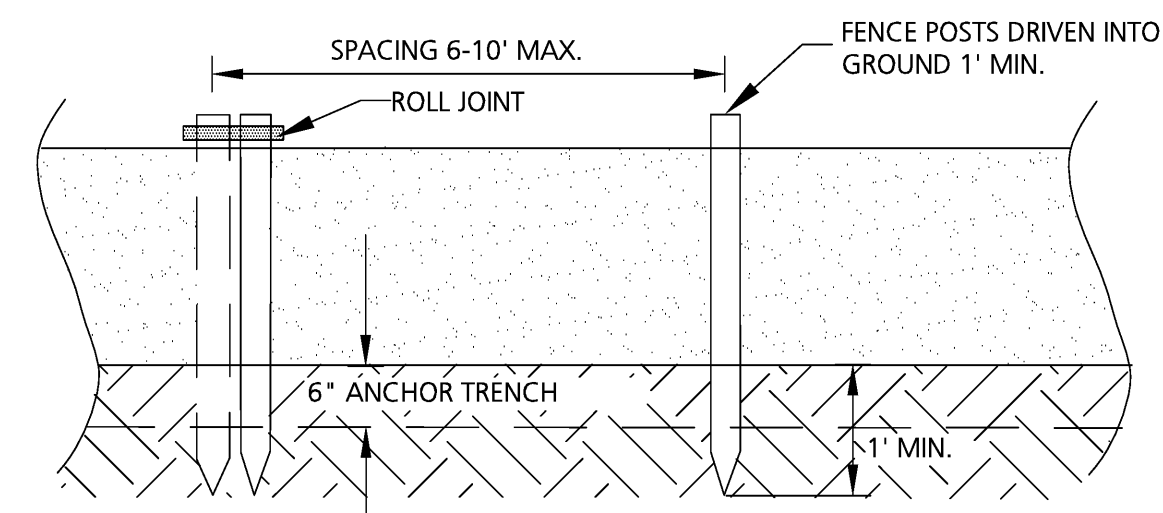
Legend

1. SEE SHEET C-401 FOR LEGEND

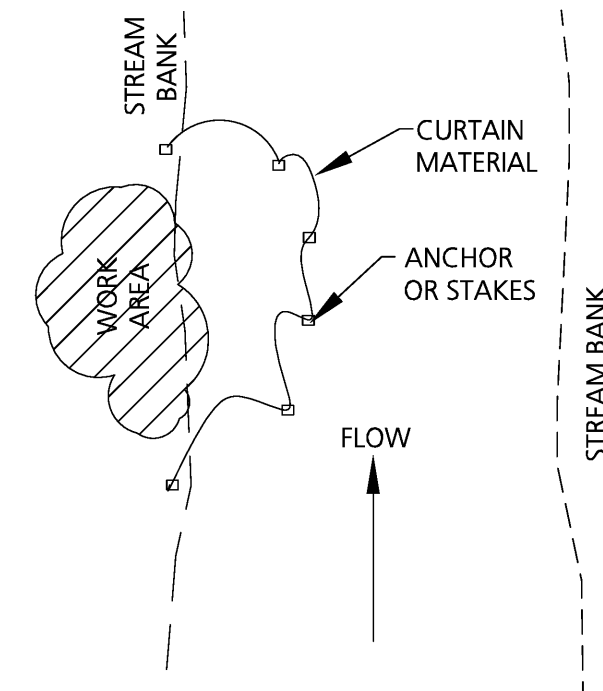
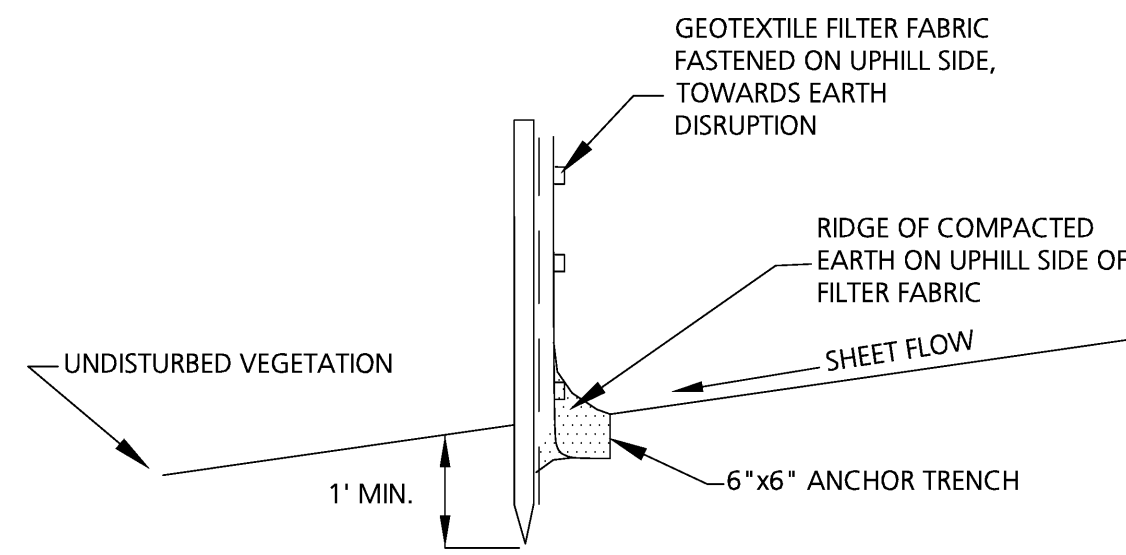


Know what's below.
 Call before you dig.

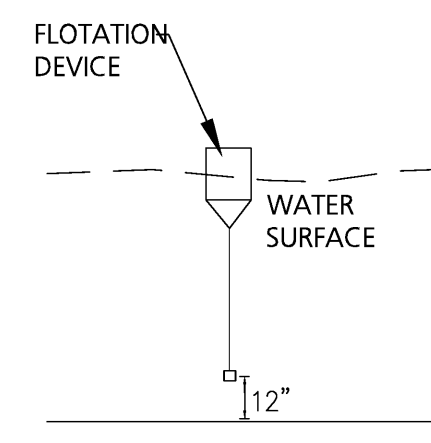




ROLL JOINTS



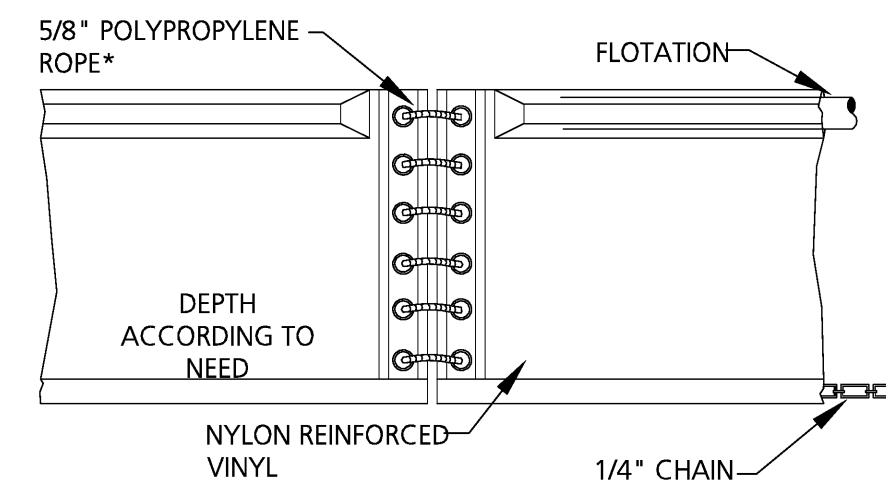
PLAN VIEW



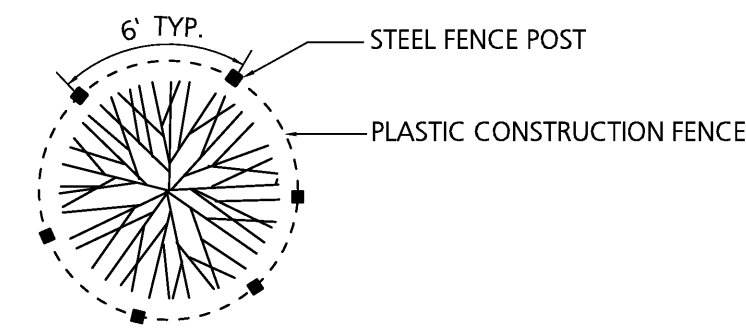
PROFILE

* JOINTS VARY DEPENDING ON TYPE OF WATERBODY AND VELOCITY OF WATERFLOW.

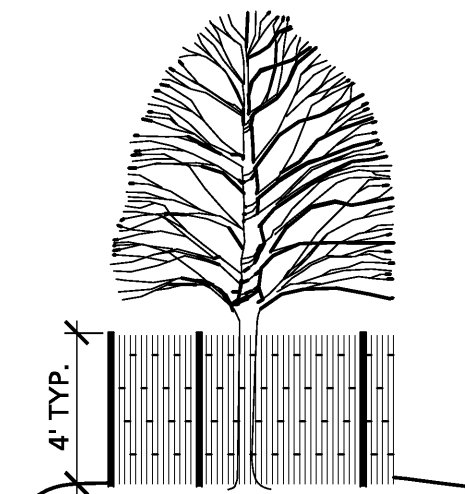
NOTES:
TYPE OF TURBIDITY CURTAIN TO BE DETERMINED BY A QUALIFIED ENGINEER OR CPESC.



PROFILE - CURTAIN DETAIL



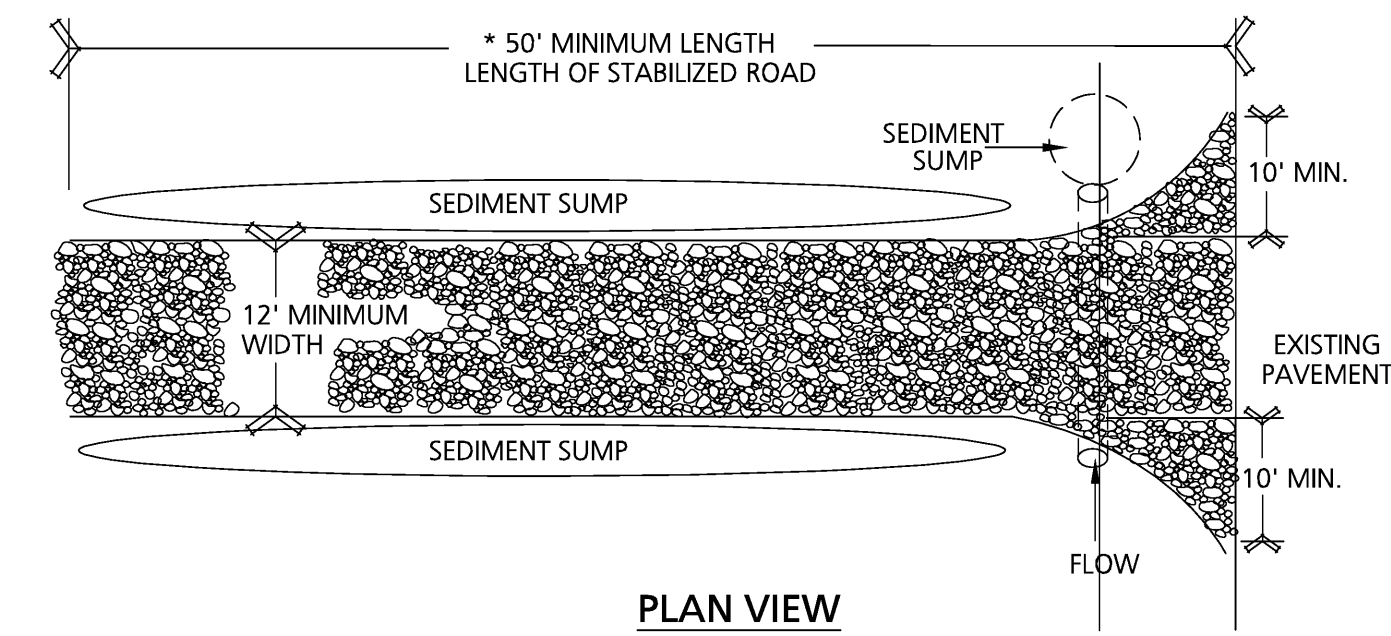
PLAN



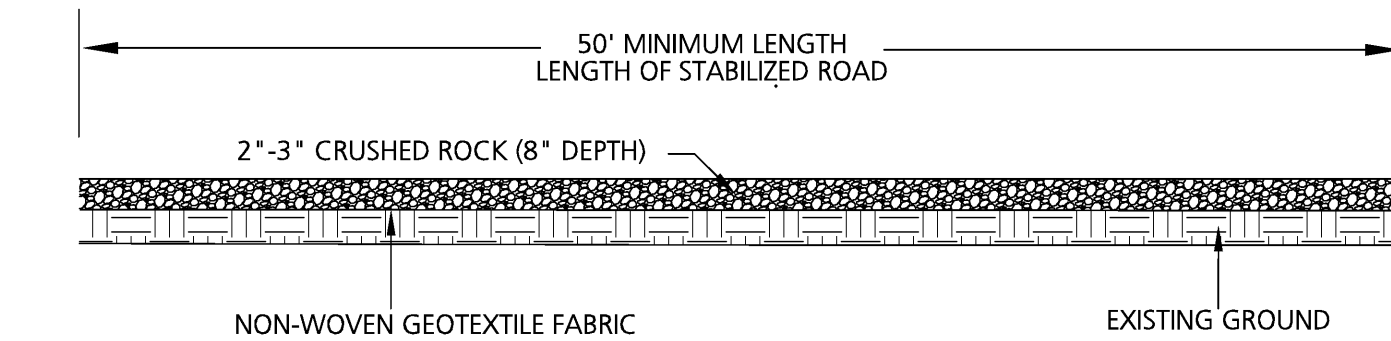
ELEVATION

NOTES:

1. TREE PROTECTION FENCING SHALL BE ERECTED PRIOR TO ANY EARTHWORK OR CONSTRUCTION AND IS TO REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE. FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE SPREAD OF THE BRANCHES OR CLOSER ONLY AT THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT.
2. ALL DEBRIS, FILL, EQUIPMENT AND MATERIAL SHALL BE KEPT CLEAR OF AREA WITHIN PROTECTIVE FENCE. NO CLEANING, STORAGE, OR DISPOSAL OF ANY MATERIAL ALLOWED WITHIN THE DRIP LINE OF TREES TO BE SAVED.
3. TREE PROTECTION FENCING SHALL BE INSTALLED WHERE DIRECTED BY LANDSCAPE ARCHITECT AND SHALL BE PAID ON A UNIT PRICE BASIS.



PLAN VIEW



PROFILE

NOTES:

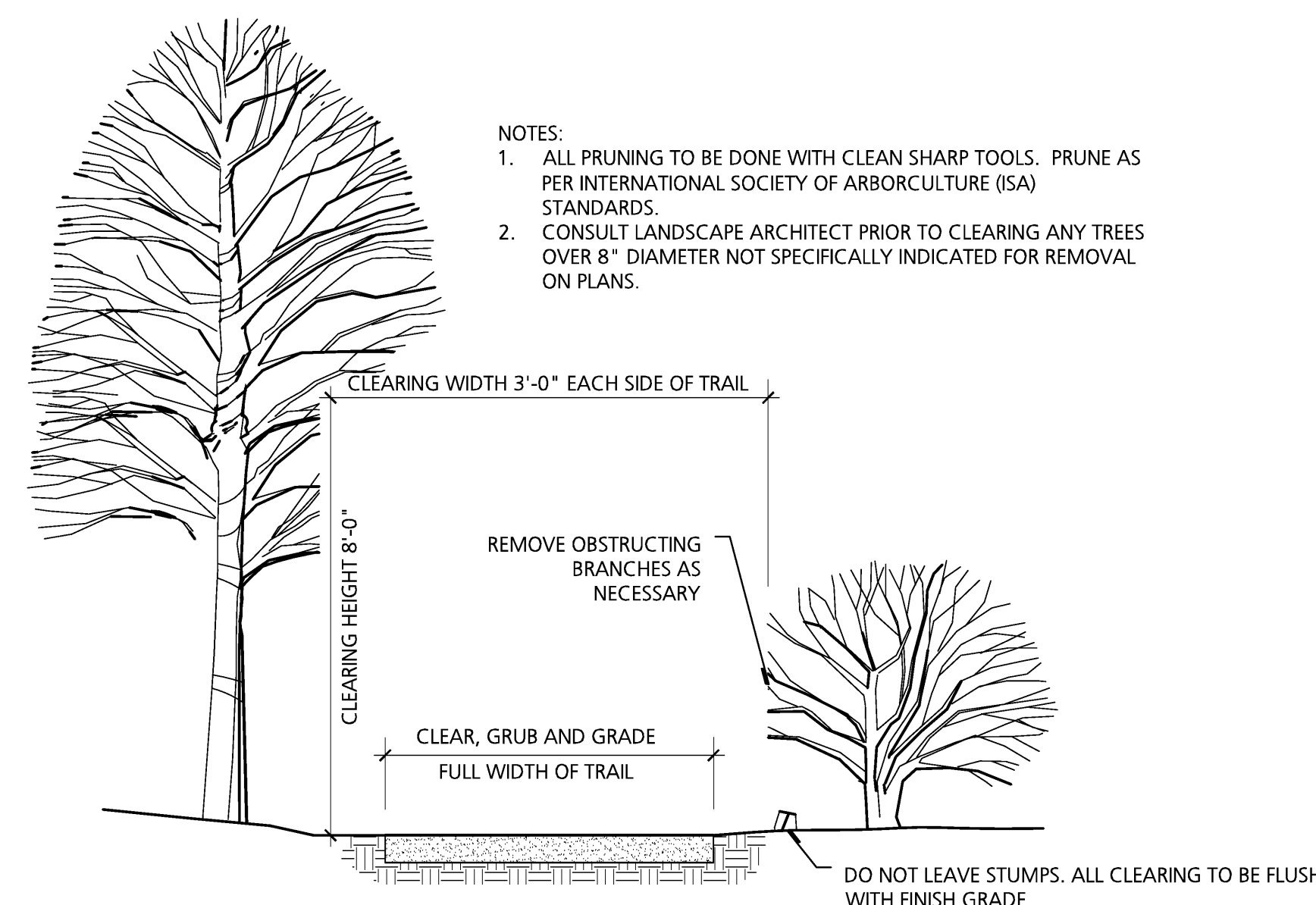
1. Establish stabilized construction entrance prior to the initiation of site construction activities.
2. Care should be taken to prevent material movement into adjacent wetlands/waterbodies.
3. Care should be taken to maintain existing roadside drainage via culvert installation, with sediment sump placed down flow of culvert.

1 Filter Fabric Fence
NO SCALE

2 Turbidity Curtain
NO SCALE

3 Tree Protection
NO SCALE

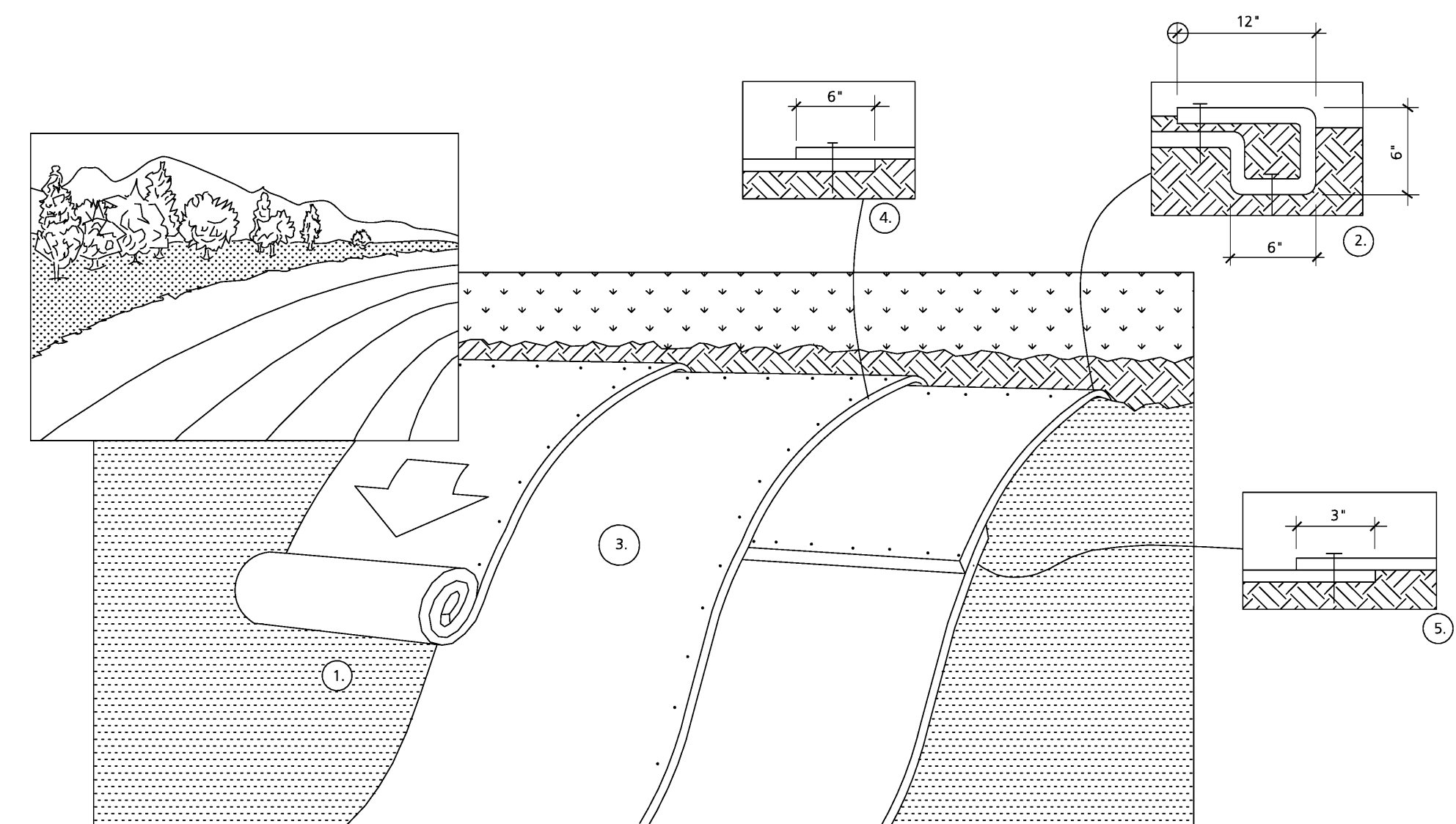
4 Stabilized Construction Access
NO SCALE



NOTES:

1. ALL PRUNING TO BE DONE WITH CLEAN SHARP TOOLS. PRUNE AS PER INTERNATIONAL SOCIETY OF ARBORCULTURE (ISA) STANDARDS.
2. CONSULT LANDSCAPE ARCHITECT PRIOR TO CLEARING ANY TREES OVER 8" DIAMETER NOT SPECIFICALLY INDICATED FOR REMOVAL ON PLANS.

5 Clearing, Grubbing and Trail Preparation Extents
NO SCALE



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL BLANKET.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF EROSION CONTROL BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE EROSION CONTROL BLANKET WITH STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF EROSION CONTROL BLANKET BACK OVER SEED AND COMPACT SOIL. SECURE EROSION CONTROL BLANKET OVER COMPACTED SOIL WITH A ROW OF STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE EROSION CONTROL BLANKET.
3. ROLL THE EROSION CONTROL BLANKET DOWN THE SLOPE. EROSION CONTROL BLANKET WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL EROSION CONTROL BLANKETS SHALL BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAKE PATTERN GUIDE. WHEN USING THE DOT SYSTEM THE STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAKE PATTERN.
4. THE EDGES OF PARALLEL EROSION CONTROL BLANKETS SHALL BE STAKED WITH APPROXIMATELY 6" OVERLAP.
5. CONSECUTIVE EROSION CONTROL BLANKETS SPICED DOWN THROUGH THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAKE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE EROSION CONTROL BLANKET WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE EROSION CONTROL BLANKET.

6 Erosion Control Blanket - Slope Installation
NO SCALE

Seal

Project Title

**White Lake Township
Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Site Details

Dates

Dates	Issued for
03.14.2012	95% Owner Review
04.09.2012	Permits
07.18.2012	MDNR Review
08.01.2012	Bids

Scale

As Specified

Quality Control

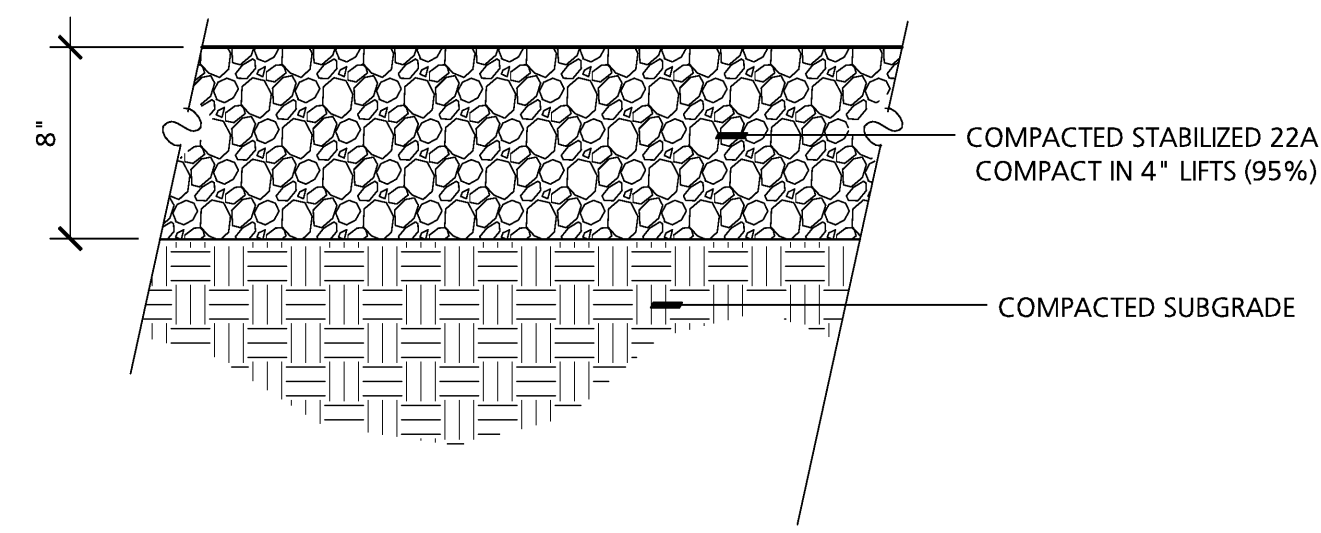
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Checked: BB
Approved: BB

Project Number

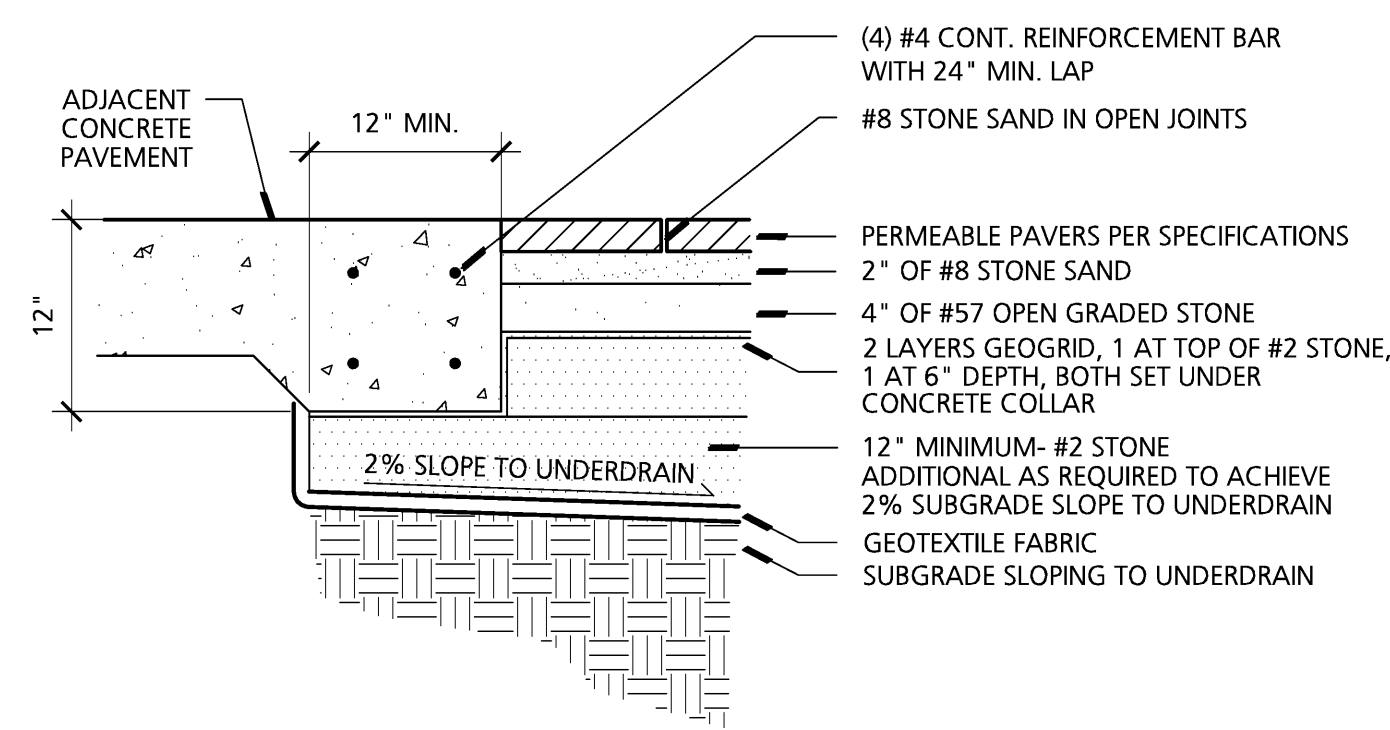
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Sheet Number

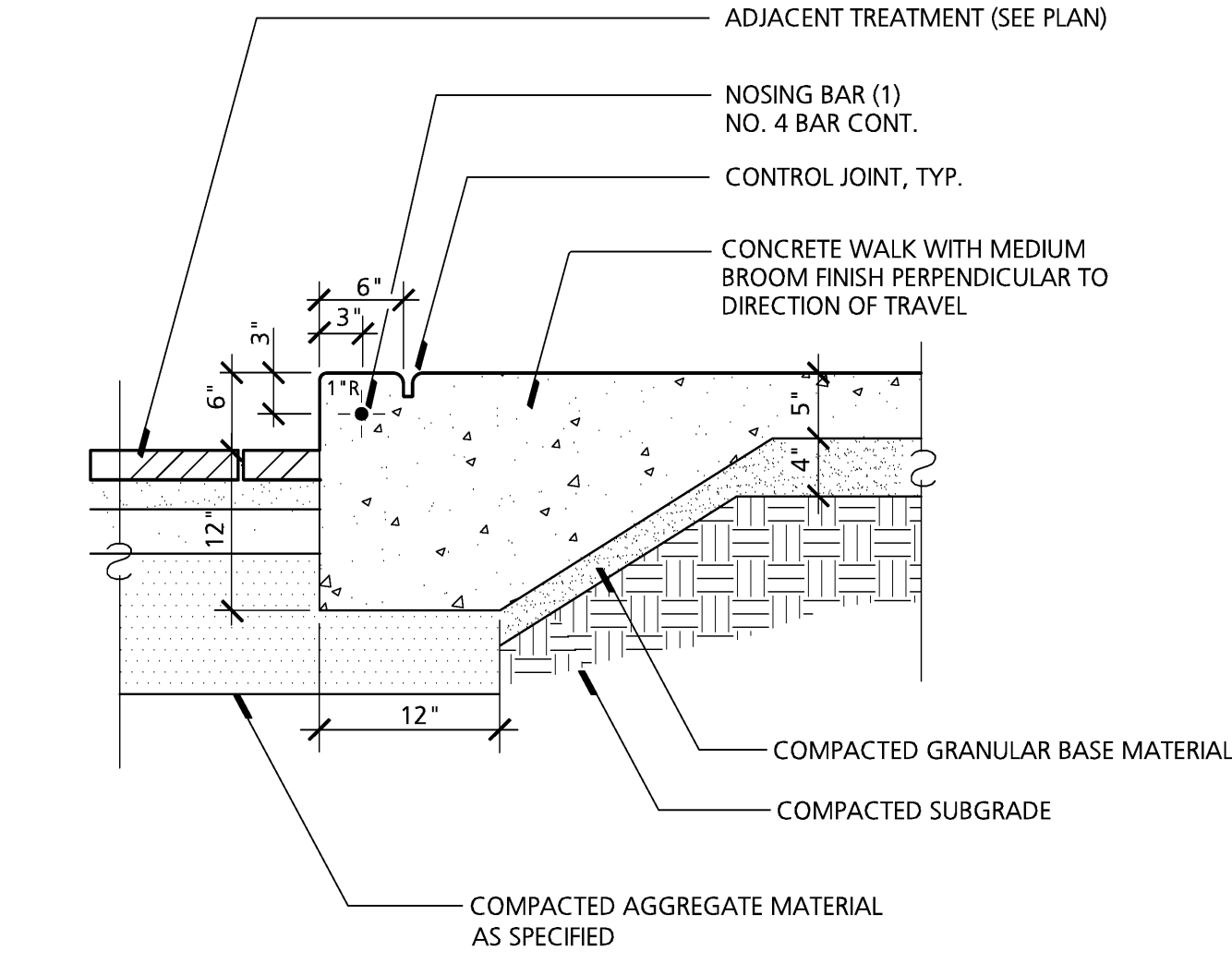
C-501



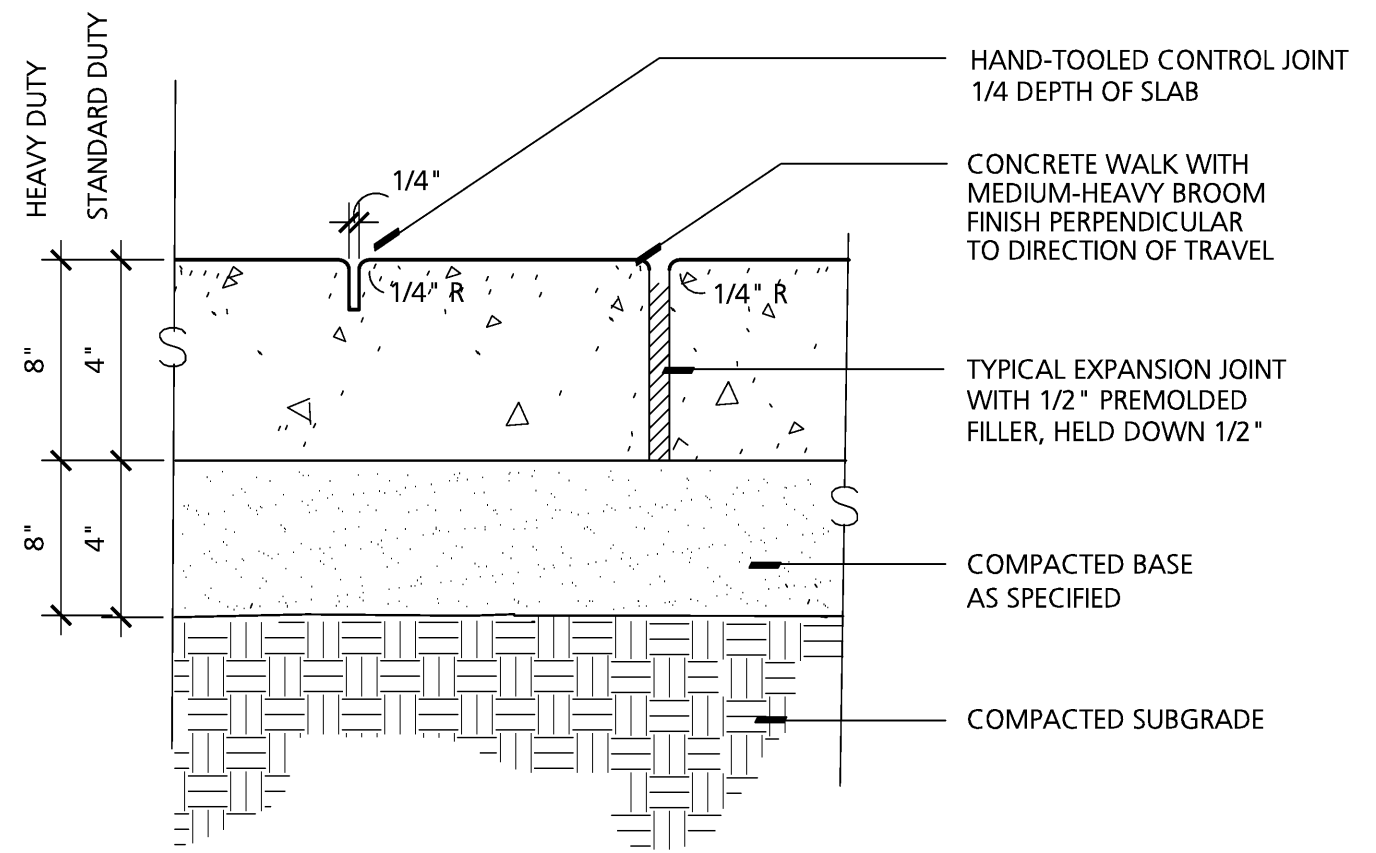
1 Section Gravel Paving
NO SCALE



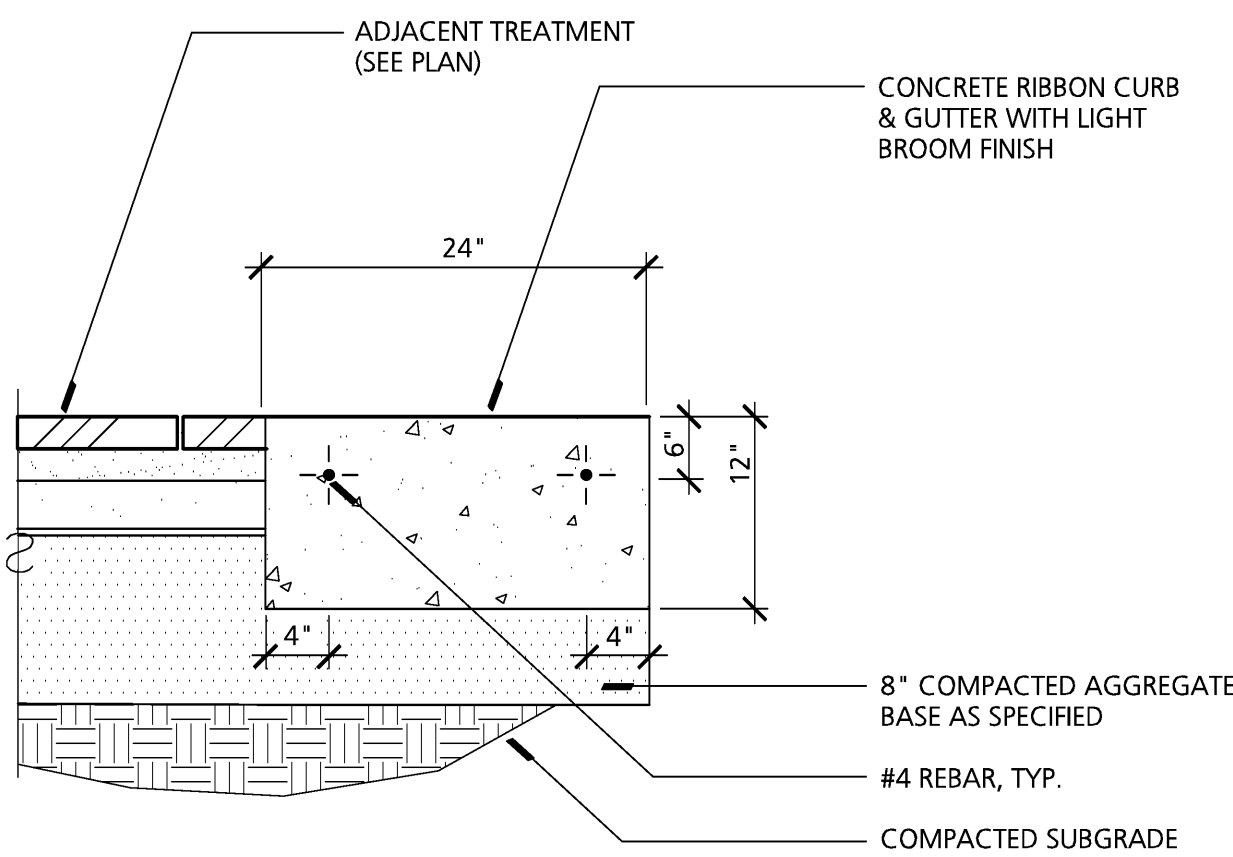
2 Porous Paving
NO SCALE



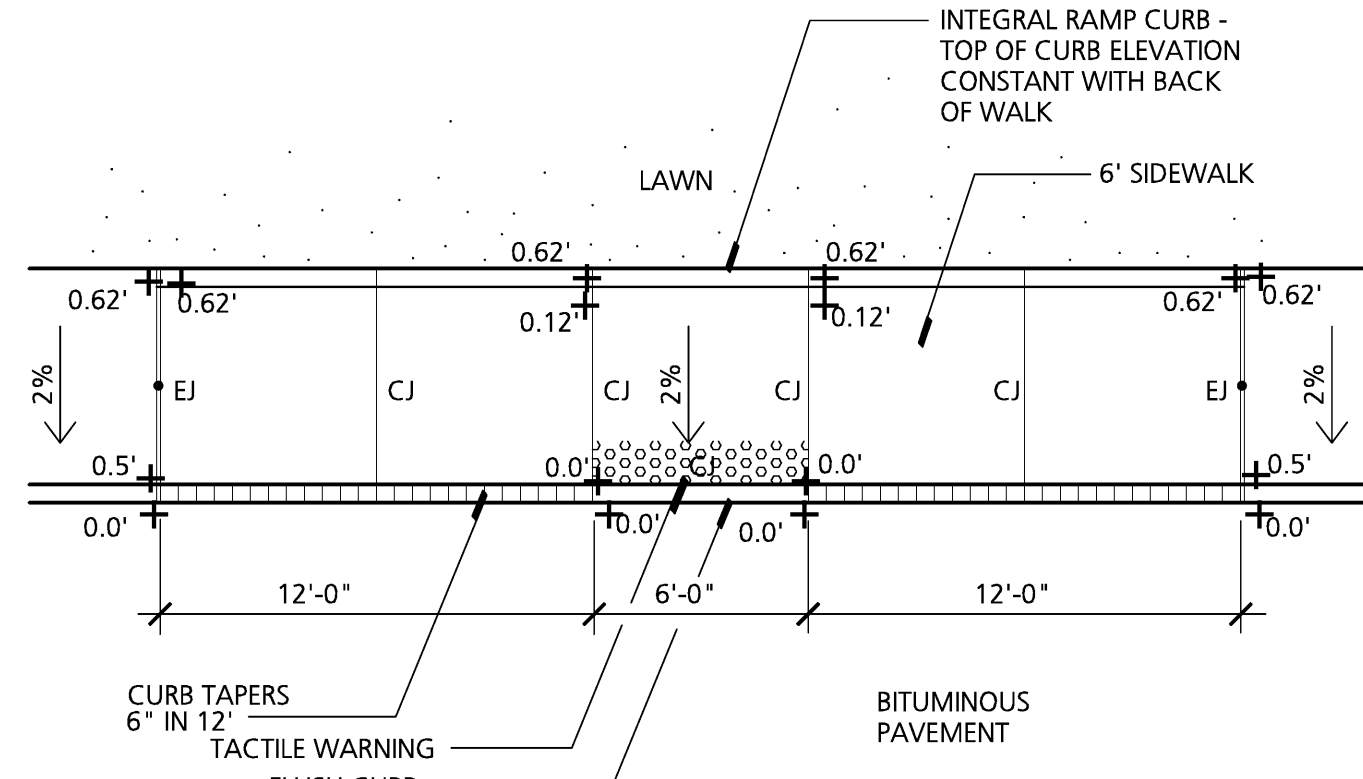
3 Concrete Sidewalk with Integral Curb
NO SCALE



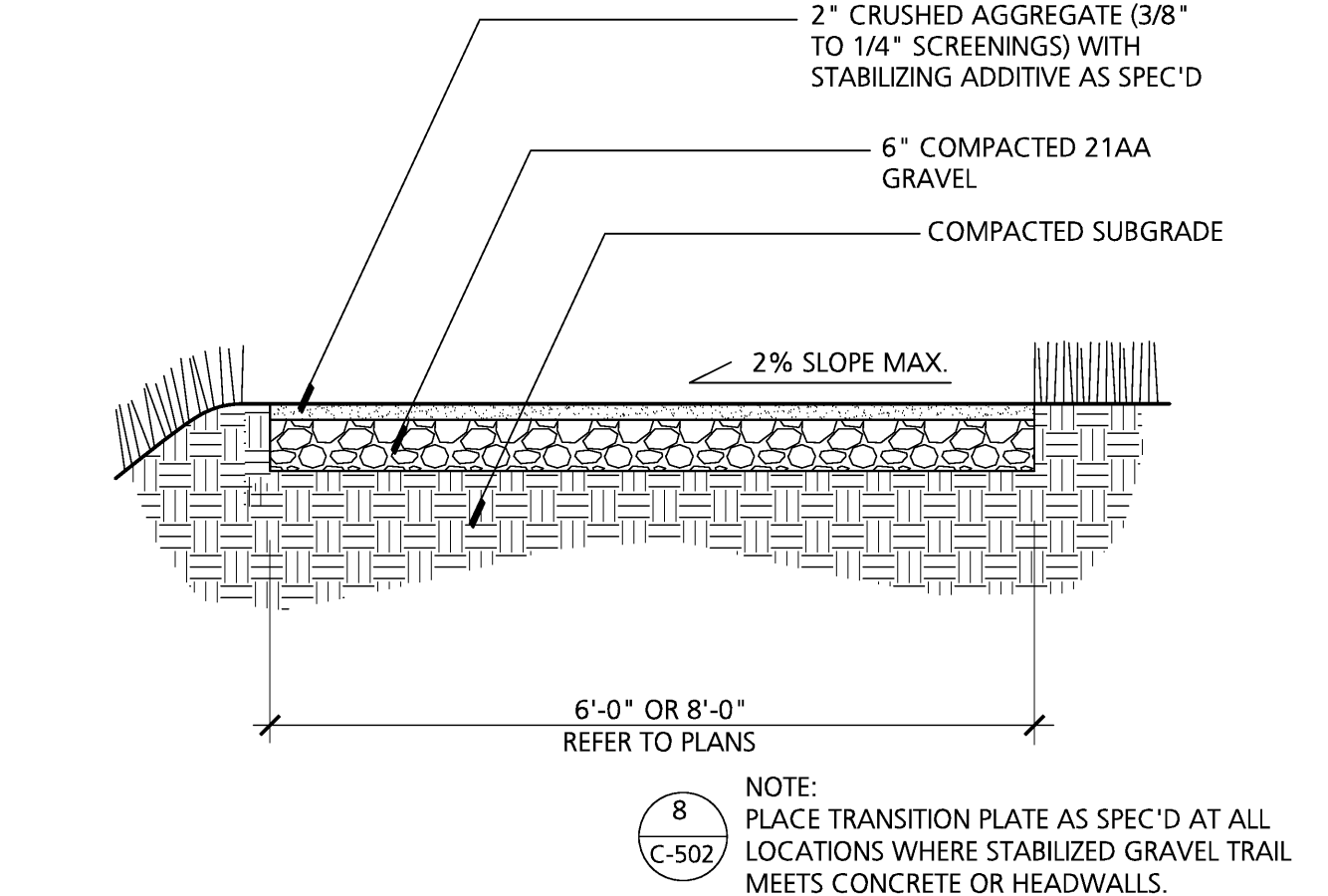
4 Concrete Pavement
NO SCALE



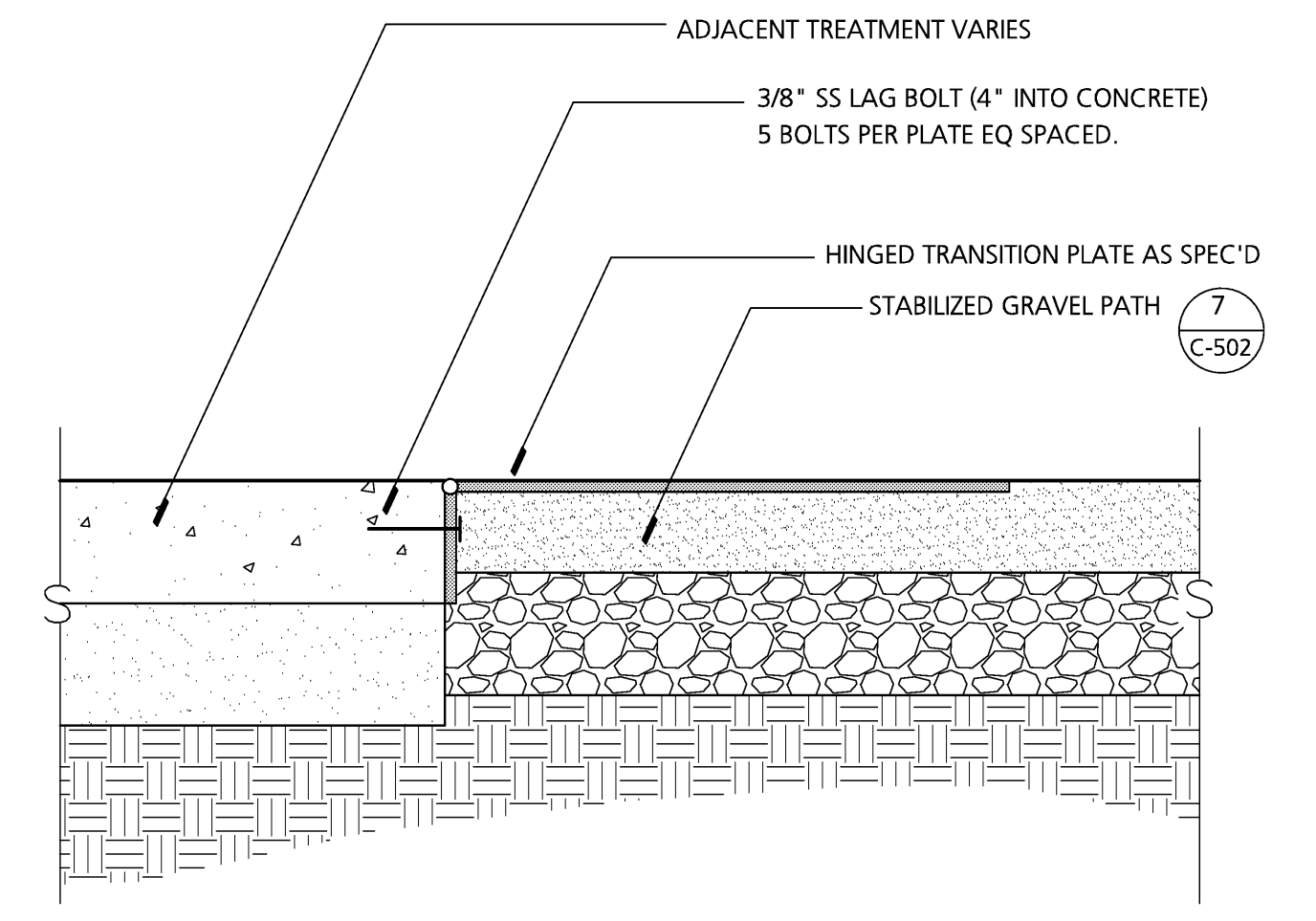
5 Ribbon Curb, Typical
NO SCALE



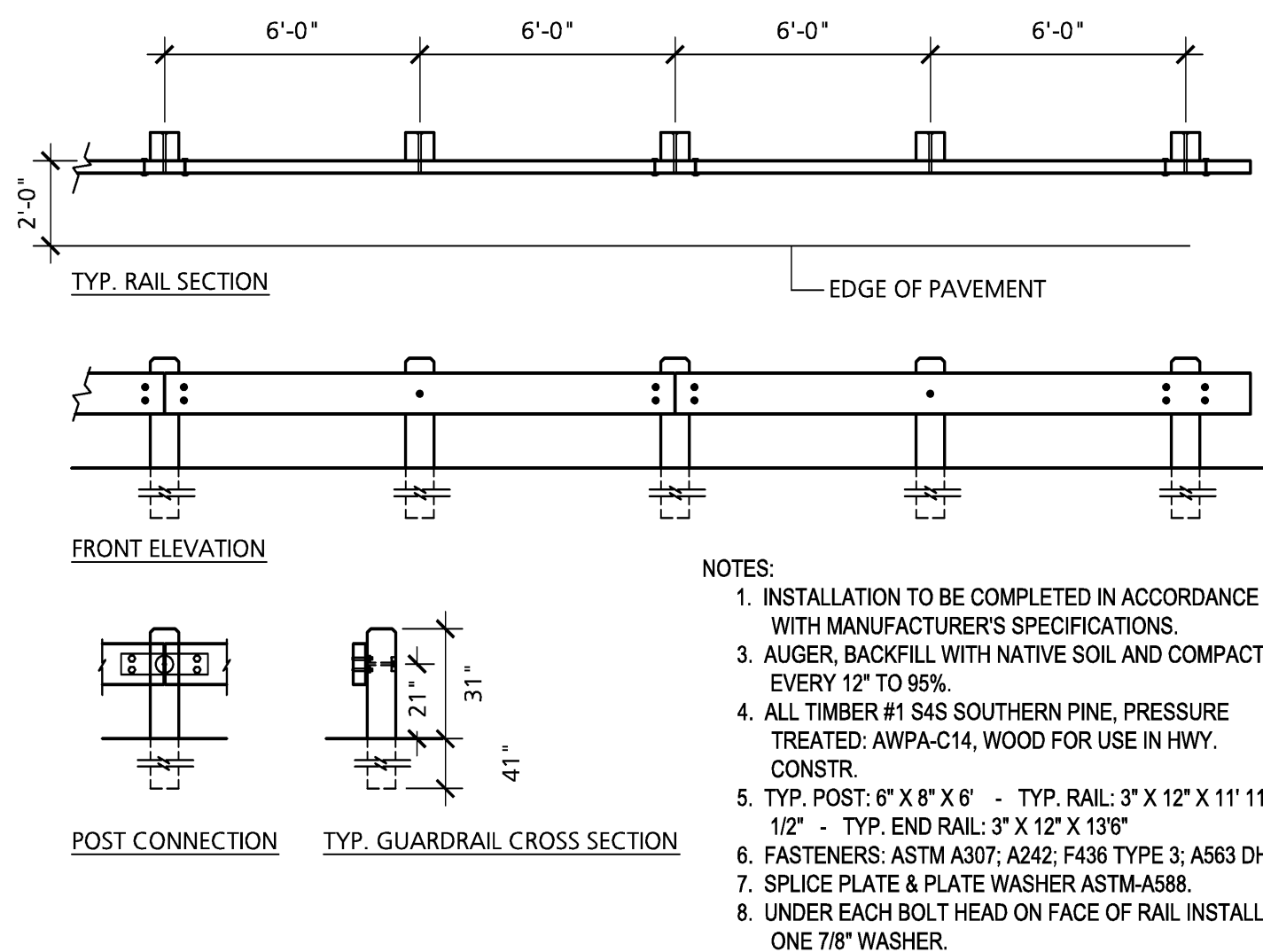
6 Integral Ramp
SCALE: 3/16" = 1'-0"



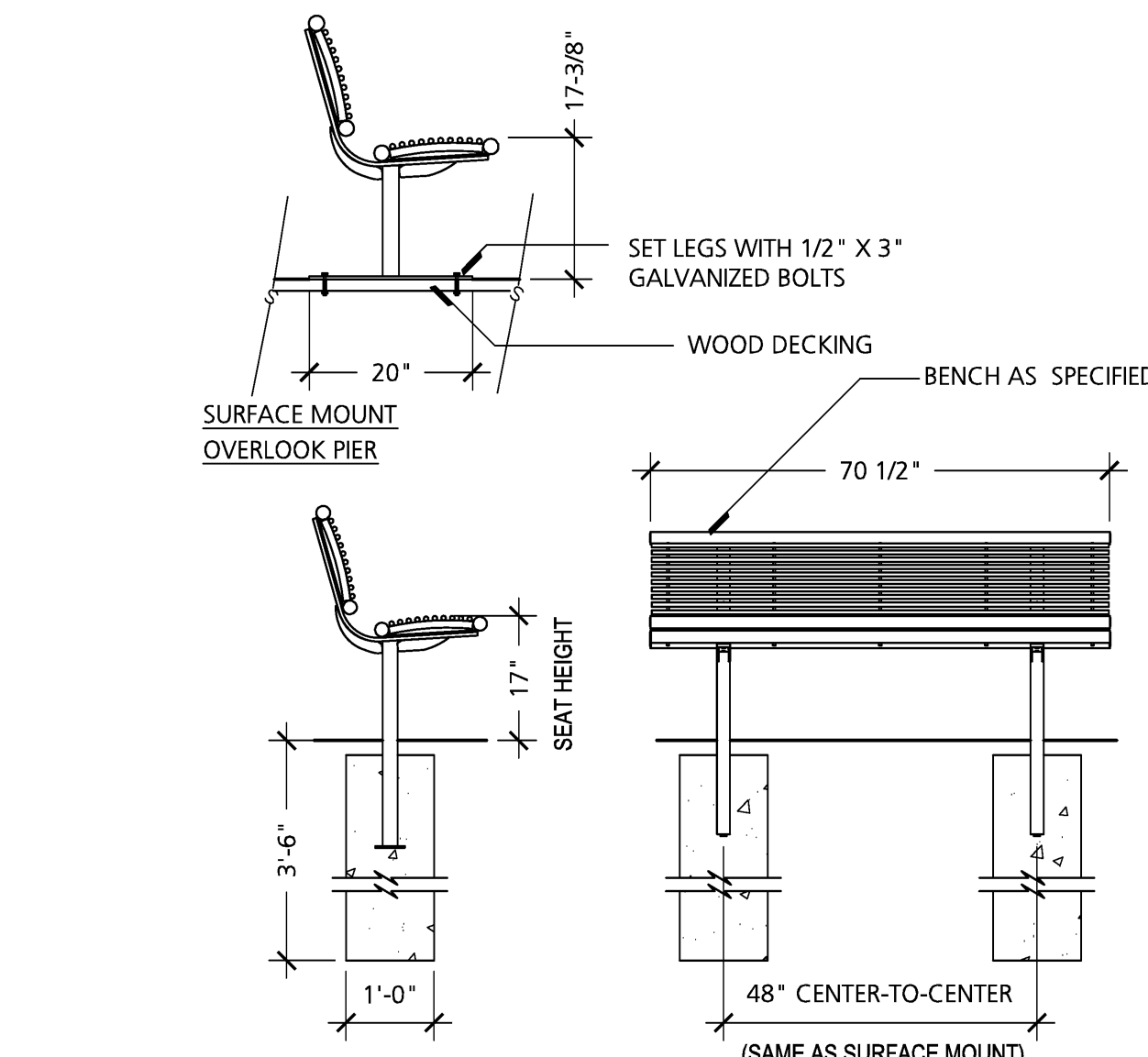
7 Stabilized Gravel Path
SCALE: 1/2" = 1'-0"



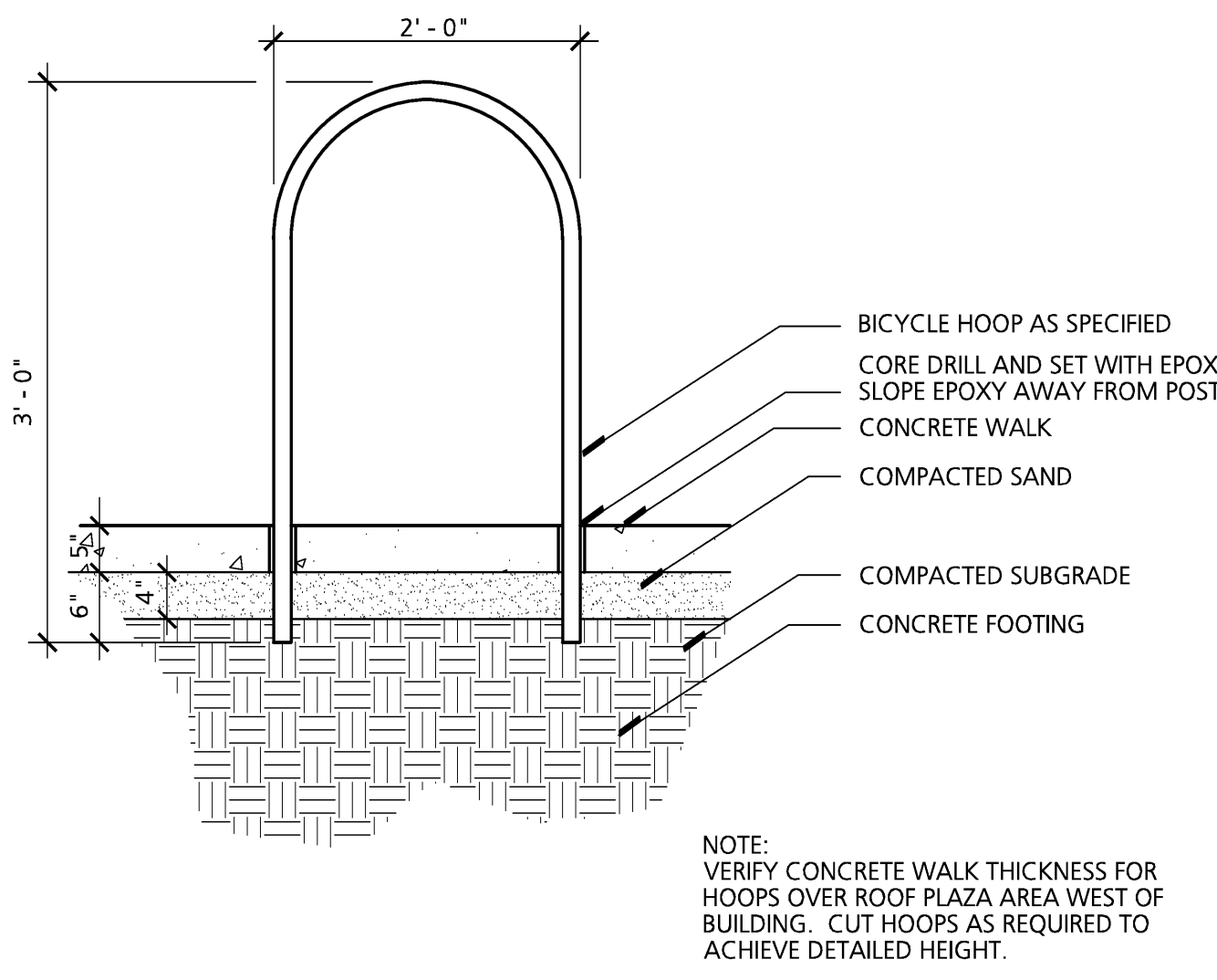
8 Transition Plate
Scale: 2" = 1'-0"



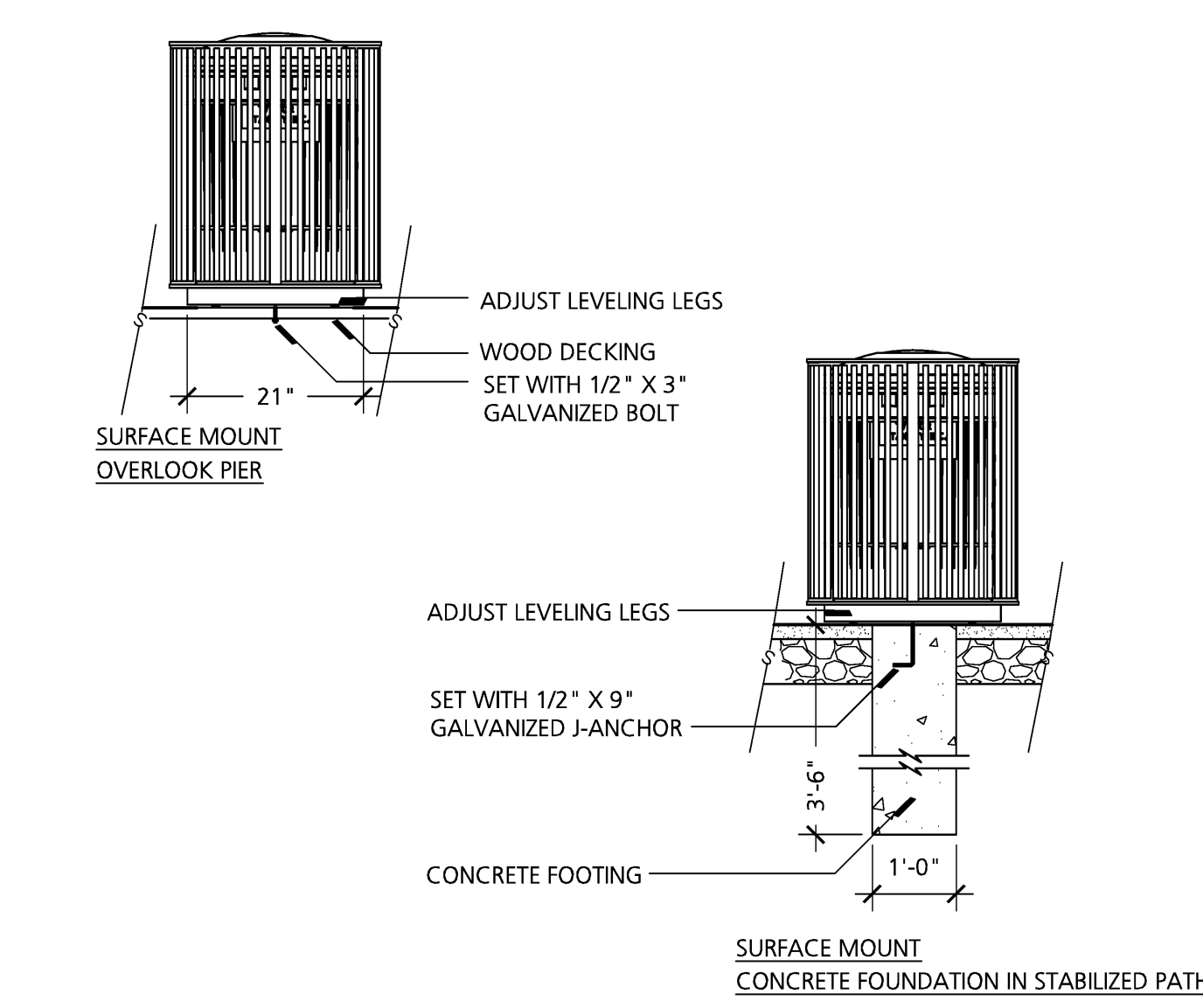
9 Guardrail
SCALE: 1/4" = 1'-0"



10 Bench Mounting Detail
NO SCALE



11 Bicycle Hoop in Concrete
NO SCALE



12 Trash Receptacle Mounting
NO SCALE

Seal

Project Title

**White Lake Township
Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

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Scale

As Specified

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Drawn: NB/BB

Checked: BB

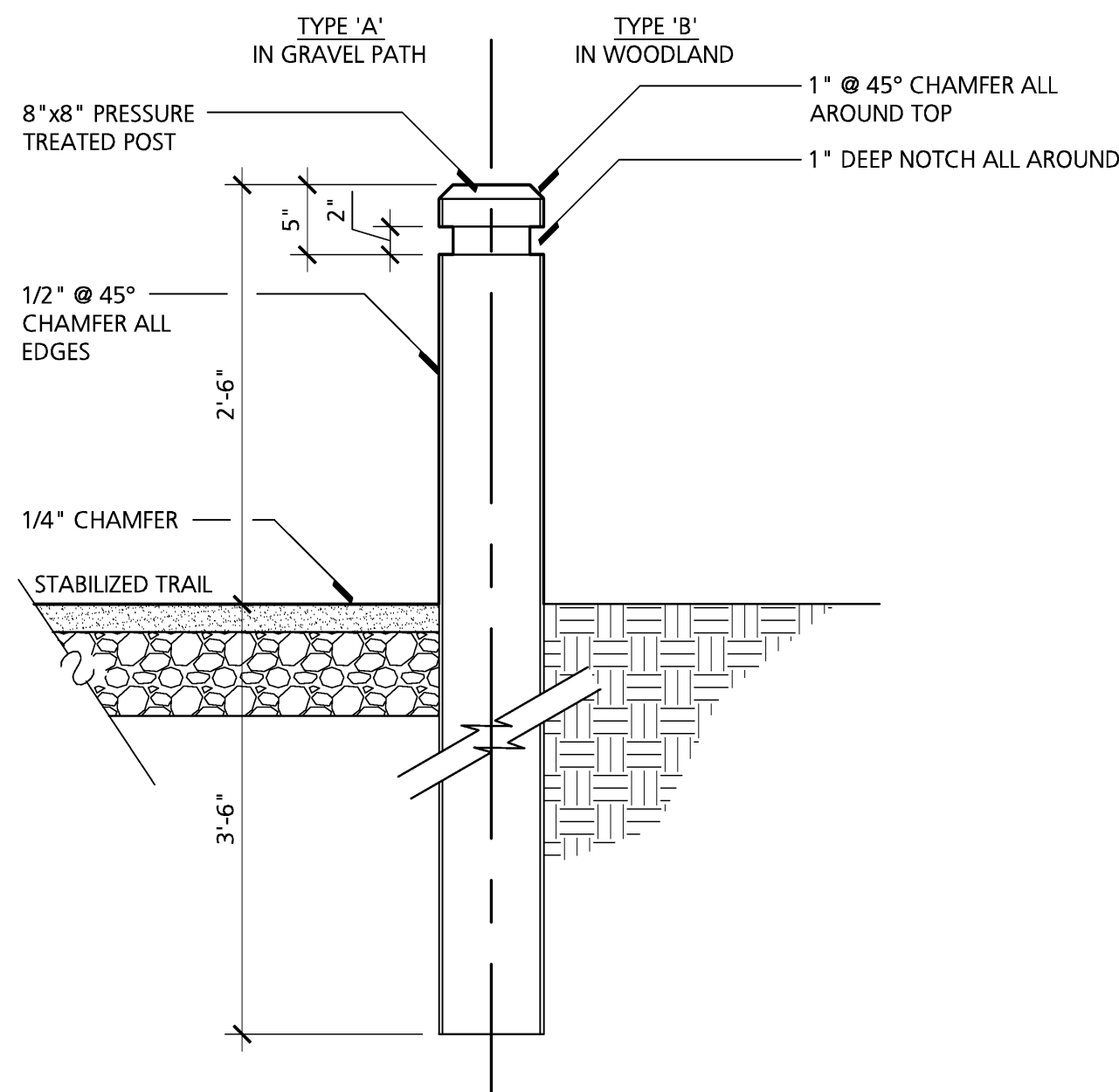
Approved: BB

Project Number

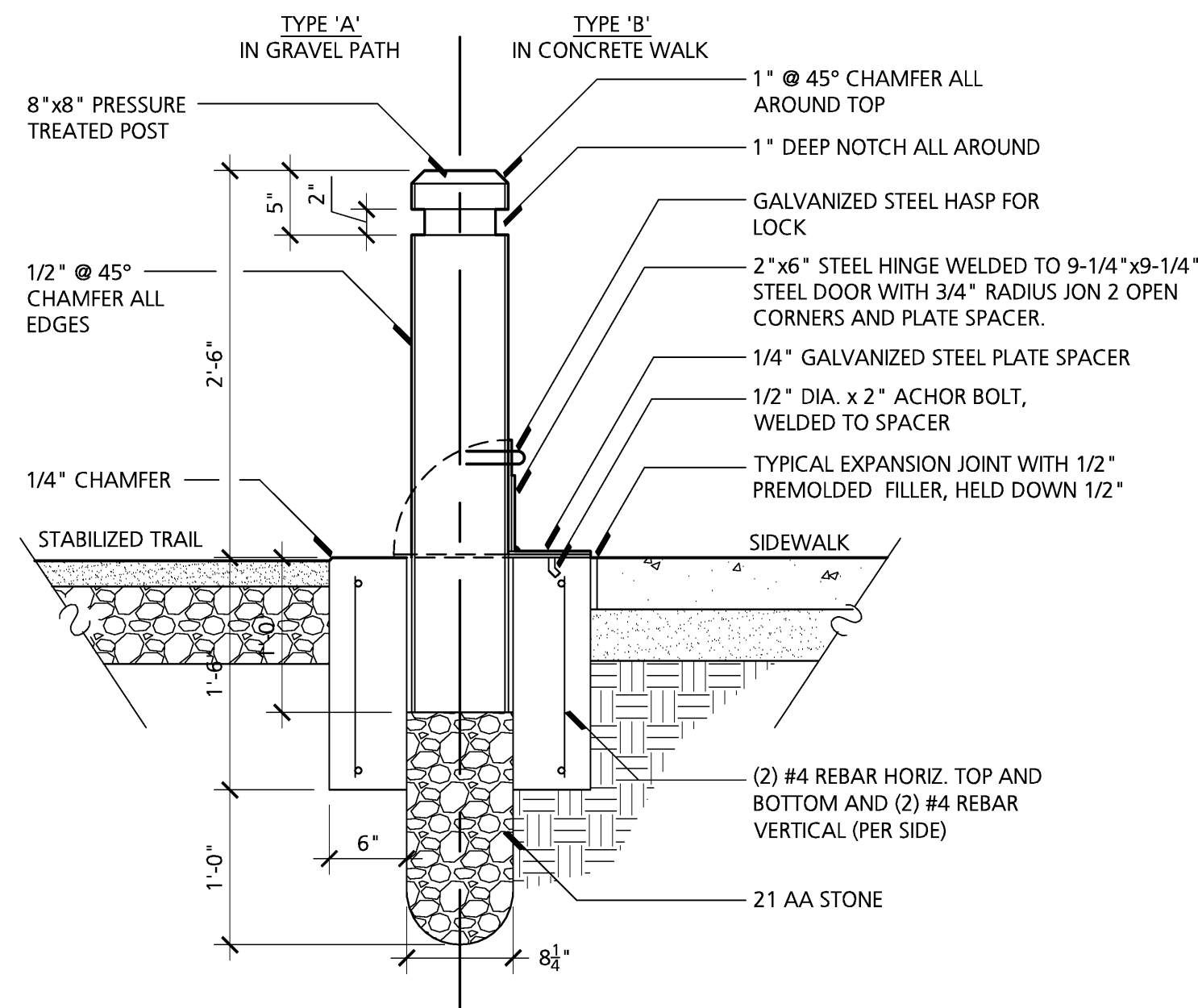
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Sheet Number

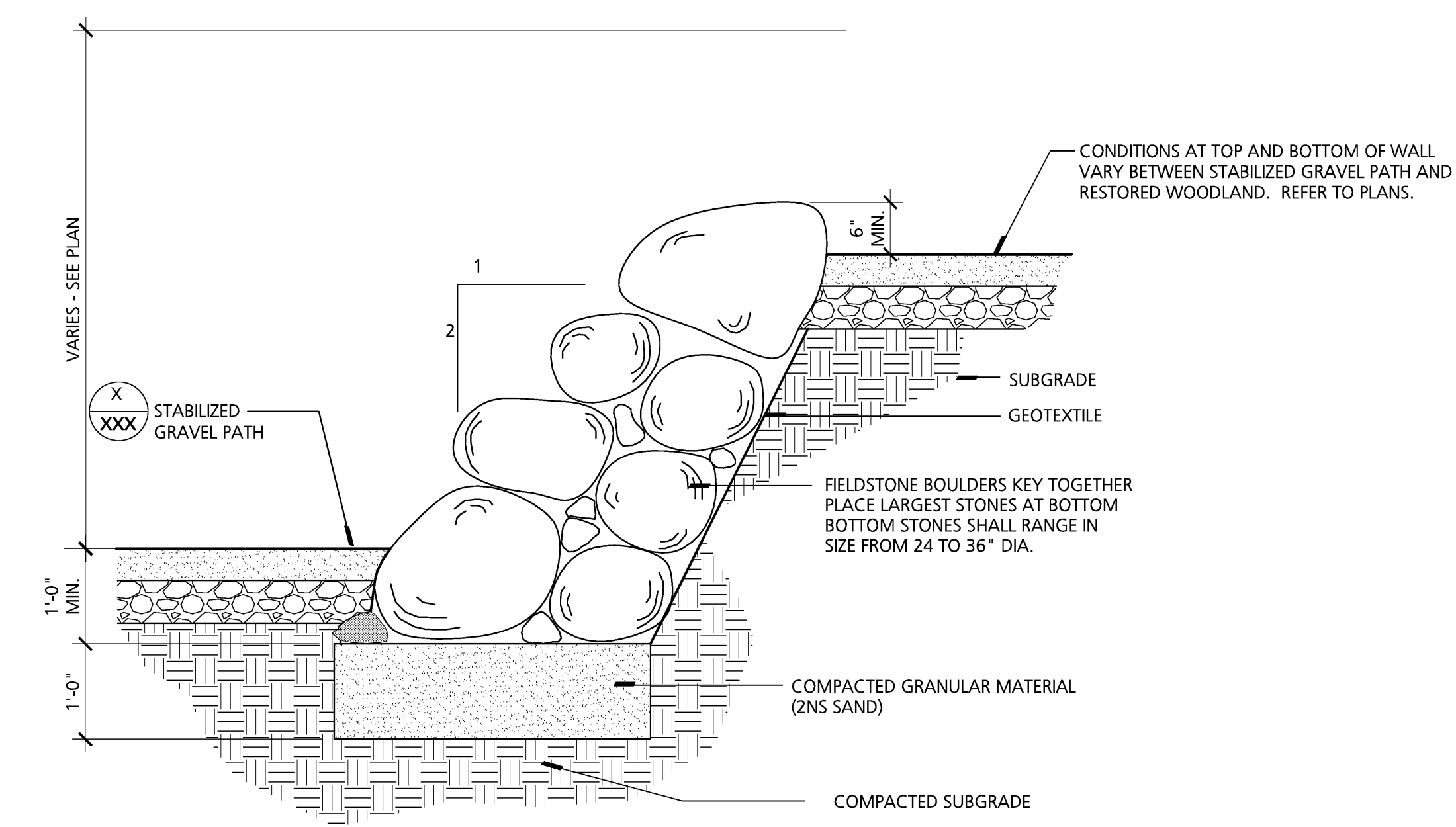
C-502



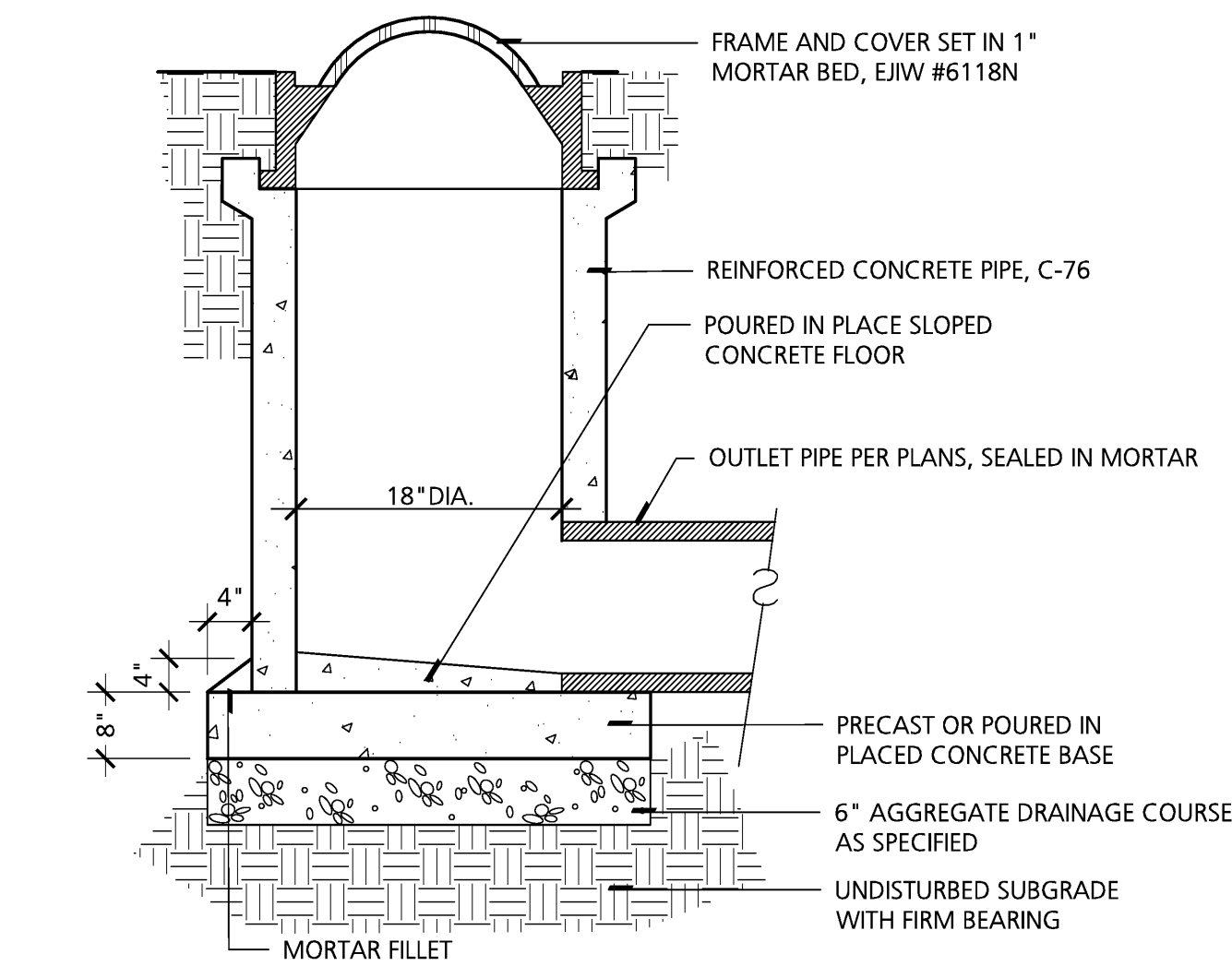
1 Standard Bollard
SCALE: 1"=1'-0"



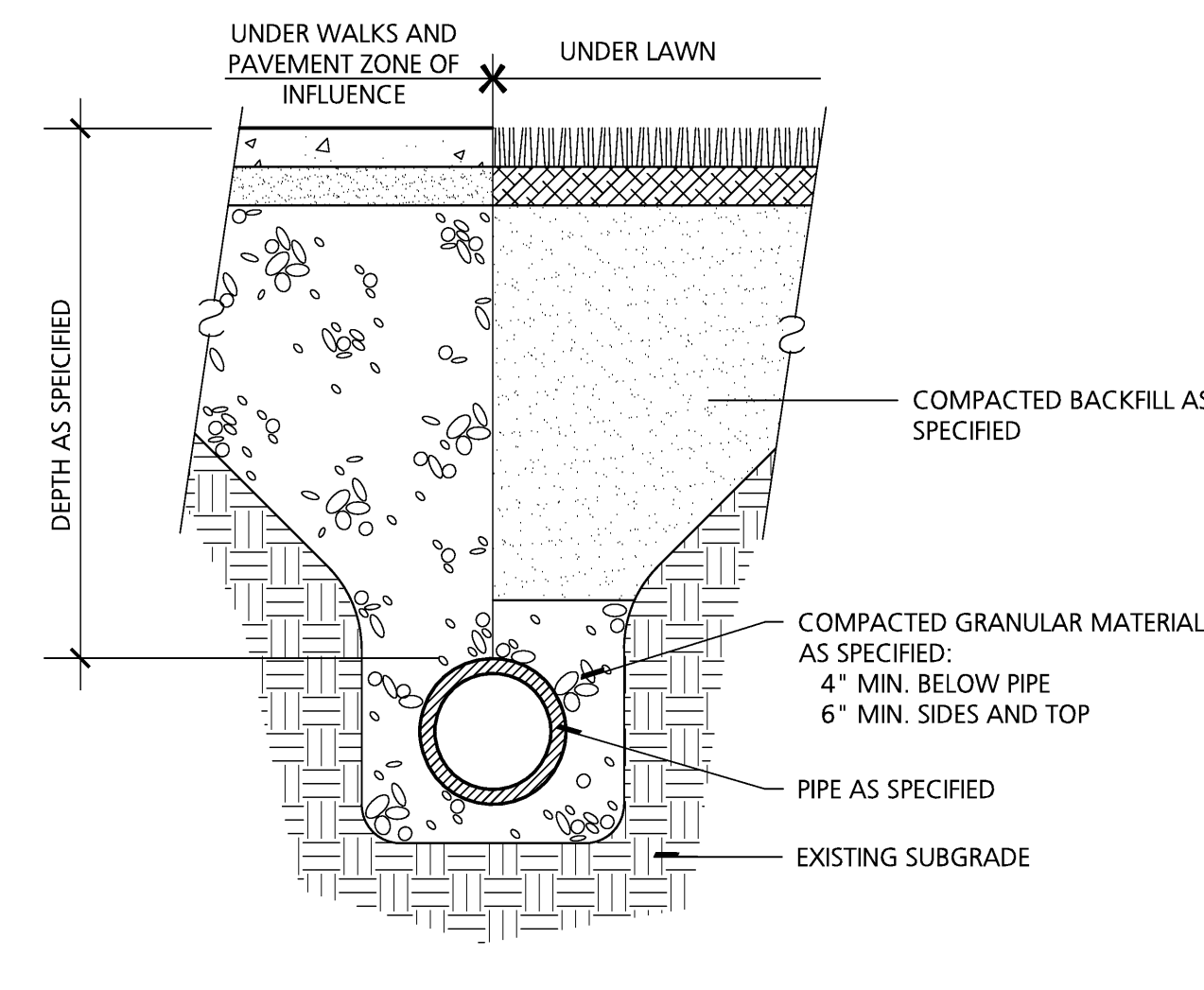
2 Removable Bollard
SCALE: 1"=1'-0"



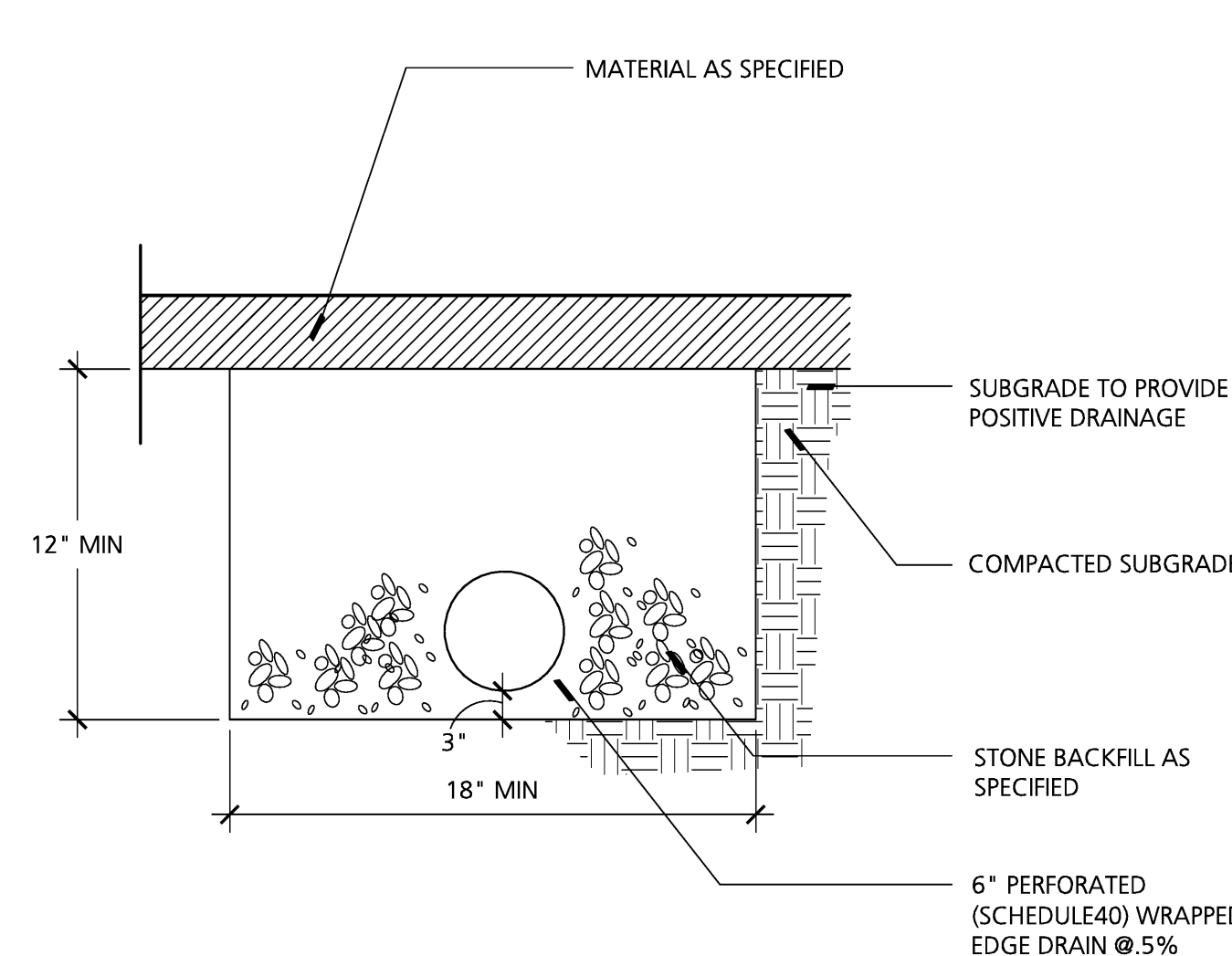
3 Boulder Retaining Wall
SCALE: 3/4"=1'-0"



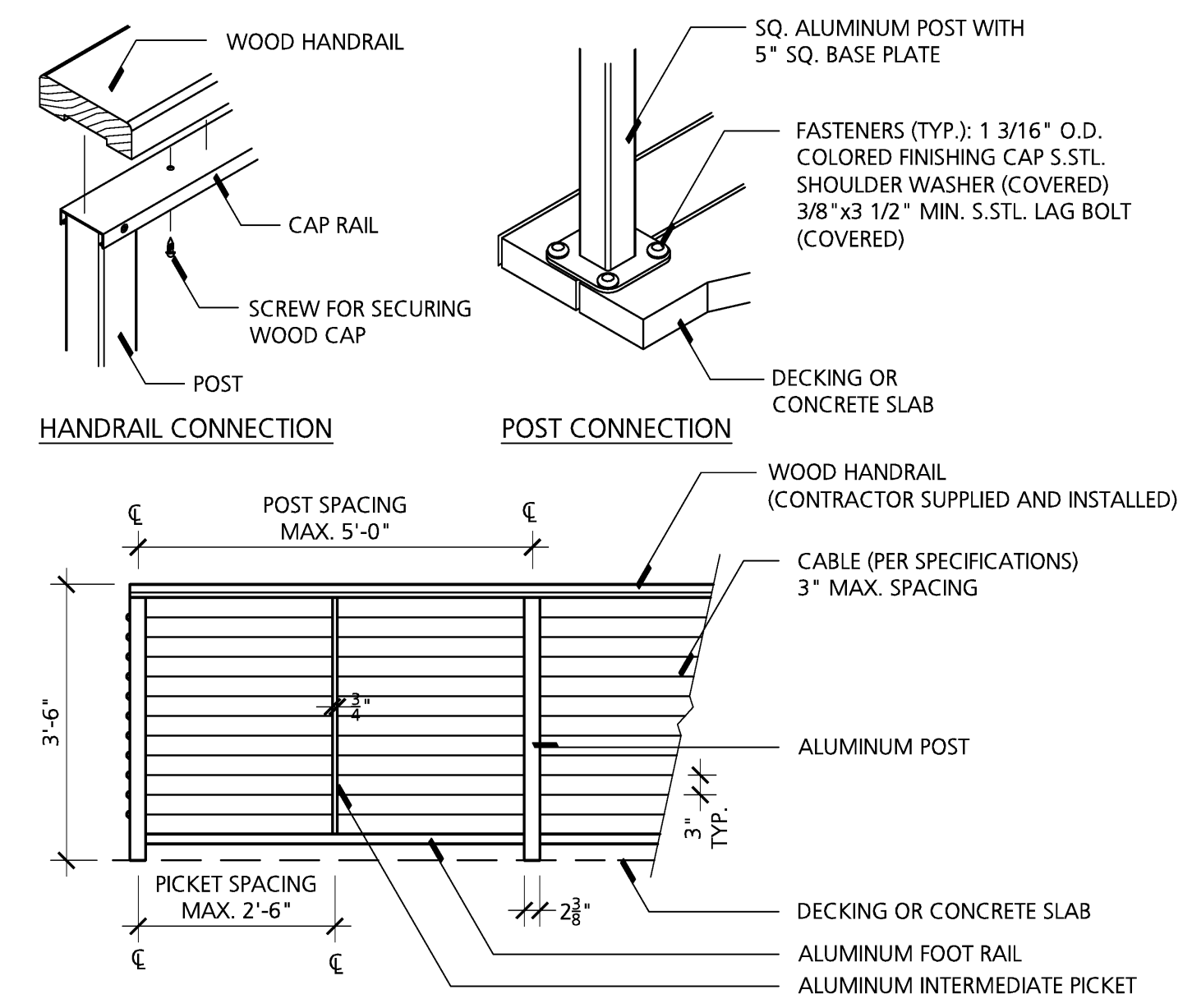
4 Field Drain Inlet
NO SCALE



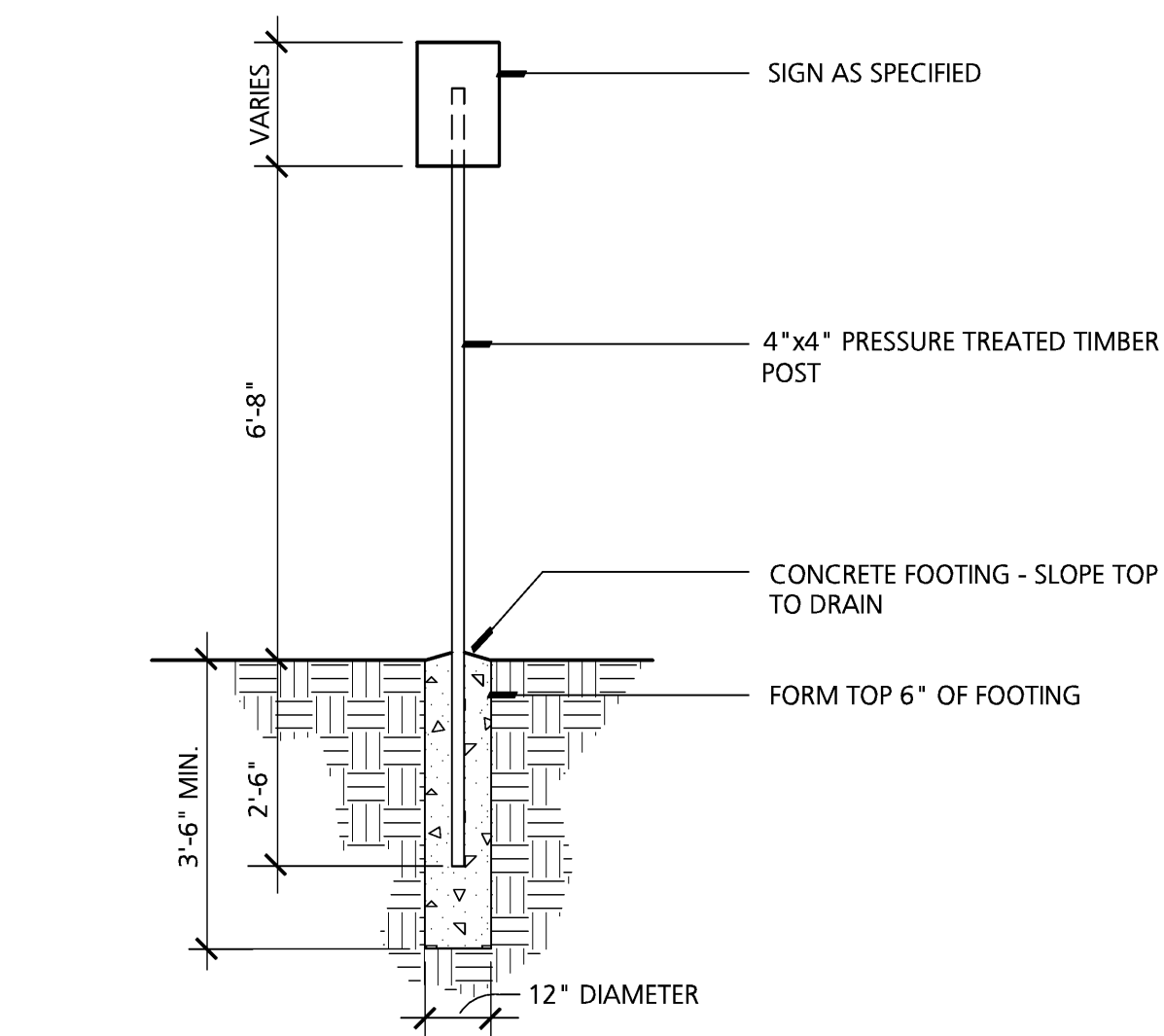
5 Trench Detail
NO SCALE



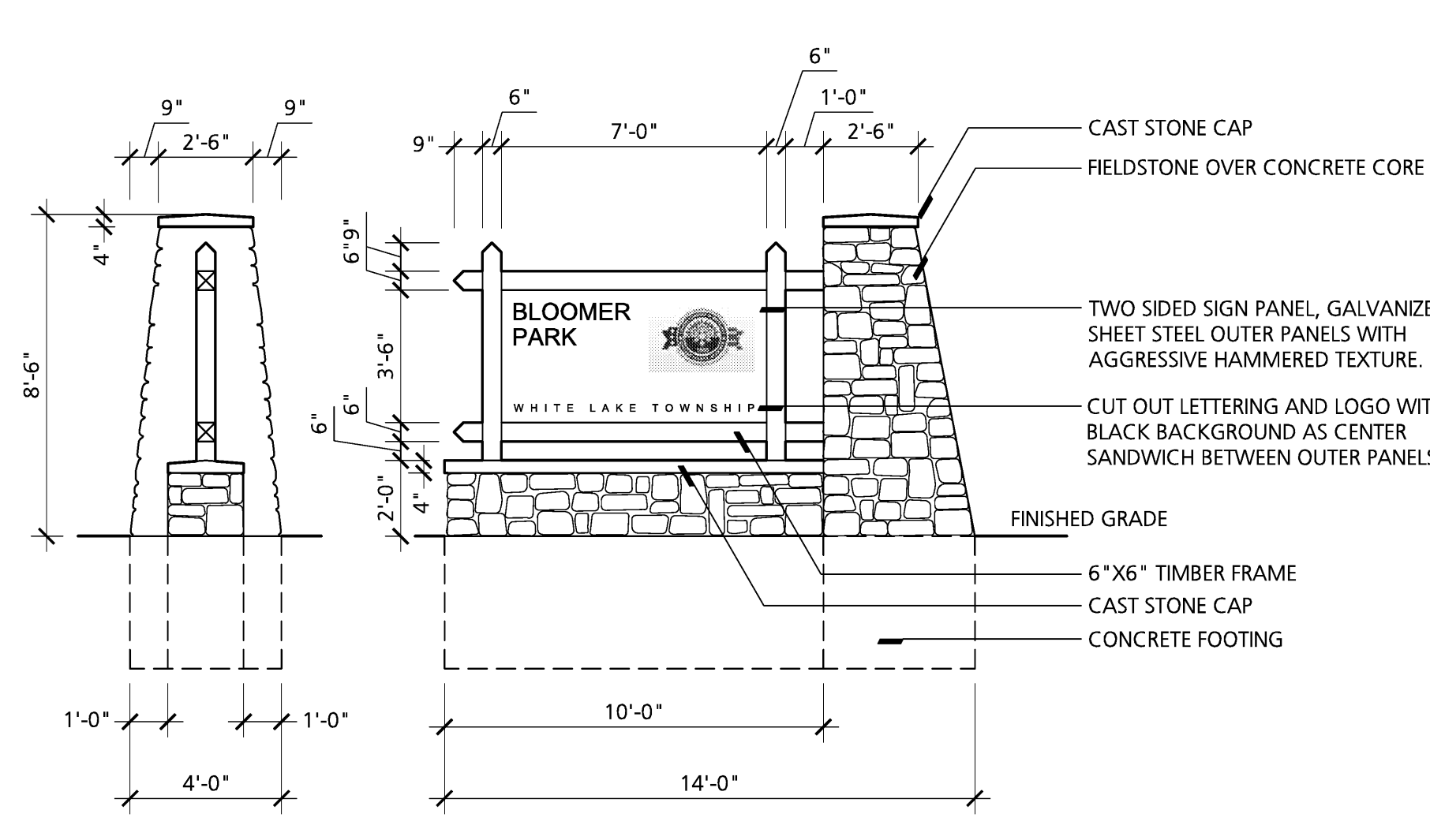
6 Underdrain Detail
NO SCALE



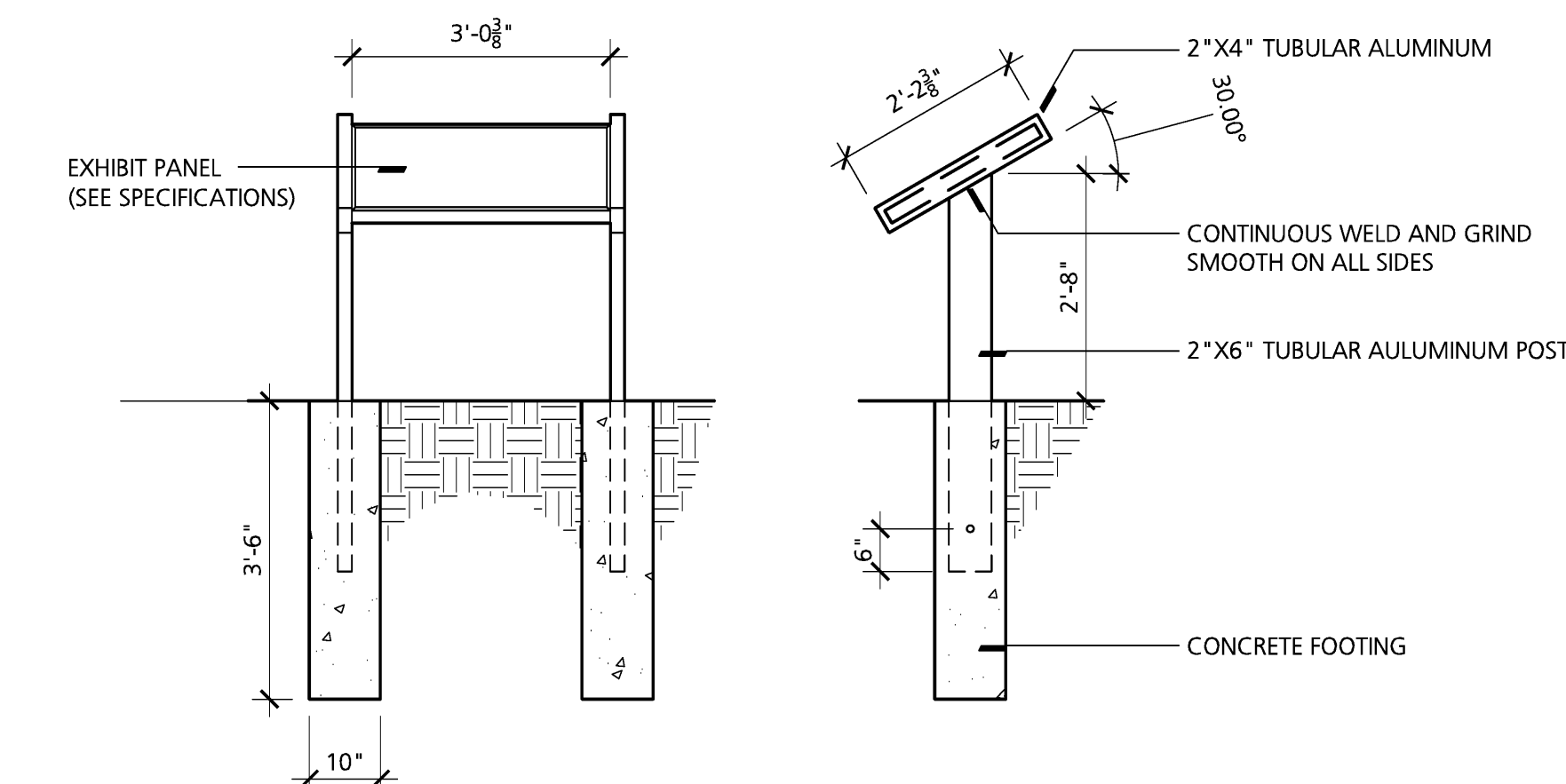
7 Cable Railing
SCALE: 1/2"=1'-0"



8 Regulatory Warning Sign
NO SCALE



9 Park Identification Sign
SCALE: 1/4"=1'-0"



10 Interpretive Sign
SCALE: 1/2"=1'-0"

Seal

Project Title

**White Lake Township
Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Site Details

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08.01.2012	Bids

Scale

As Specified

Quality Control

Drawn: NB/BB
Checked: BB
Approved: BB

Project Number

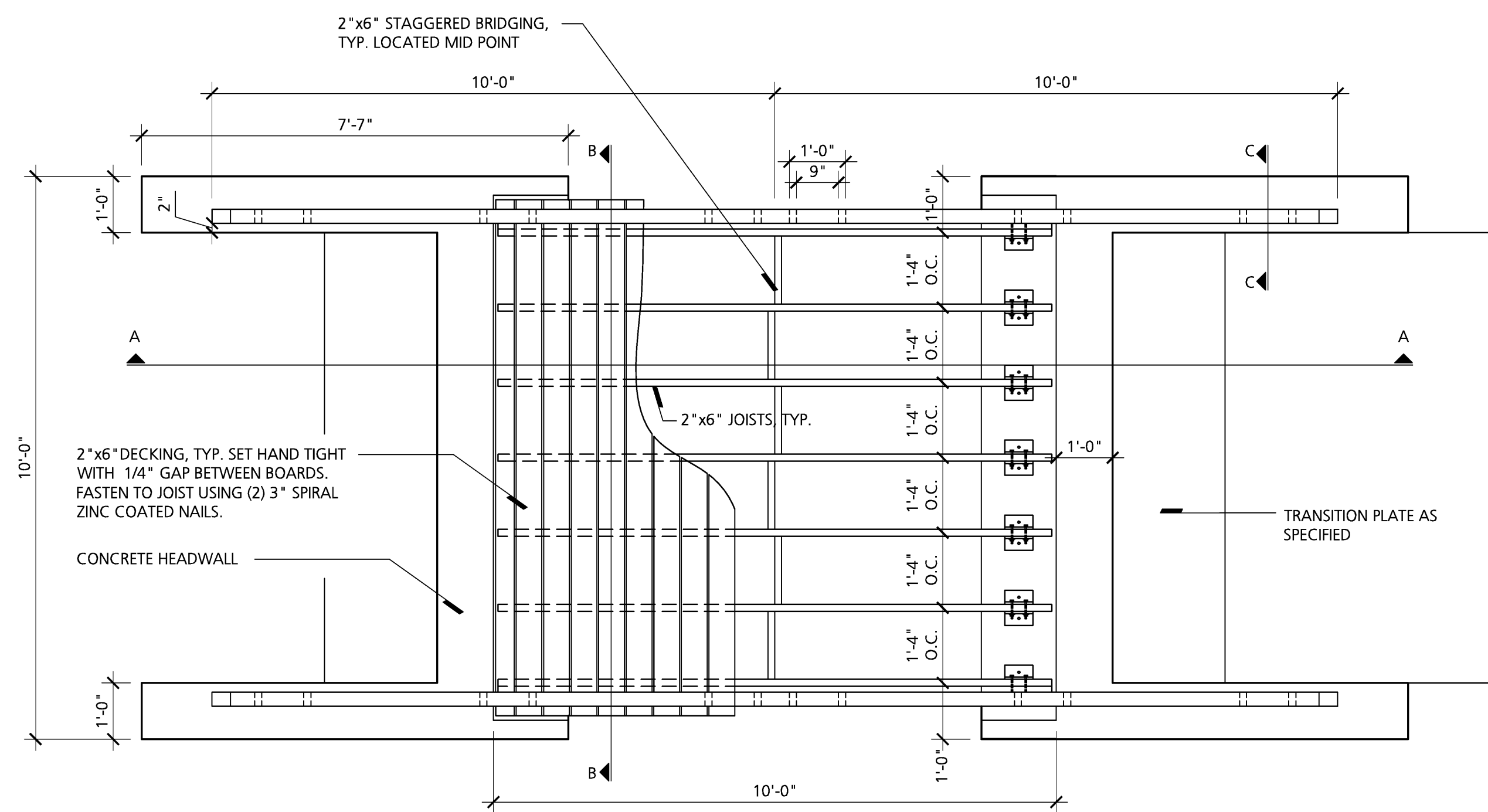
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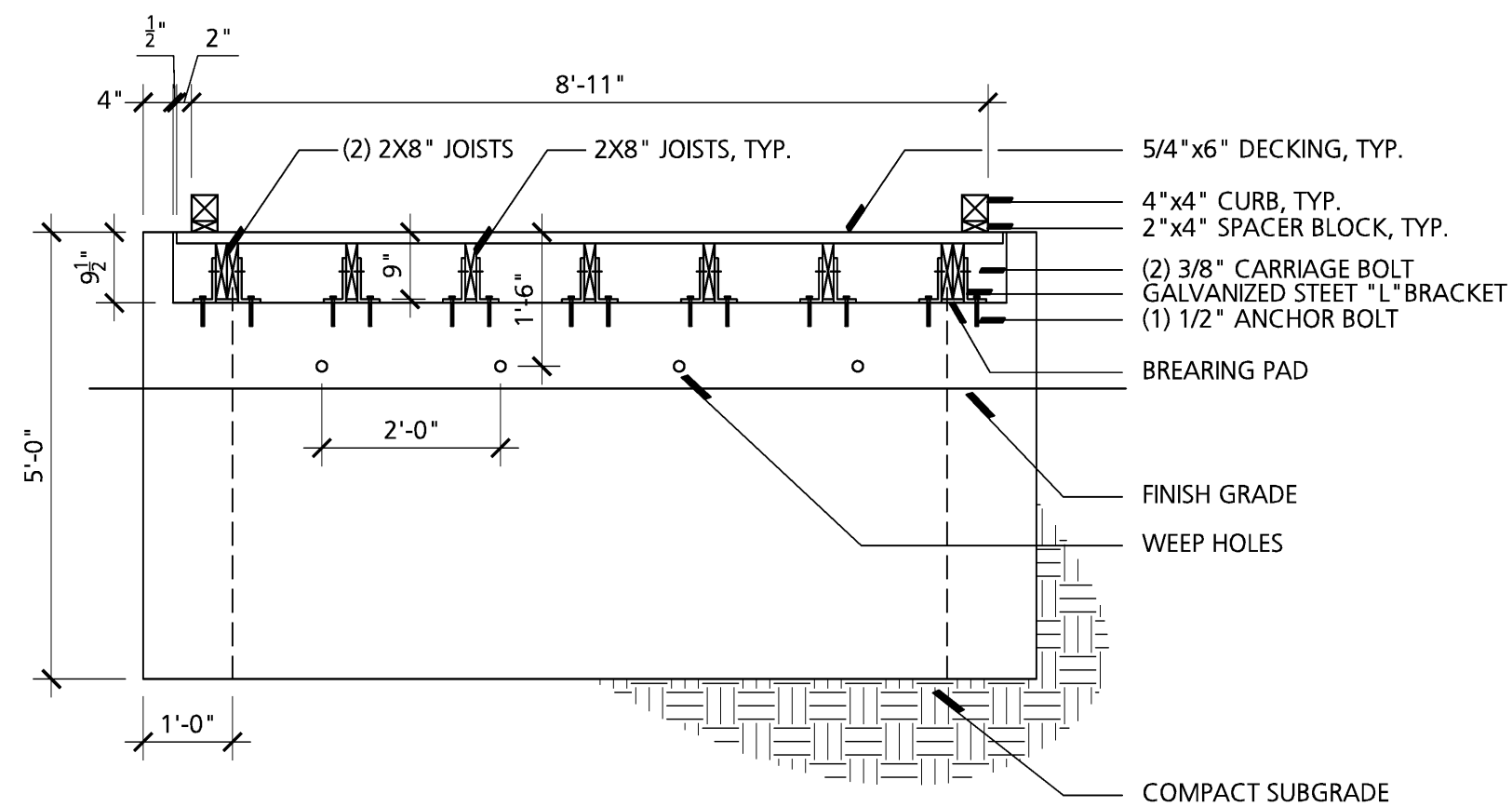
C-503

Dates	Issued for
03.14.2012	95% Owner Review
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07.18.2012	MDNR Review
08.01.2012	Bids

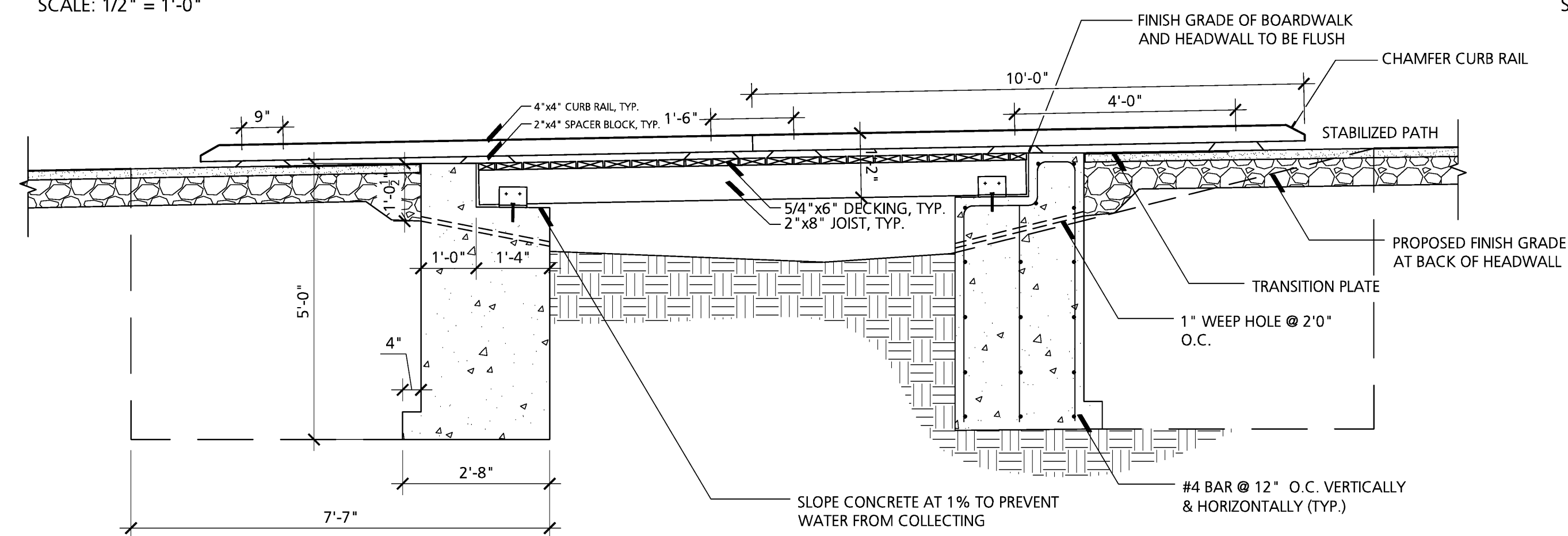
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Checked:	BB
Approved:	BB



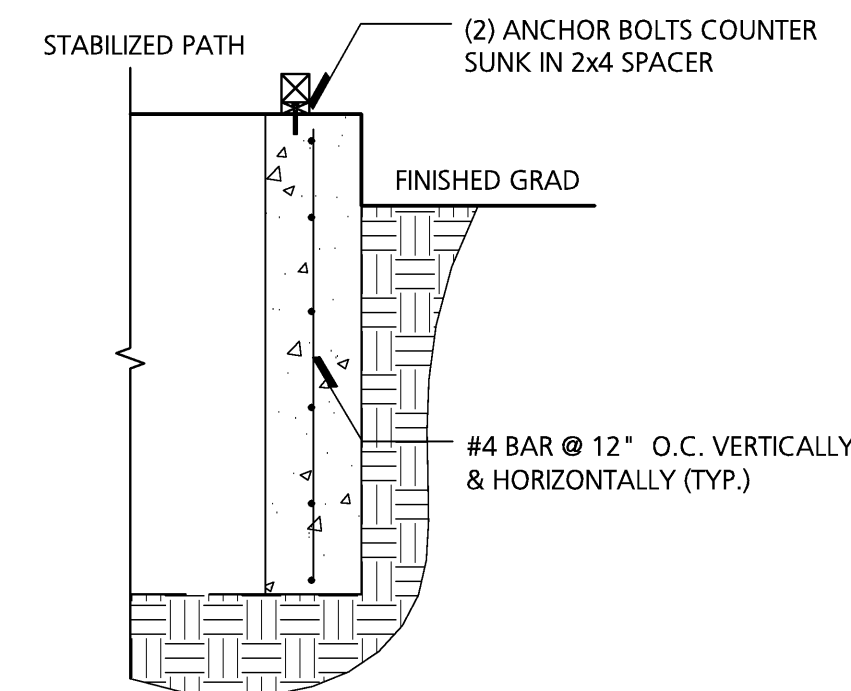
PLAN VIEW
 SCALE: 1/2" = 1'-0"



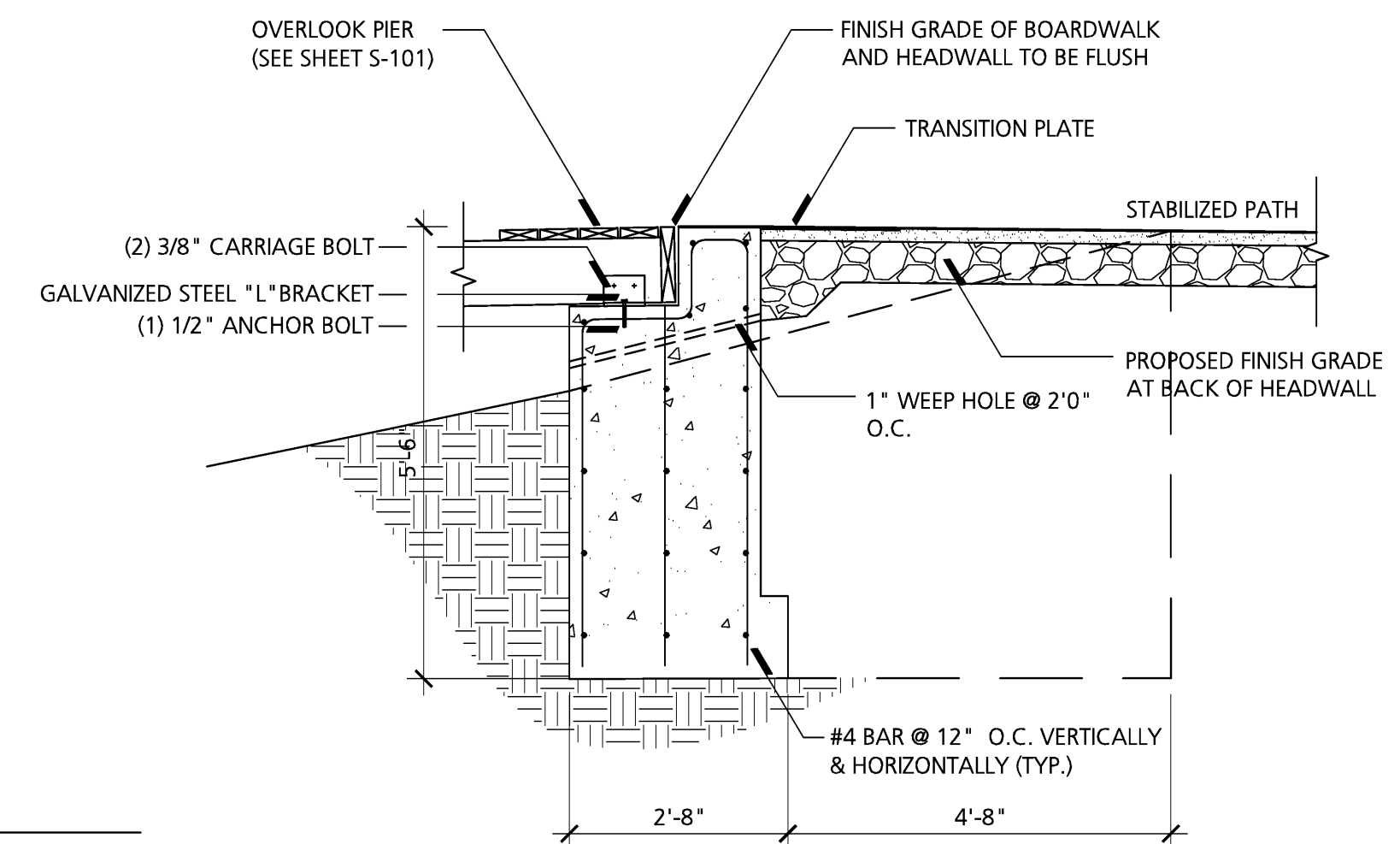
CROSS SECTION B
 SCALE: 1/2" = 1'-0"



CROSS SECTION 'A'
 SCALE: 1/2" = 1'-0"

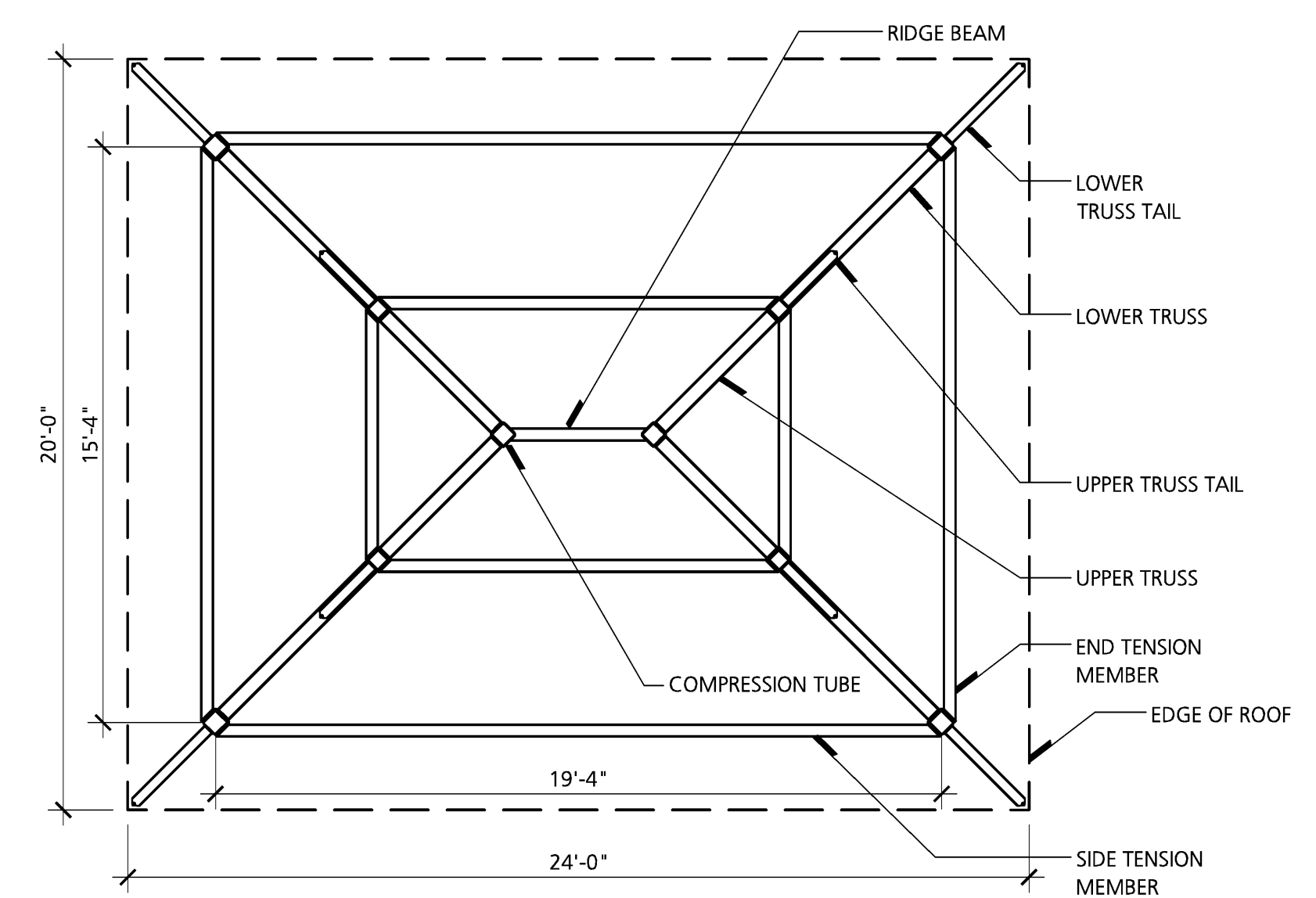


CROSS SECTION C
 SCALE: 1/2" = 1'-0"

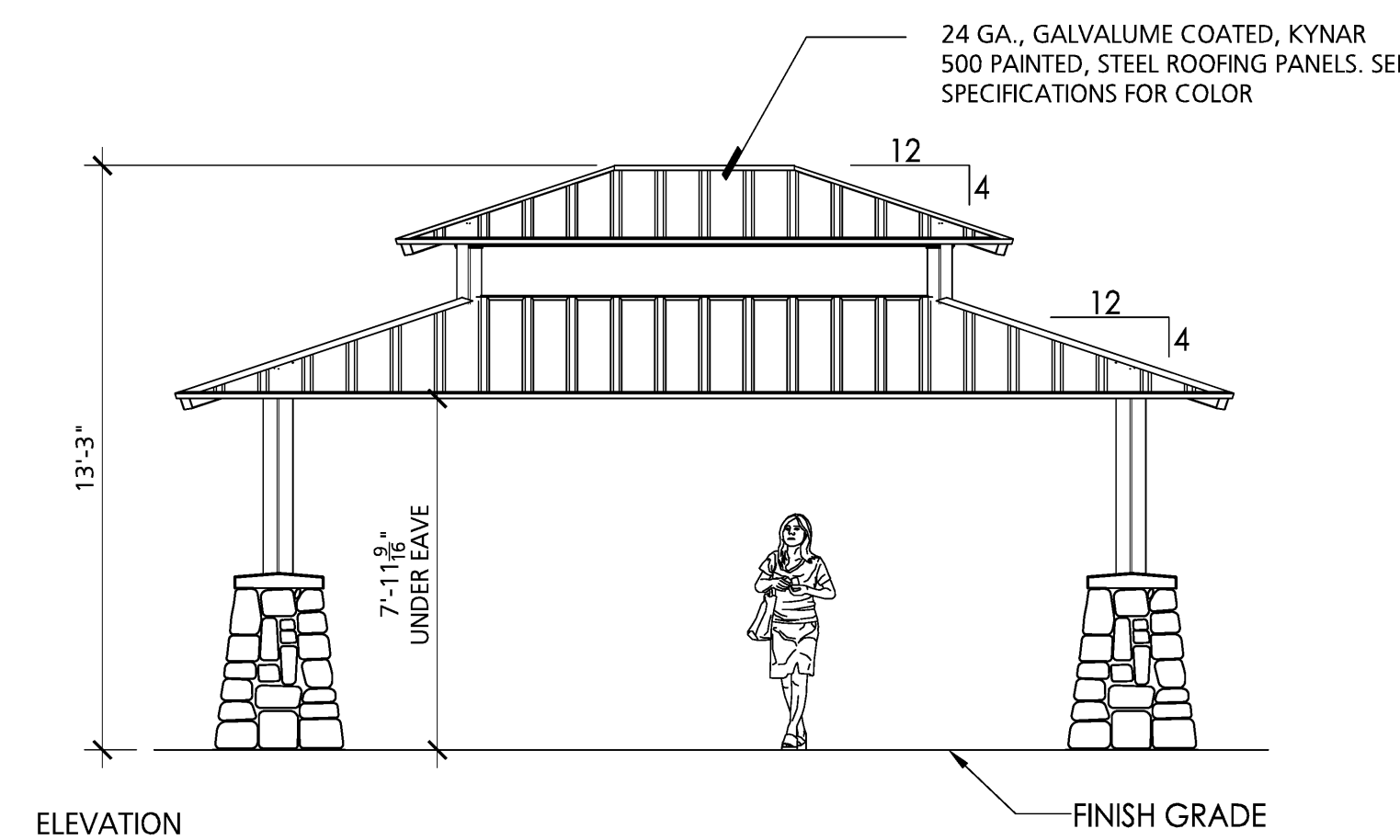


4 OVERLOOK PIER HEADWALL
 SCALE: 1/2" = 1'-0"

1 Boardwalk and Headwalls
 SCALE: 1/2" = 1'-0"

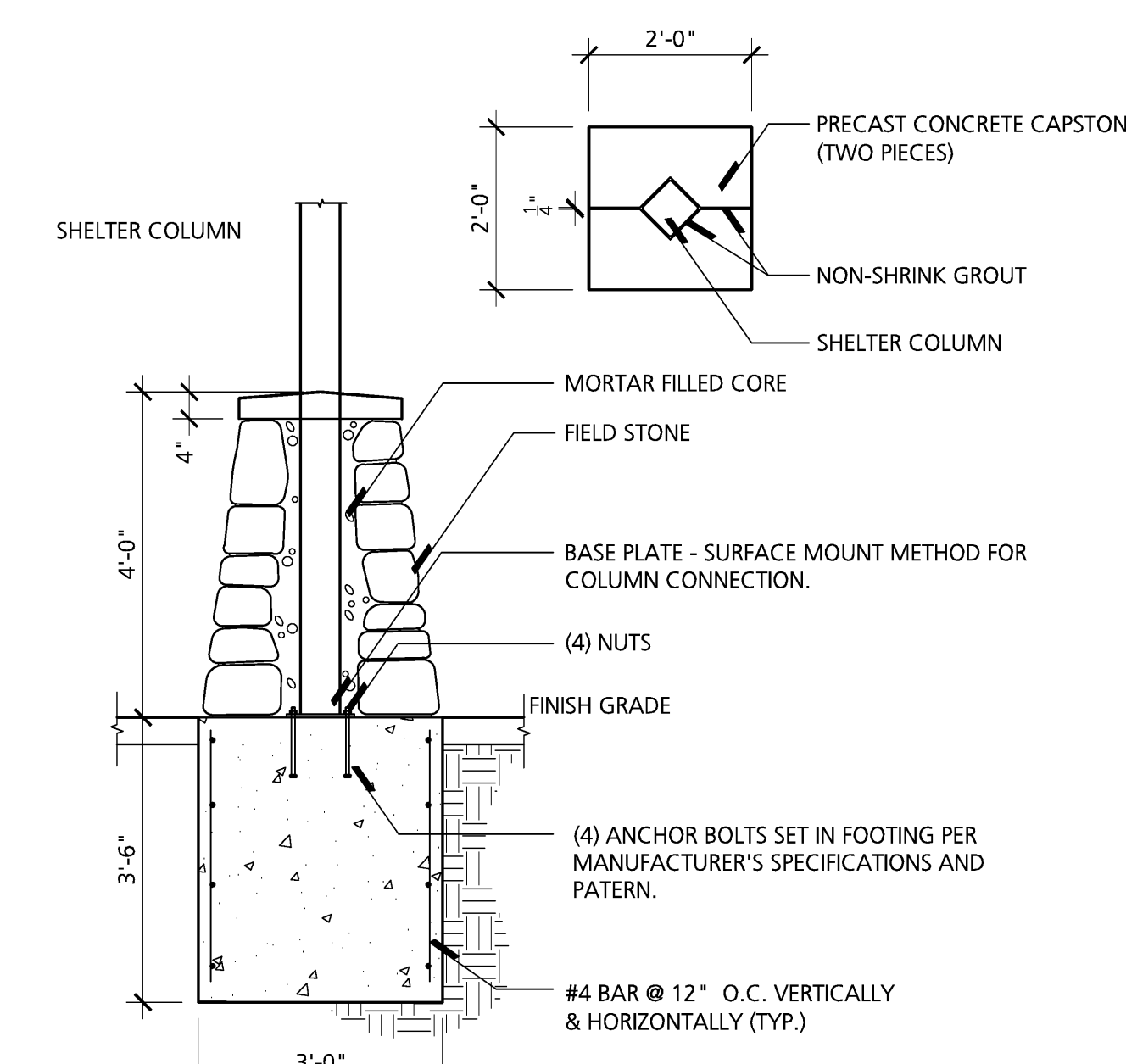


PLAN VIEW



ELEVATION

3 Picnic Shelter
 SCALE: 1/2" = 1'-0"



4 Picnic Shelter Footing and Stone Column Pier
 SCALE: 1/2" = 1'-0"

Seal

Sheet Title
**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

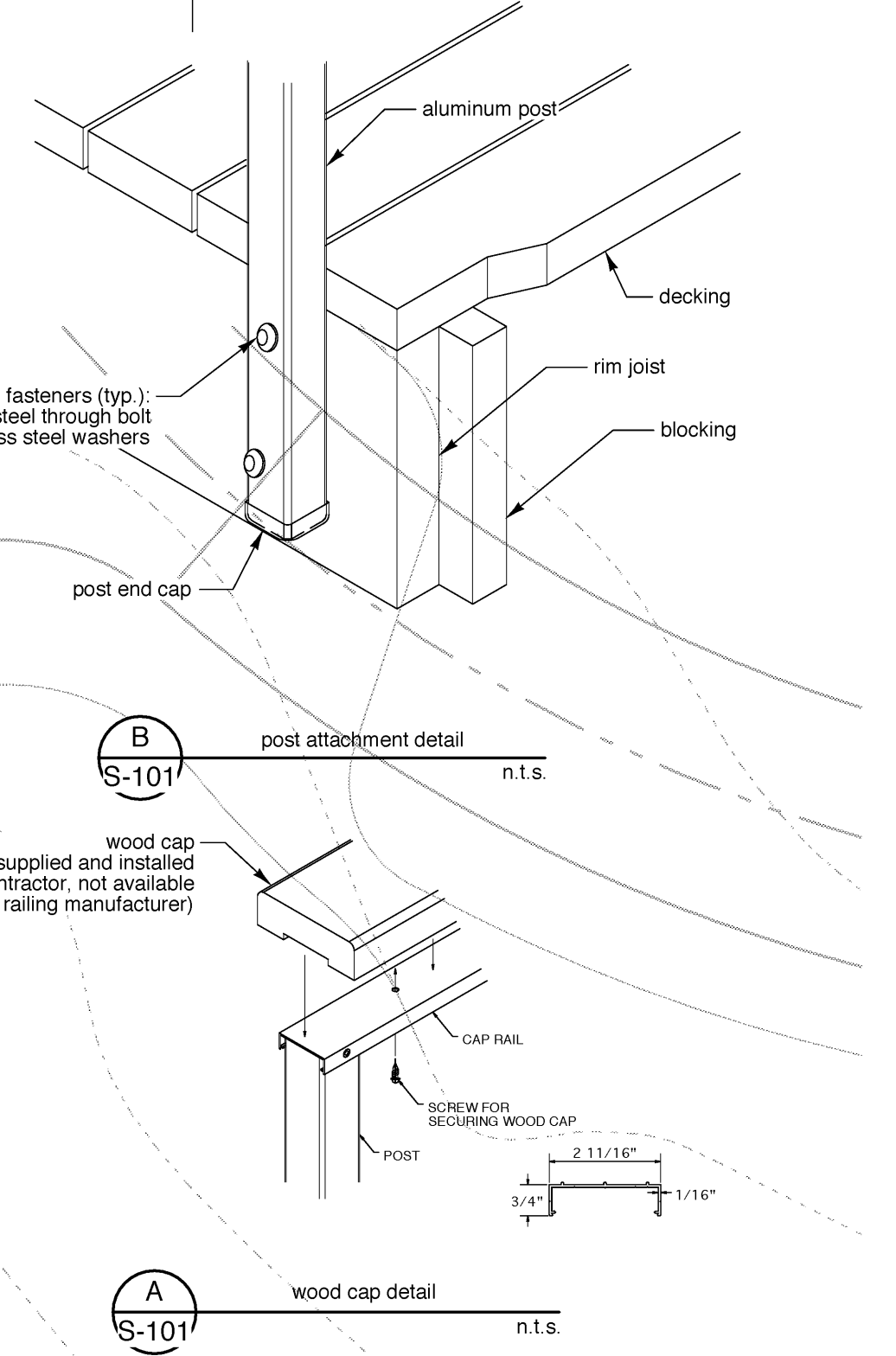
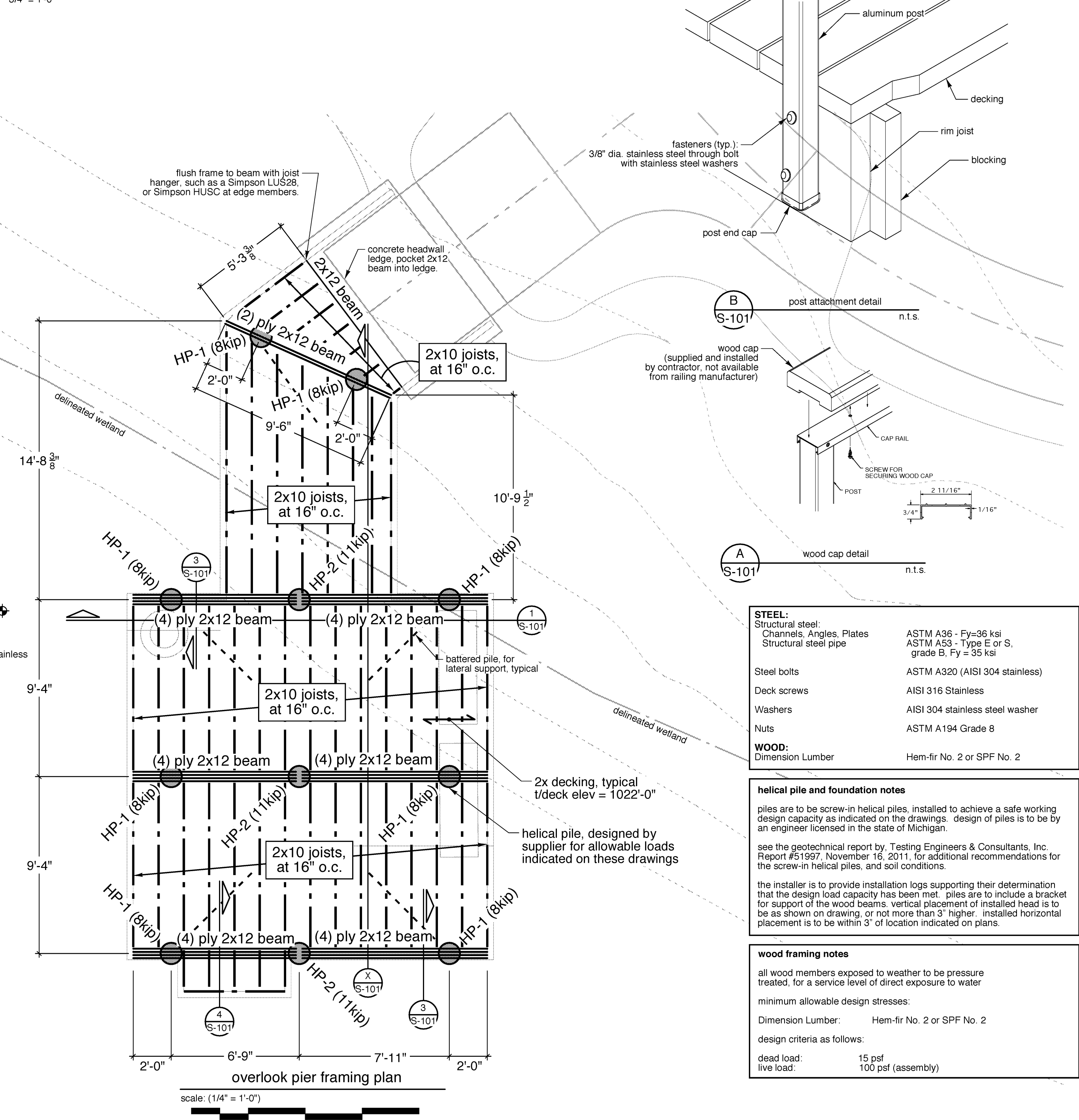
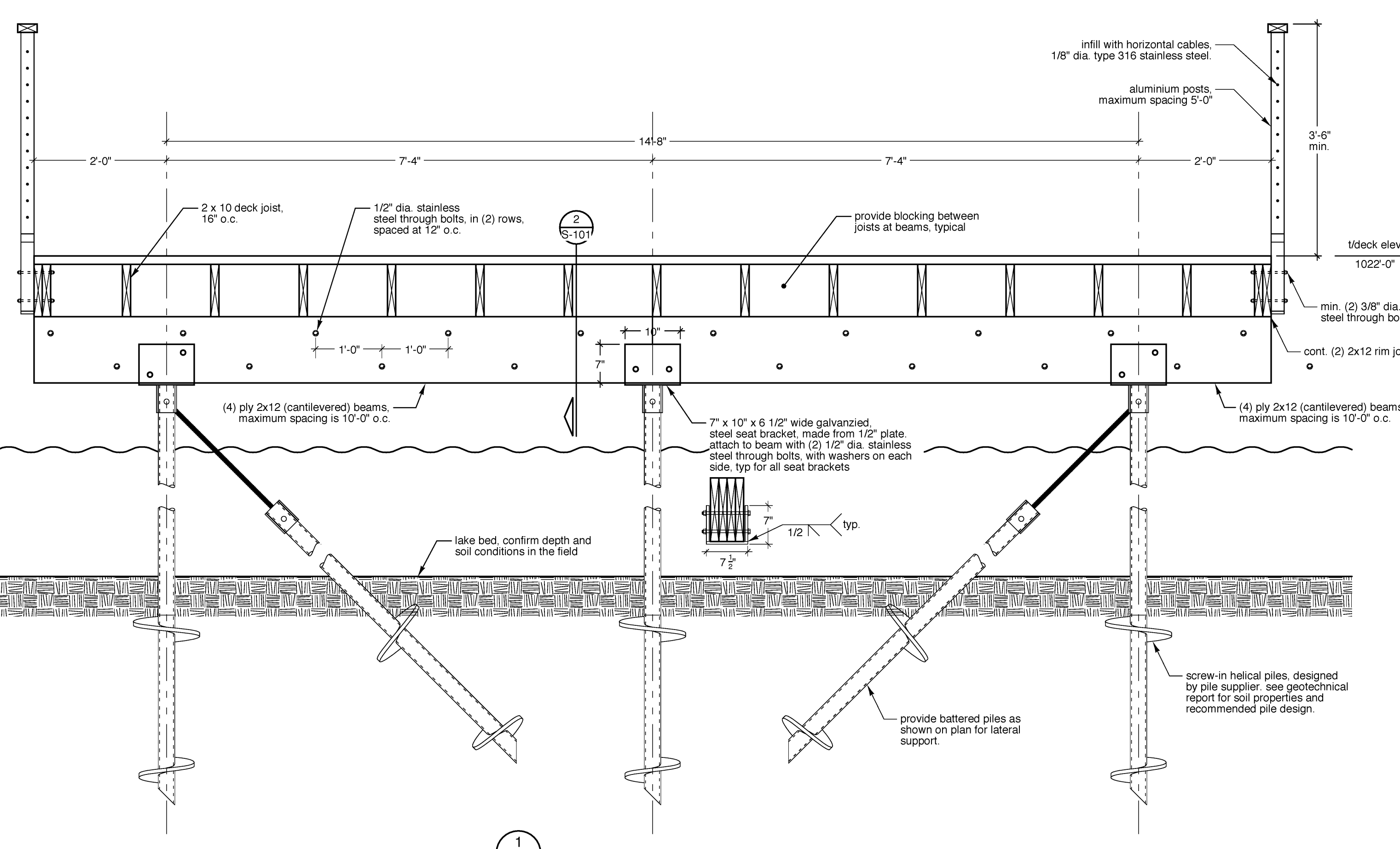
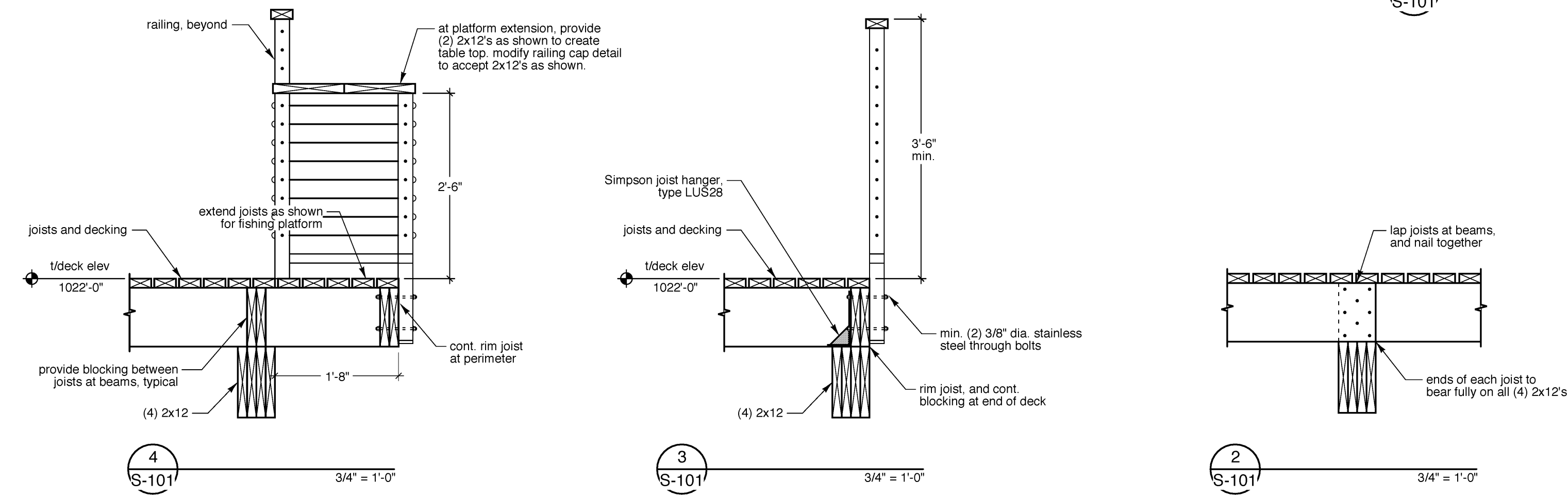
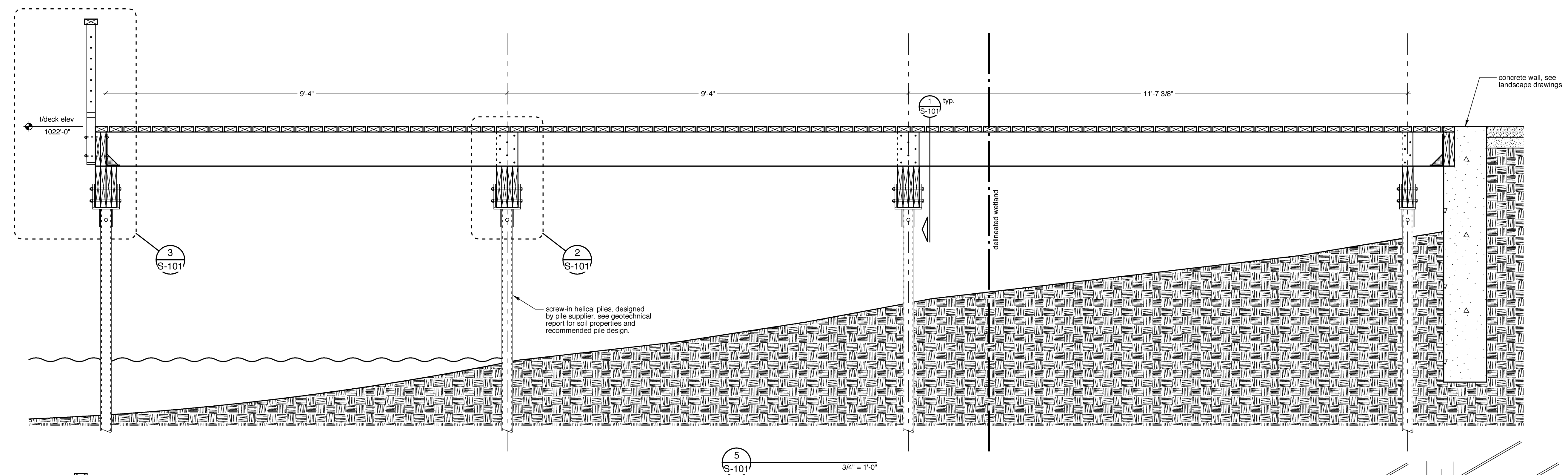
Sheet Title
**Overlook Pier Framing Plans
 and Details**

Dates
 Dates Issued for
 03.14.2012 OWNER REVIEW
 04.09.2012 PERMITS

STEEEL:
 Structural steel: ASTM A36 - Fy=36 ksi
 Channels, Angles, Plates ASTM A53 - Type E or S,
 Structural steel pipe grade B, Fy = 35 ksi
 Steel bolts ASTM A320 (AISI 304 stainless)
 Deck screws AISI 316 Stainless
 Washers AISI 304 stainless steel washer
 Nuts ASTM A194 Grade 8
 WOOD:
 Dimension Lumber Hem-fir No. 2 or SPF No. 2

helical pile and foundation notes
 piles are to be screw-in helical piles, installed to achieve a safe working design capacity as indicated on the drawings. design of piles is to be by an engineer licensed in the state of Michigan.
 see the geotechnical report by Testing Engineers & Consultants, Inc. Report #51997, November 16, 2011, for additional recommendations for the screw-in helical piles, and soil conditions.
 the installer is to provide installation logs supporting their determination that the design load capacity has been met. piles are to include a bracket for support of the wood beams. vertical placement of installed head is to be as shown on drawing, or not more than 3" higher. installed horizontal placement is to be within 3" of location indicated on plans.

wood framing notes
 all wood members exposed to weather to be pressure treated, for a service level of direct exposure to water
 minimum allowable design stresses:
 Dimension Lumber: Hem-fir No. 2 or SPF No. 2
 design criteria as follows:
 dead load: 15 psf
 live load: 100 psf (assembly)



Consultants

sdi structures
 275 E Liberty | Ann Arbor, MI 48104
 734-213-6091
 sdi@sdistructures.com

Arbor Land Consultants, Inc.
 Professional Land Surveyors

2936 Madrono Ct.
 Ann Arbor, MI 48103
 Tel 1-734-669-2960
 Fax 1-734-669-2961

Seal

Project Title

**White Lake Township
 Bloomer Park Improvements**

White Lake Township, Michigan

Sheet Title

Landscape Plan - Area A

Dates

Dates	Issued for
03.14.2012	95% Owner Review
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08.01.2012	Bids

Scale

1" = 30.00'

Quality Control

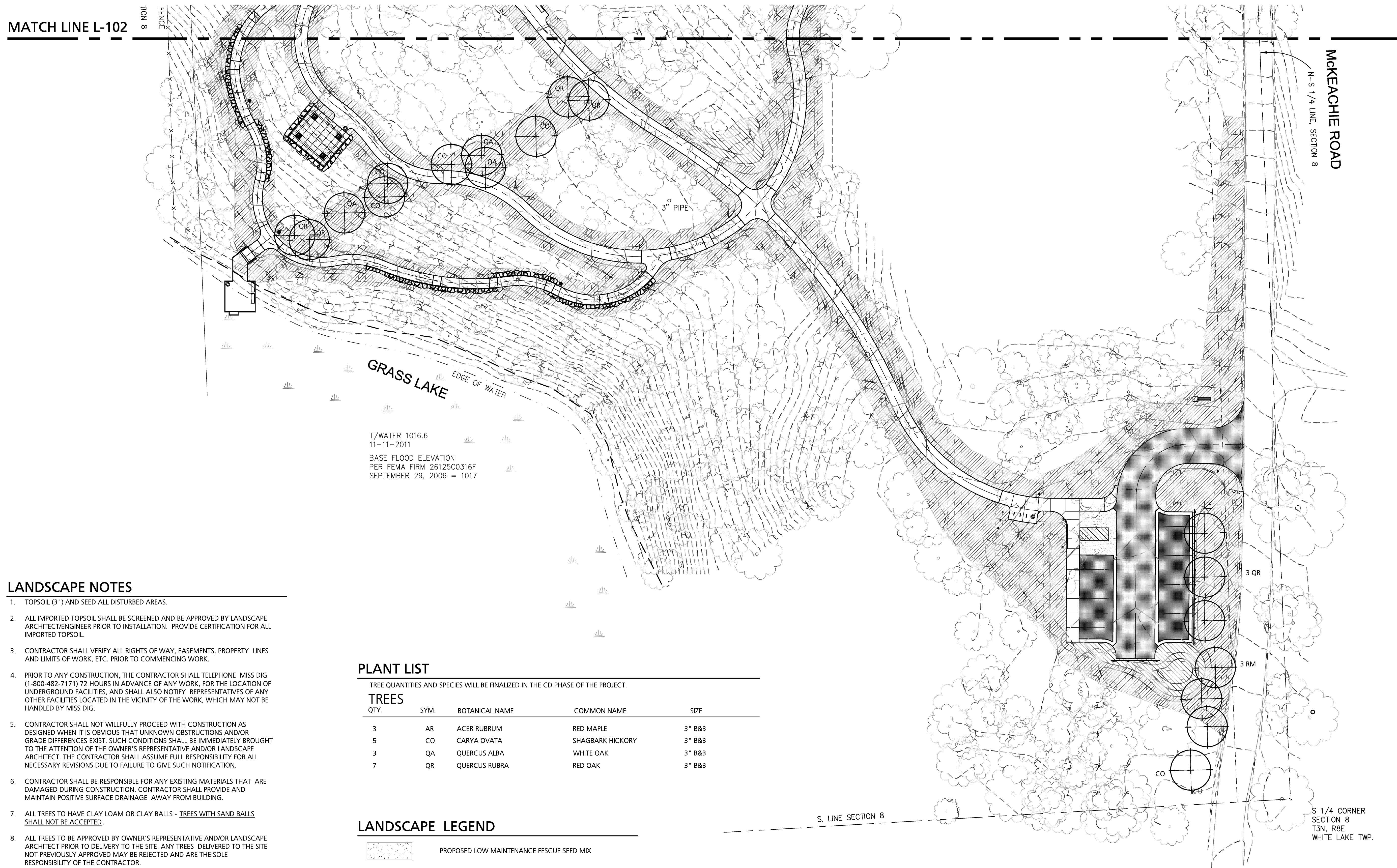
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 Checked: BB
 Approved: BB

Project Number

201133.06

Sheet Number

L-101



LANDSCAPE NOTES



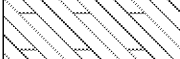
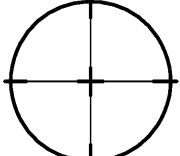
- TOPSOIL (3") AND SEED ALL DISTURBED AREAS.
- ALL IMPORTED TOPSOIL SHALL BE SCREENED AND BE APPROVED BY LANDSCAPE ARCHITECT/ENGINEER PRIOR TO INSTALLATION. PROVIDE CERTIFICATION FOR ALL IMPORTED TOPSOIL.
- CONTRACTOR SHALL VERIFY ALL RIGHTS OF WAY, EASEMENTS, PROPERTY LINES AND LIMITS OF WORK, ETC. PRIOR TO COMMENCING WORK.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL TELEPHONE MISS DIG (1-800-482-7171) 72 HOURS IN ADVANCE OF ANY WORK, FOR THE LOCATION OF UNDERGROUND FACILITIES, AND SHALL ALSO NOTIFY REPRESENTATIVES OF ANY OTHER FACILITIES LOCATED IN THE VICINITY OF THE WORK, WHICH MAY NOT BE HANDLED BY MISS DIG.
- CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXISTING MATERIALS THAT ARE DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE AND MAINTAIN POSITIVE SURFACE DRAINAGE AWAY FROM BUILDING.
- ALL TREES TO HAVE CLAY LOAM OR CLAY BALLS - TREES WITH SAND BALLS SHALL NOT BE ACCEPTED.
- ALL TREES TO BE APPROVED BY OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT PRIOR TO DELIVERY TO THE SITE. ANY TREES DELIVERED TO THE SITE NOT PREVIOUSLY APPROVED MAY BE REJECTED AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- CONTRACTOR TO VERIFY PERCOLATION OF ALL PLANTING PITS AND BEDS PRIOR TO INSTALLATION OF PLANT MATERIAL.
- PRUNE MATERIAL ONLY AS DIRECTED BY LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL STRAIGHTEN & STAKE TREES WITHIN 3 DAYS OF INSTALLATION.
- LANDSCAPE ARCHITECT SHALL REVIEW ALL EXCAVATED TREE PITS AND SHRUBS, GROUND COVER, PERENNIAL BEDS PRIOR TO INSTALLATION OF SPECIFIED PLANTING SOIL MIX.

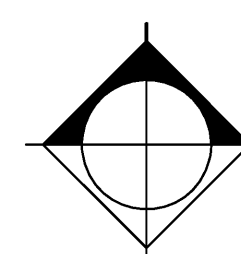
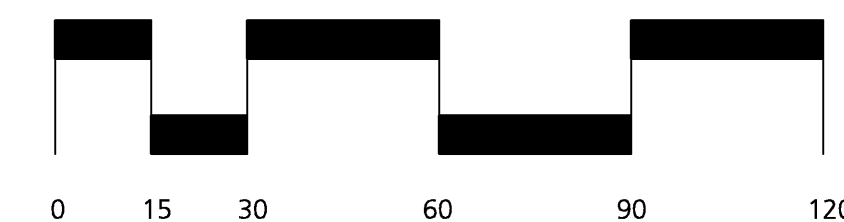
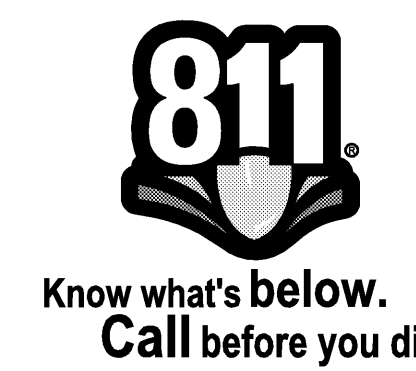
PLANT LIST

TREE QUANTITIES AND SPECIES WILL BE FINALIZED IN THE CD PHASE OF THE PROJECT.

TREES	QTY.	SYM.	BOTANICAL NAME	COMMON NAME	SIZE
	3	AR	ACER RUBRUM	RED MAPLE	3" B&B
	5	CO	CARYA OVATA	SHAGBARK HICKORY	3" B&B
	3	QA	QUERCUS ALBA	WHITE OAK	3" B&B
	7	QR	QUERCUS RUBRA	RED OAK	3" B&B

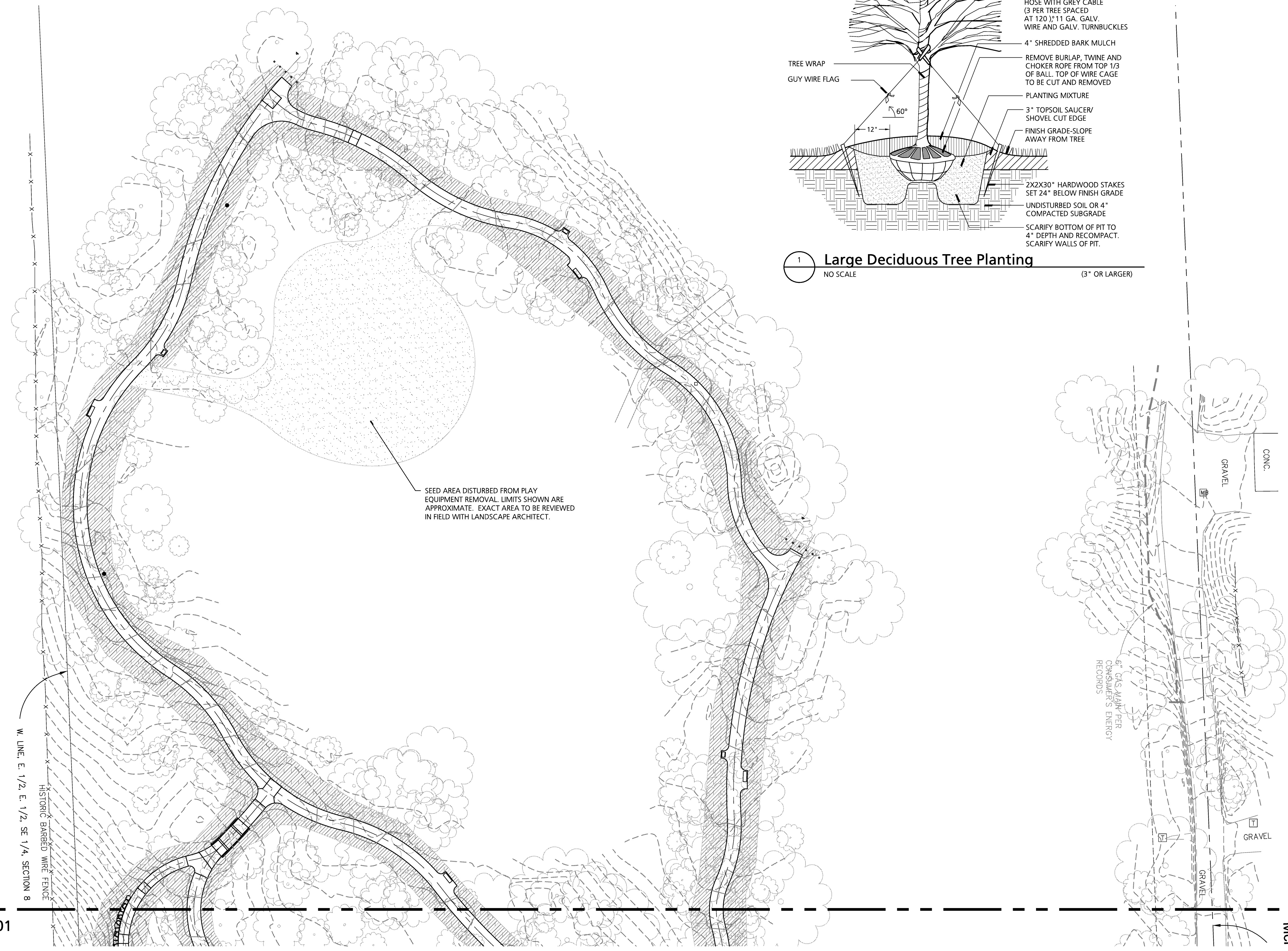
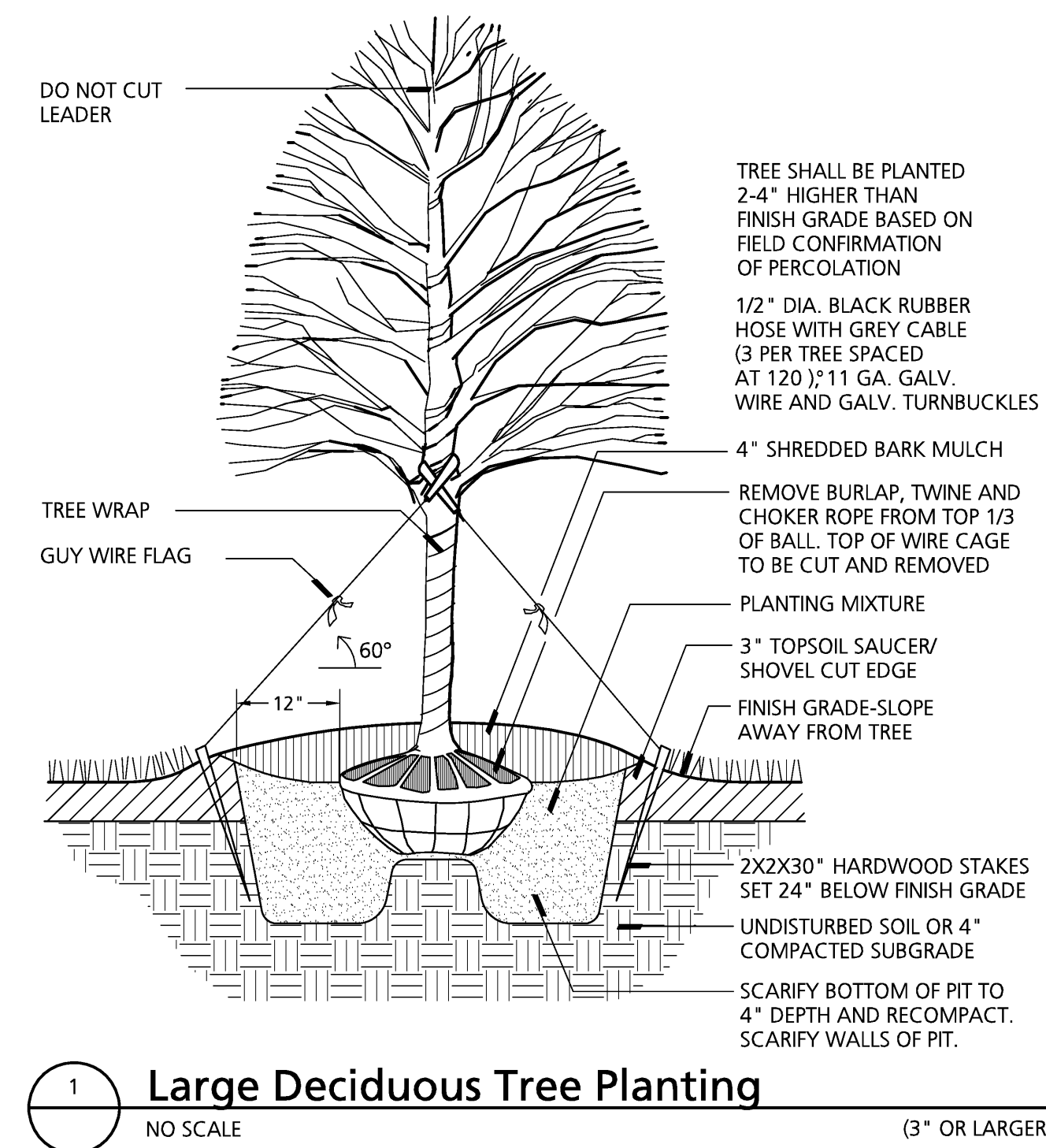
LANDSCAPE LEGEND

-  PROPOSED LOW MAINTENANCE FESCUE SEED MIX
-  PROPOSED WOODLAND SEED MIX
-  PROPOSED WET SWALE SEED MIX
-  PROPOSED CANOPY TREE



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Drawn:	NB/BB
Checked:	BB
Approved:	BB



MATCH LINE L-101

Landscape Notes:

1. SEE SHEET L-101 FOR NOTES

Legend

1. SEE SHEET L-101 FOR LEGEND



Know what's below.
 Call before you dig.

