

INDIANA DEPARTMENT OF ADMINISTRATION PUBLIC WORKS DIVISION

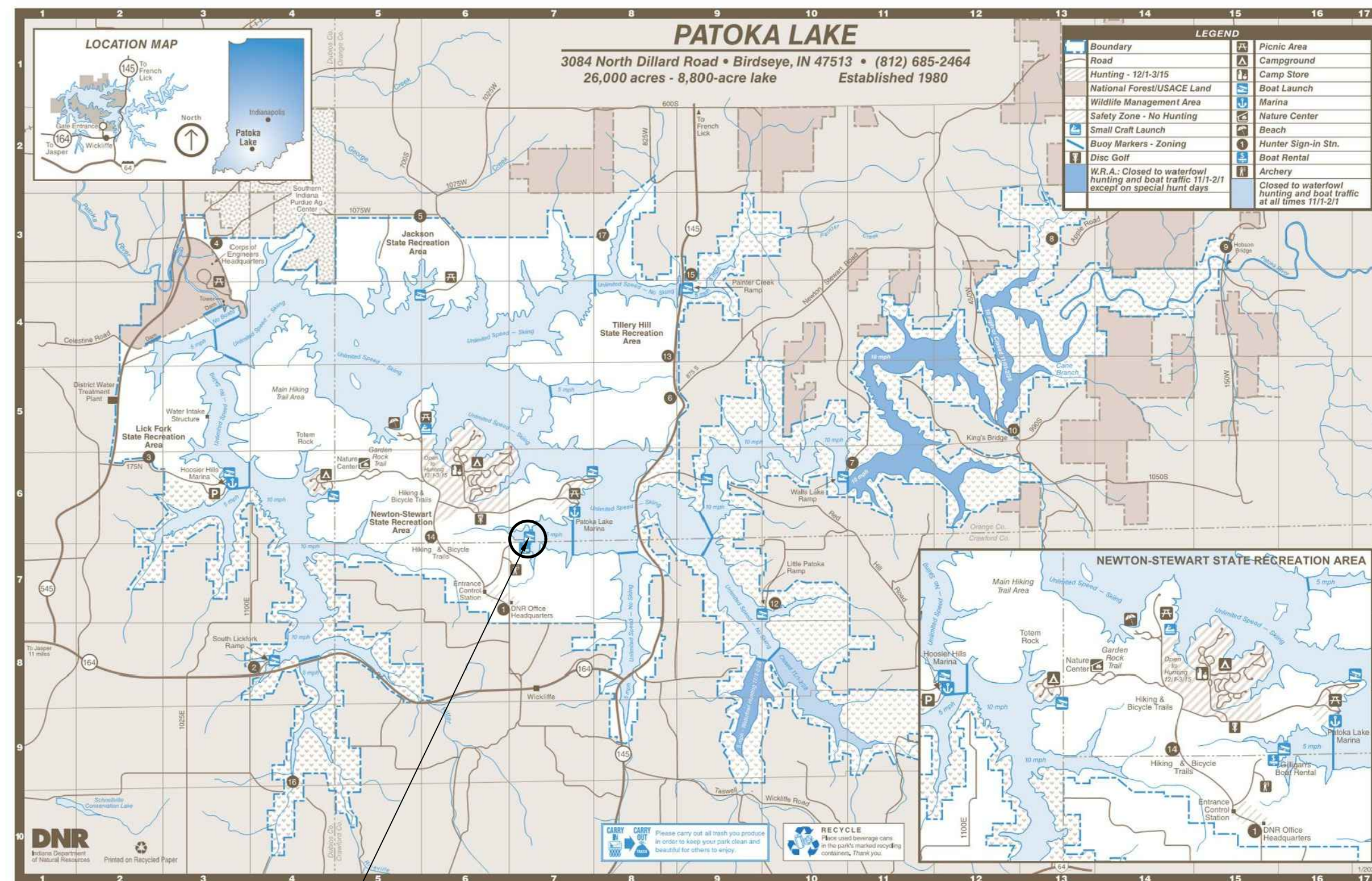
PUBLIC WORKS PROJECT NO. ENG2201760232 DNR - PATOKA LAKE - SOUTH BOAT RAMP IMPROVEMENTS



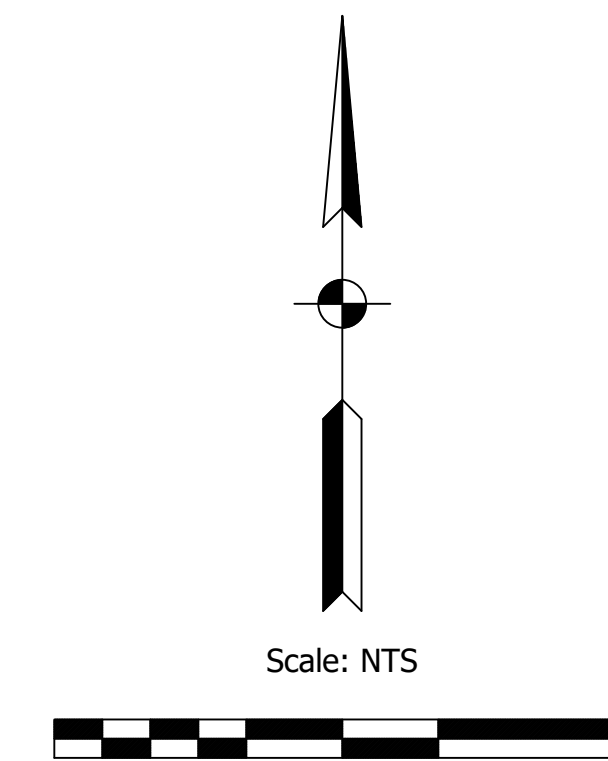
UTILITY NOTES

NOTE 1: Utilities shown are from visual inspection of the site and as relayed to the the ENGINEER by the OWNER.

NOTE 2: CONTRACTOR shall field verify location and depth of utilities prior to ordering of pipe material to ensure that the proposed plan will not be in conflict with existing utilities.



Sheet List Table	
Sheet Number	Sheet Title
G-1	TITLE SHEET
C-1	EXISTING CONDITIONS
C-2	SITE PLAN
C-3	GRADING PLAN
C-4	STRIPING & SIGNAGE
C-5 & C-6	DETAILS



PROJECT LOCATION
This project is located on Elon Rd approximately 0.7 miles Northeast of the intersection of Dillard Rd (221) and Elon Rd, in Crawford County, Indiana

PLANS PREPARED BY:

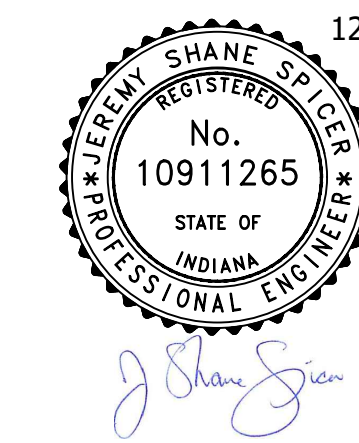


Offices in North Vernon, Seymour, & New Castle

72 Henry Street, PO Box 47
North Vernon, IN 47265

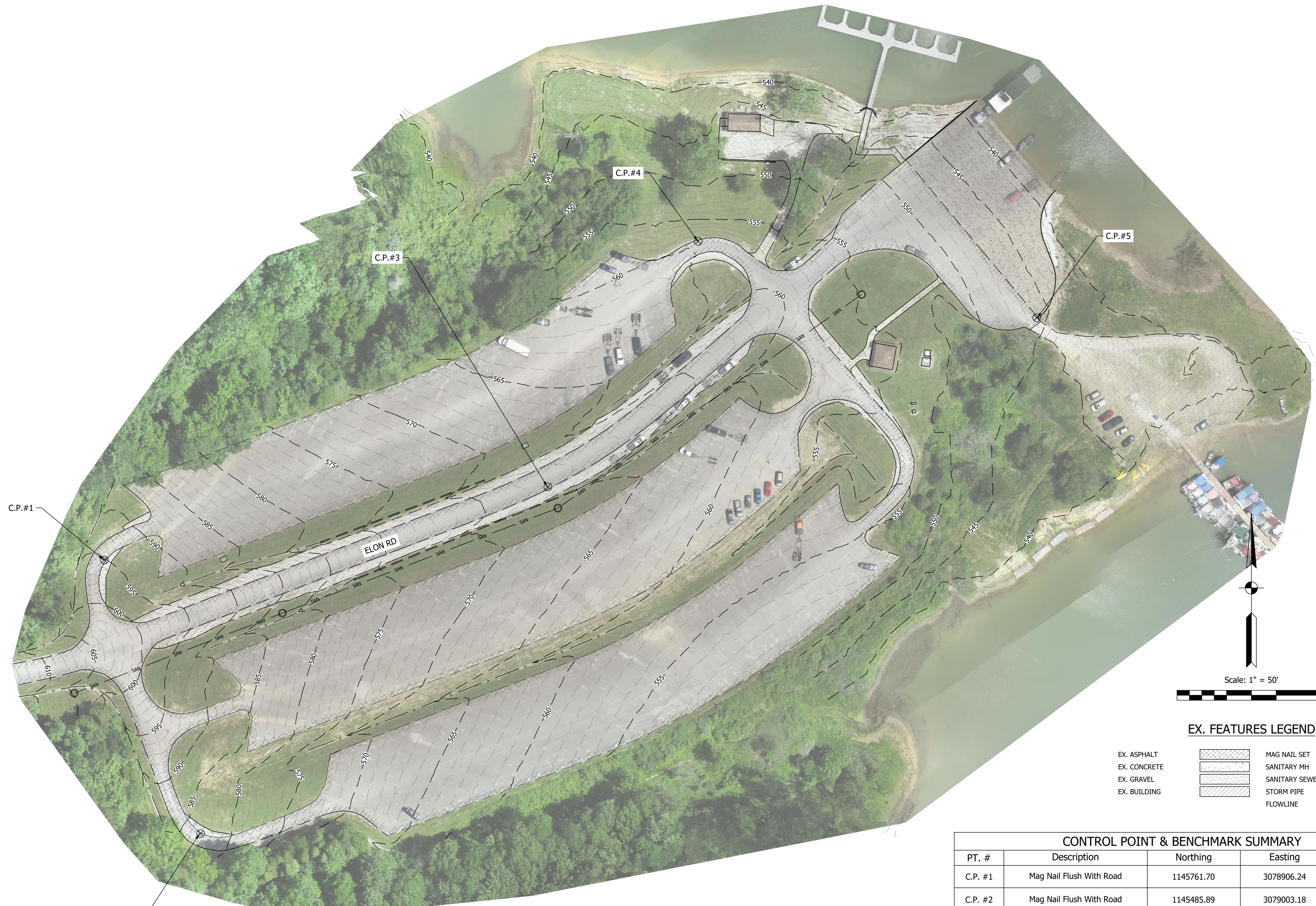
P: (812) 346-2045 Toll Free: 1-866-ENG-FPBH

www.fpbhonline.com

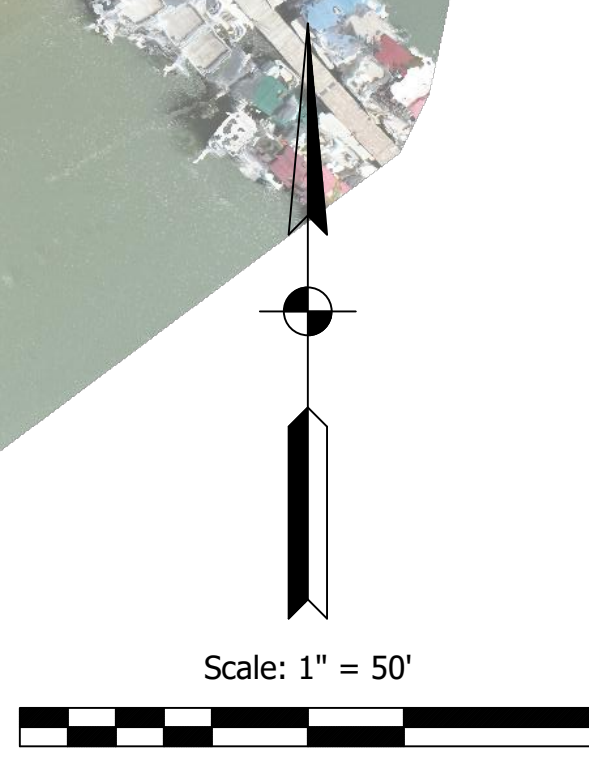


PREPARED FOR: INDIANA DEPARTMENT OF NATURAL RESOURCES
PROJECT DESCRIPTION: PATOKA SOUTH BOAT RAMP IMPROVEMENTS
FILE NUMBER: 22-12509
DATE: DECEMBER 09, 2022
DESIGN PHASE: FINAL PLANS
PLOT SHEETS TO SCALE ON ANSI D 22" X 34"

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HORIZONTAL DATUM = NAD83 STATE PLANE COORDINATES (INDIANA WEST)
 VERTICAL DATUM = NAVD 88
 TOPOGRAPHIC SURVEY AS INDICATED BY FIELD WORK COMPLETED ON JUNE 20, 2022.



EX. FEATURES LEGEND

- | | | | |
|--------------|--|----------------|--|
| EX. ASPHALT | | MAG NAIL SET | |
| EX. CONCRETE | | SANITARY MH | |
| EX. GRAVEL | | SANITARY SEWER | |
| EX. BUILDING | | STORM PIPE | |
| | | FLOWLINE | |

CONTROL POINT & BENCHMARK SUMMARY				
PT. #	Description	Northing	Easting	Elevation
C.P. #1	Mag Nail Flush With Road	1145761.70	3078906.24	595.16
C.P. #2	Mag Nail Flush With Road	1145485.89	3079003.18	583.11
C.P. #3	Mag Nail Flush With Road	1145835.52	3079353.45	568.66
C.P. #4	Mag Nail Flush With Road	1146083.11	3079505.03	559.72
C.P. #5	Mag Nail Flush With Road	1146006.02	3079846.28	546.27

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12/9/2022

 J. Shane Spicer

SCALE: 1" = 50'
 DRAWN BY: ARC/BRB
 CHECKED BY: ARC
 DATE: DECEMBER 09, 2022

Revision	Drawn By	Date

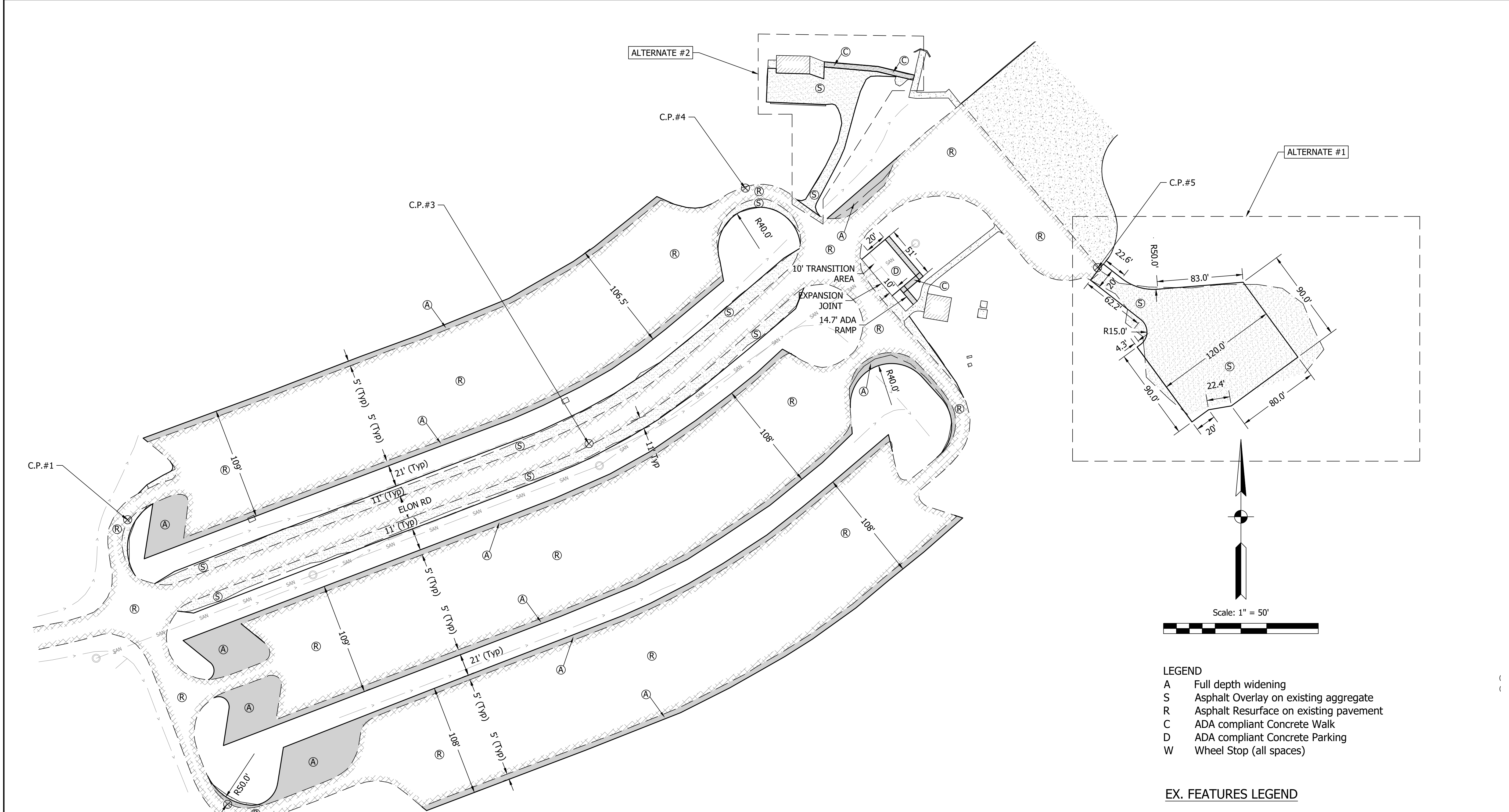
FILE NO: 22-12509
 CLIENT NAME:
 INDIANA DEPARTMENT OF
 NATURAL RESOURCES

PROJECT DESCRIPTION:
 PATOKA SOUTH BOAT RAMP
 IMPROVEMENTS

SHEET TITLE:
 EXISTING CONDITIONS

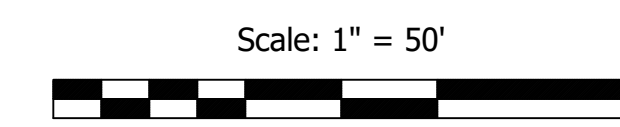
DESIGN PHASE:
 FINAL PLANS

SHEET NUMBER:
C-1



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 VERTICAL DATUM = NAVD 88
 TOPOGRAPHIC SURVEY AS INDICATED BY FIELD WORK COMPLETED ON JUNE 20, 2022.



- LEGEND**
- A Full depth widening
 - S Asphalt Overlay on existing aggregate
 - R Asphalt Resurface on existing pavement
 - C ADA compliant Concrete Walk
 - D ADA compliant Concrete Parking
 - W Wheel Stop (all spaces)

- EX. FEATURES LEGEND**
- EX. ASPHALT [Pattern]
 - EX. CONCRETE [Pattern]
 - EX. GRAVEL [Pattern]
 - EX. BUILDING [Pattern]
 - MAG NAIL SET [Symbol]
 - SANITARY MH [Symbol]
 - SANITARY SEWER [Symbol]
 - STORM PIPE [Symbol]
 - FLOWLINE [Symbol]

- SITE PLAN NOTES**
- SEE DETAIL SHEETS FOR ADDITIONAL INFORMATION AND EROSION CONTROL DETAILS.
 - CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE THROUGHOUT PROJECT LIMITS.
 - CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY ON RELOCATIONS REQUIRED.

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12/9/2022

 J. Shane Spencer

SCALE: 1" = 50'

DRAWN BY: ARC/BRB		
CHECKED BY: ARC		
DATE: DECEMBER 09, 2022		
Revision	Drawn By	Date

FILE NO: 22-12509
 CLIENT NAME:
 INDIANA DEPARTMENT OF
 NATURAL RESOURCES

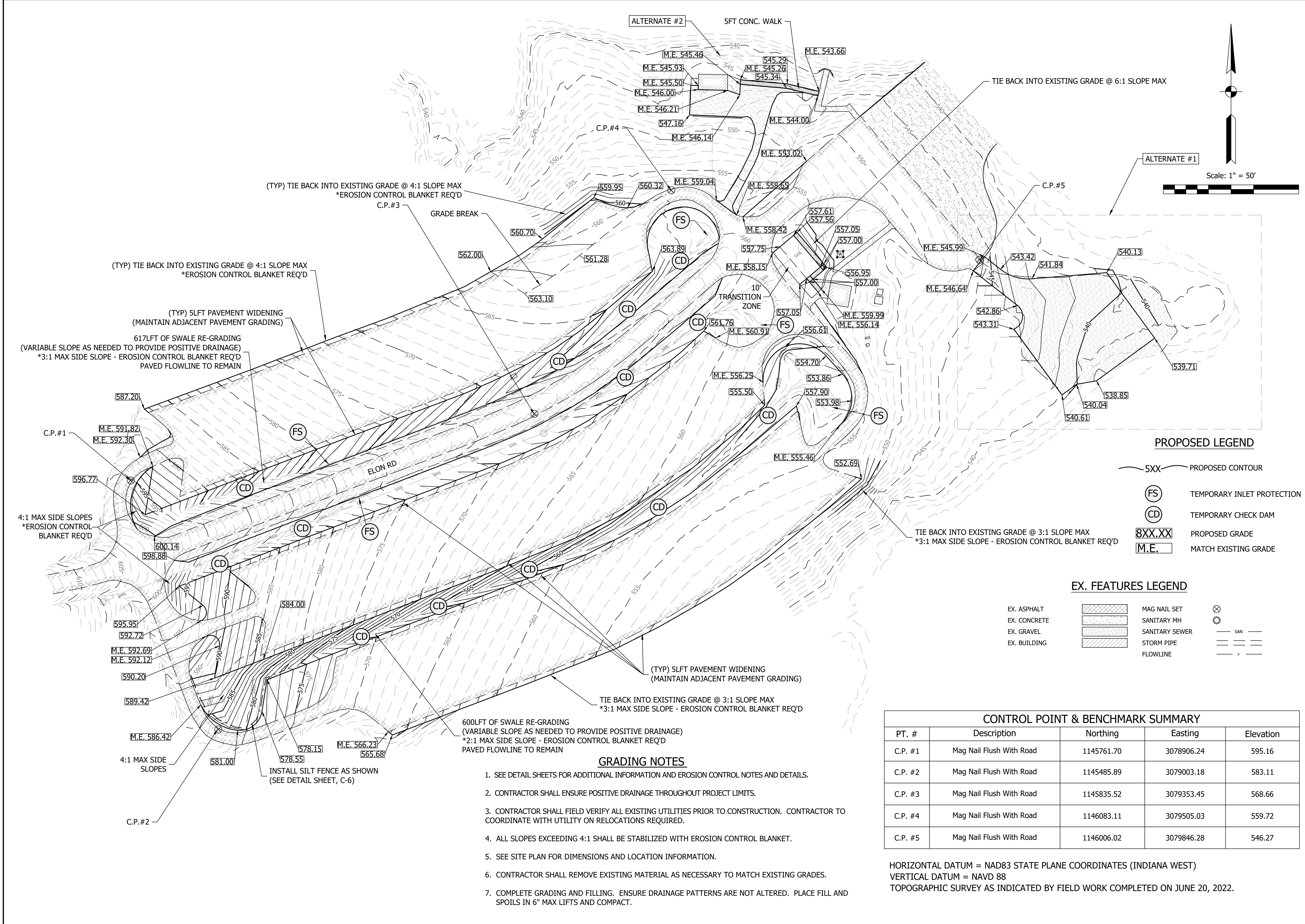
PROJECT DESCRIPTION:
 PATOKA SOUTH BOAT RAMP
 IMPROVEMENTS

SHEET TITLE:
 SITE PLAN

DESIGN PHASE:
 FINAL PLANS

SHEET NUMBER:
C-2

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12/9/2022
No. 10911265
STATE OF INDIANA
REGISTERED PROFESSIONAL ENGINEER
J. Shane Sien

SCALE: 1" = 50'
DRAWN BY: ARC/BRB
CHECKED BY: ARC
DATE: DECEMBER 09, 2022

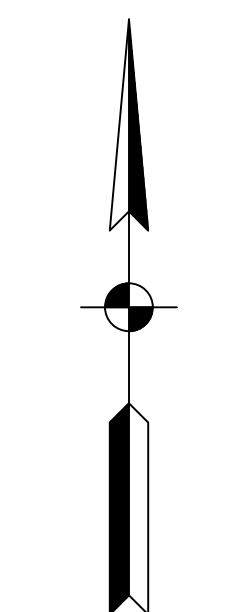
Revision	Drawn By	Date

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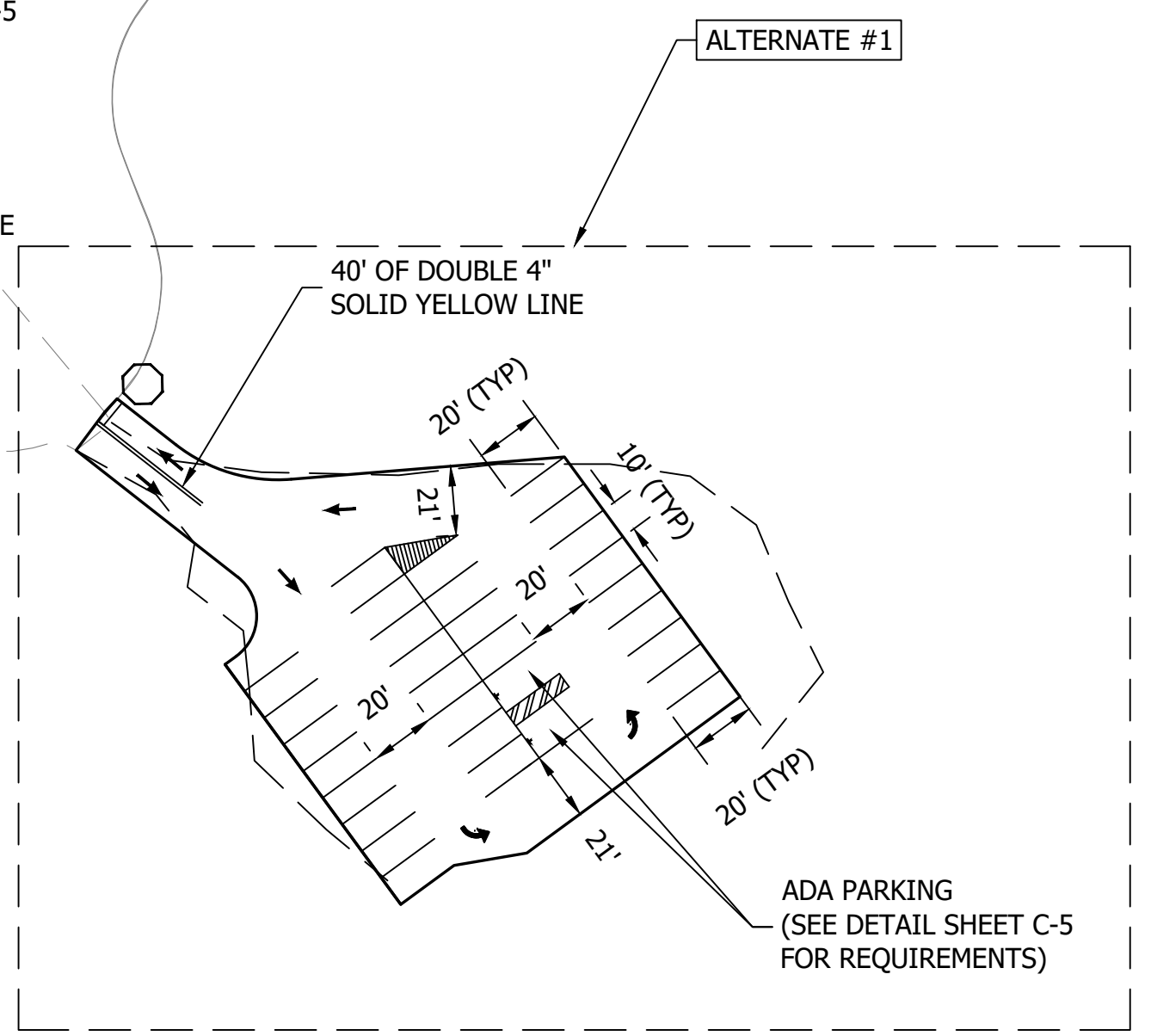
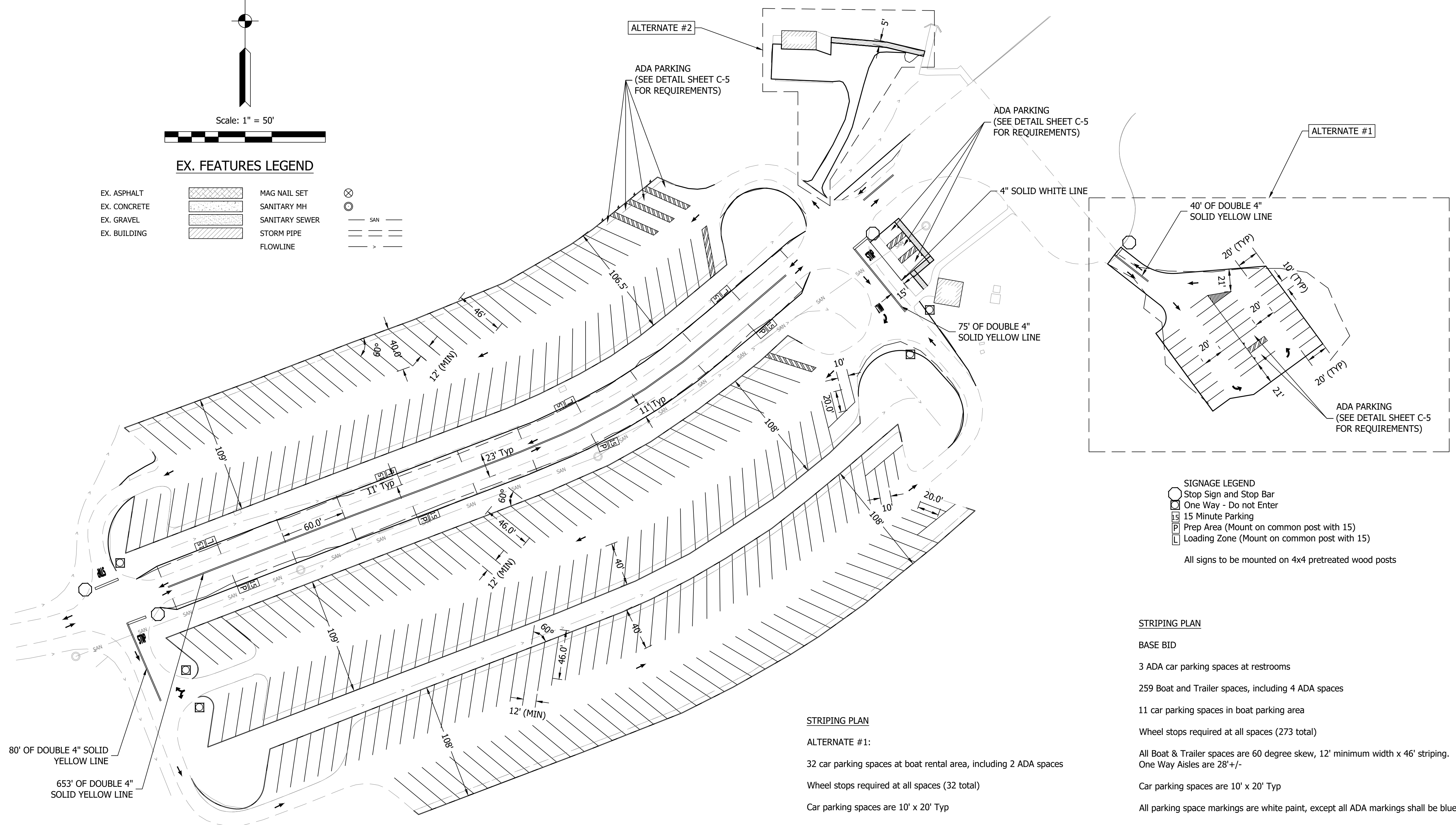
FILE NO: 22-12509
CLIENT NAME: INDIANA DEPARTMENT OF NATURAL RESOURCES
PROJECT DESCRIPTION: PATOKA SOUTH BOAT RAMP IMPROVEMENTS
SHEET TITLE: GRADING PLAN
DESIGN PHASE: FINAL PLANS
SHEET NUMBER: **C-3**



Scale: 1" = 50'

EX. FEATURES LEGEND

- | | | | |
|--------------|--|----------------|--|
| EX. ASPHALT | | MAG NAIL SET | |
| EX. CONCRETE | | SANITARY MH | |
| EX. GRAVEL | | SANITARY SEWER | |
| EX. BUILDING | | STORM PIPE | |
| | | FLOWLINE | |



- SIGNAGE LEGEND**
- Stop Sign and Stop Bar
 - One Way - Do not Enter
 - 15 Minute Parking
 - Prep Area (Mount on common post with 15)
 - Loading Zone (Mount on common post with 15)
- All signs to be mounted on 4x4 pretreated wood posts

STRIPING PLAN

BASE BID

- 3 ADA car parking spaces at restrooms
- 259 Boat and Trailer spaces, including 4 ADA spaces
- 11 car parking spaces in boat parking area
- Wheel stops required at all spaces (273 total)
- All Boat & Trailer spaces are 60 degree skew, 12' minimum width x 46' striping. One Way Aisles are 28'+/-
- Car parking spaces are 10' x 20' Typ
- All parking space markings are white paint, except all ADA markings shall be blue.
- Two way roads shall have double yellow centerline
- Mainline Prep and Loading areas shall have perpendicular markings at 60 foot intervals

STRIPING PLAN

ALTERNATE #1:

- 32 car parking spaces at boat rental area, including 2 ADA spaces
- Wheel stops required at all spaces (32 total)
- Car parking spaces are 10' x 20' Typ
- All parking space markings are white paint, except all ADA markings shall be blue.
- Two way roads shall have double yellow centerline

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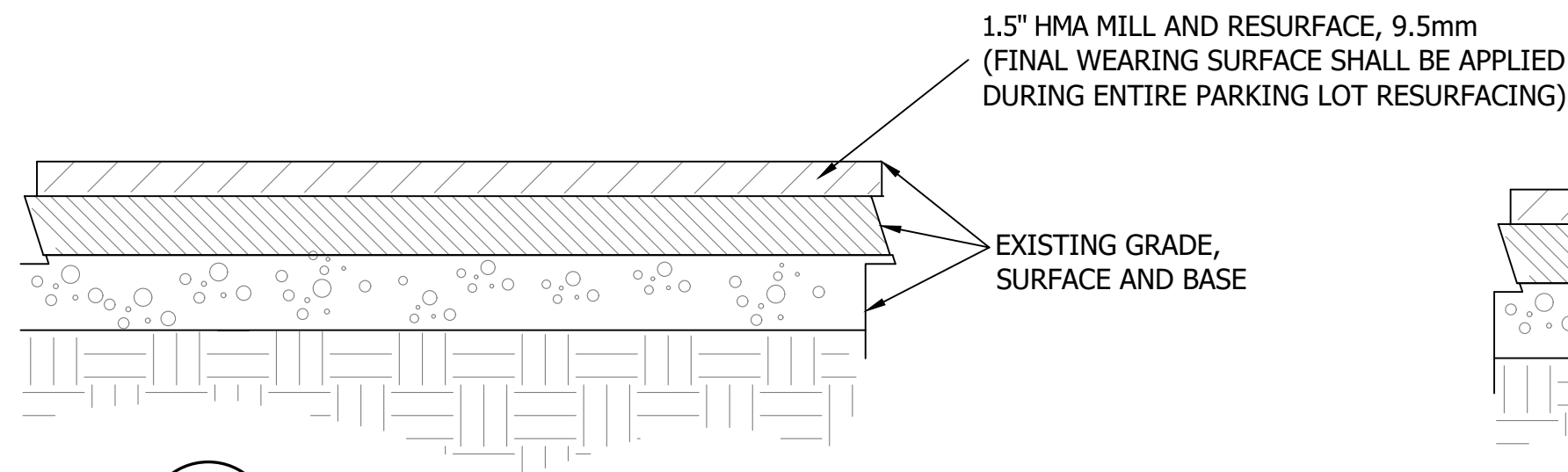
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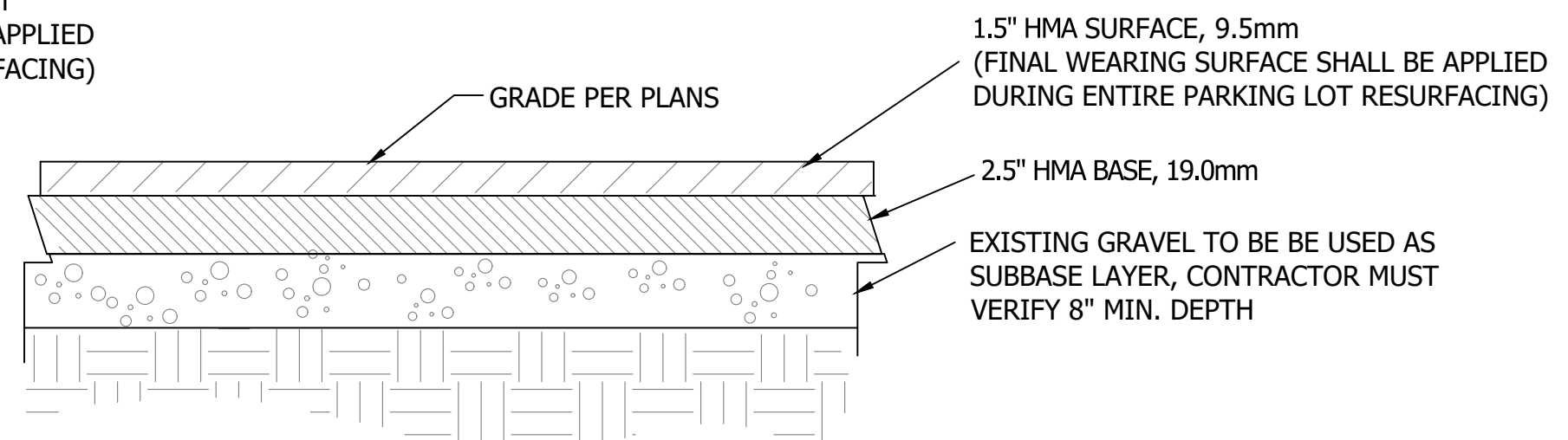


SCALE: 1" = 50'		
DRAWN BY: ARC/BRB		
CHECKED BY: ARC		
DATE: DECEMBER 09, 2022		
Revision	Drawn By	Date
FILE NO: 22-12509		
CLIENT NAME: INDIANA DEPARTMENT OF NATURAL RESOURCES		
PROJECT DESCRIPTION: PATOKA SOUTH BOAT RAMP IMPROVEMENTS		
SHEET TITLE: STRIPING & SIGNAGE		
DESIGN PHASE: FINAL PLANS		
SHEET NUMBER: C-4		

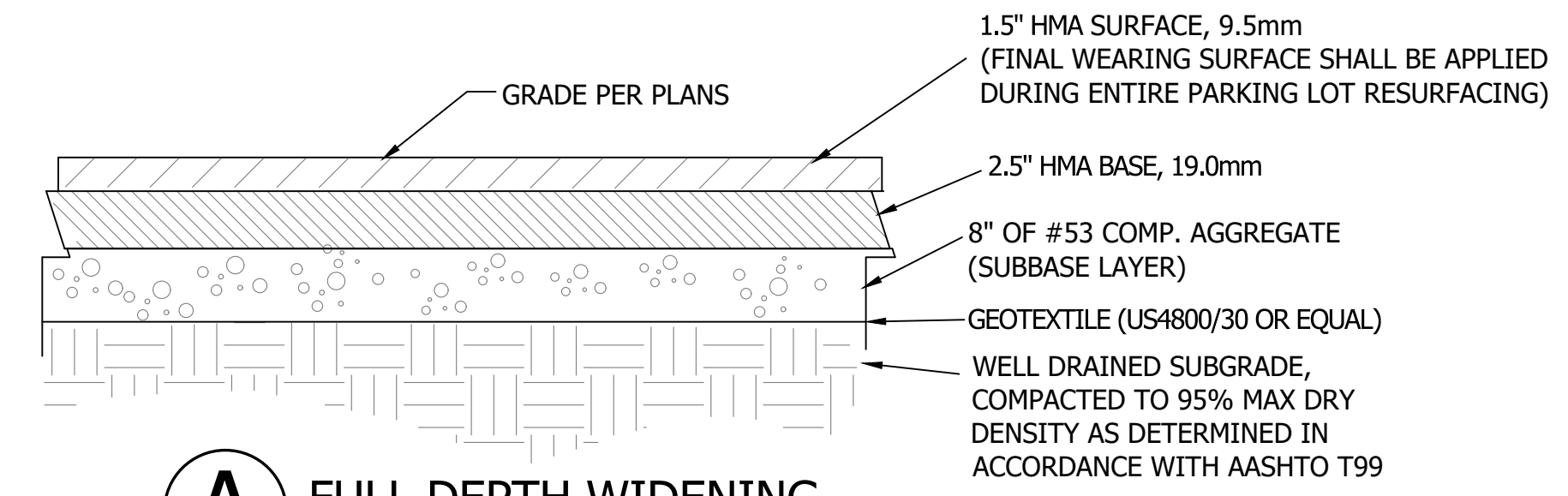
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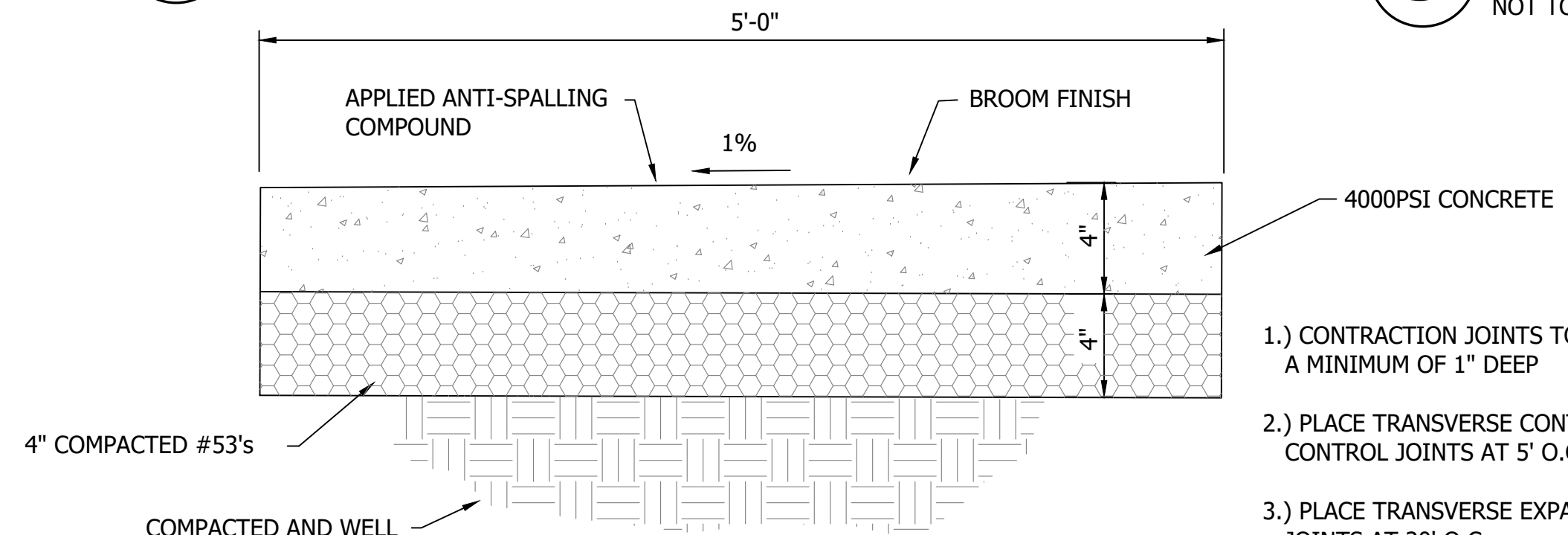
R ASPHALT RESURFACE
NOT TO SCALE



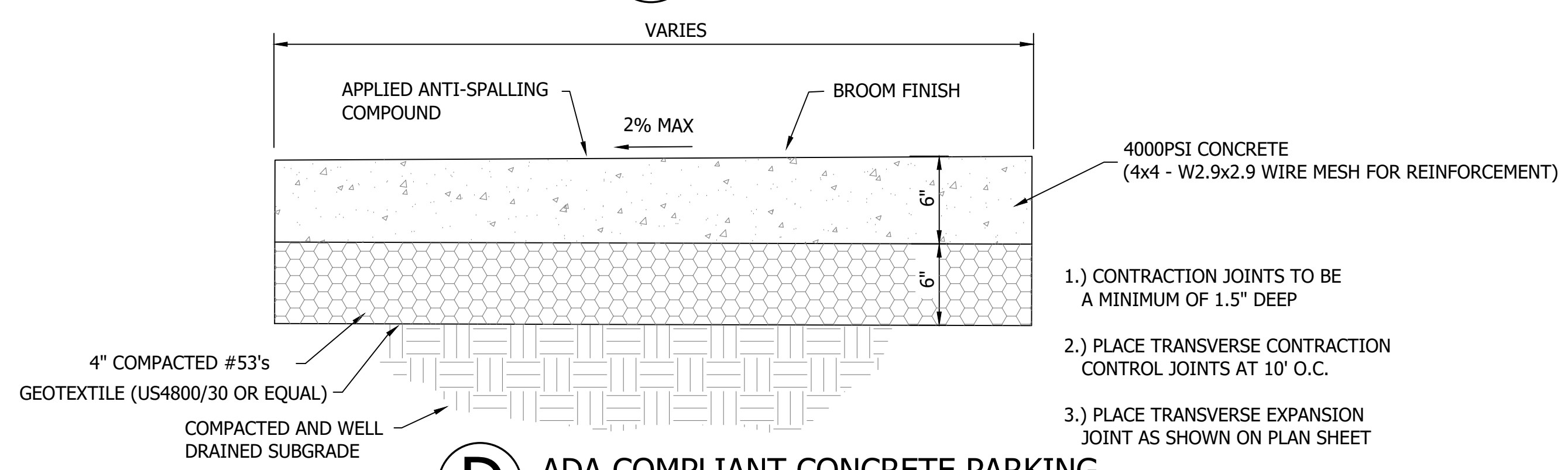
S ASPHALT OVERLAY ON EXISTING AGGREGATE
NOT TO SCALE



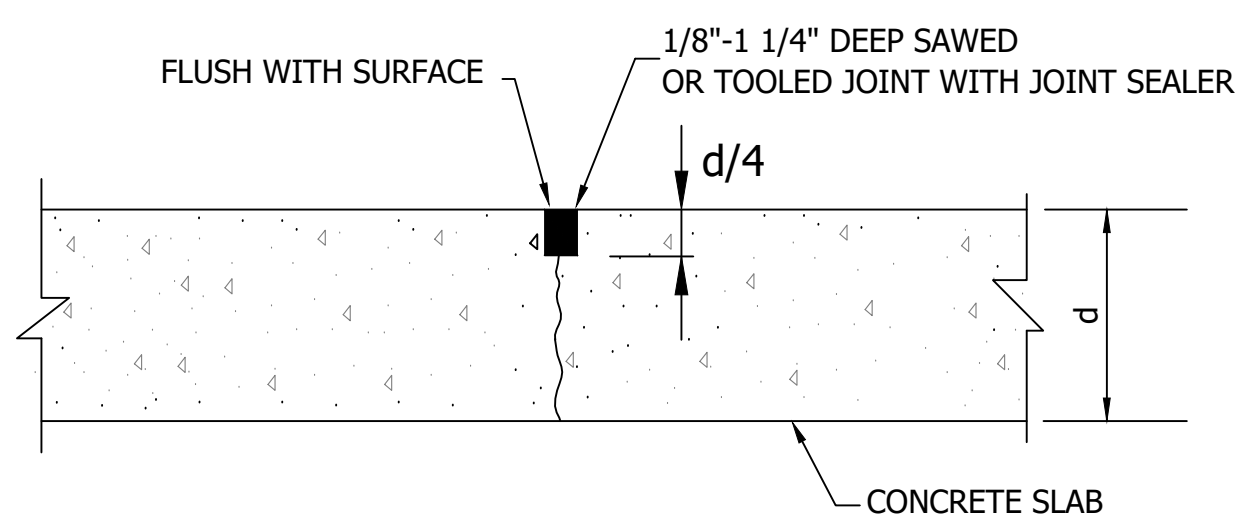
A FULL DEPTH WIDENING
NOT TO SCALE



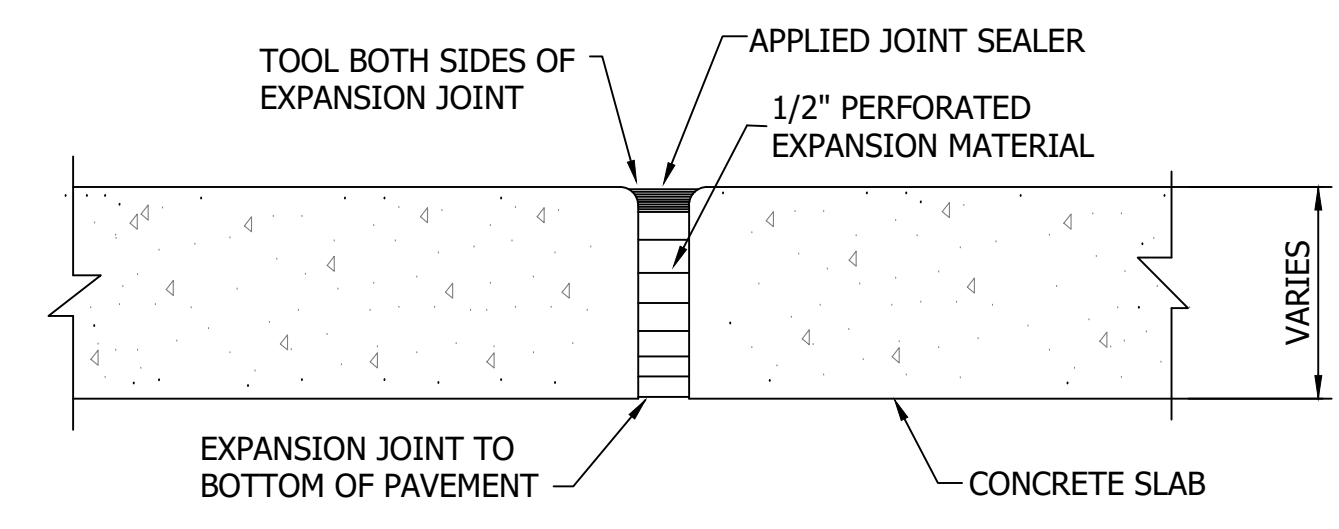
C ADA COMPLIANT CONCRETE SIDEWALK
NOT TO SCALE



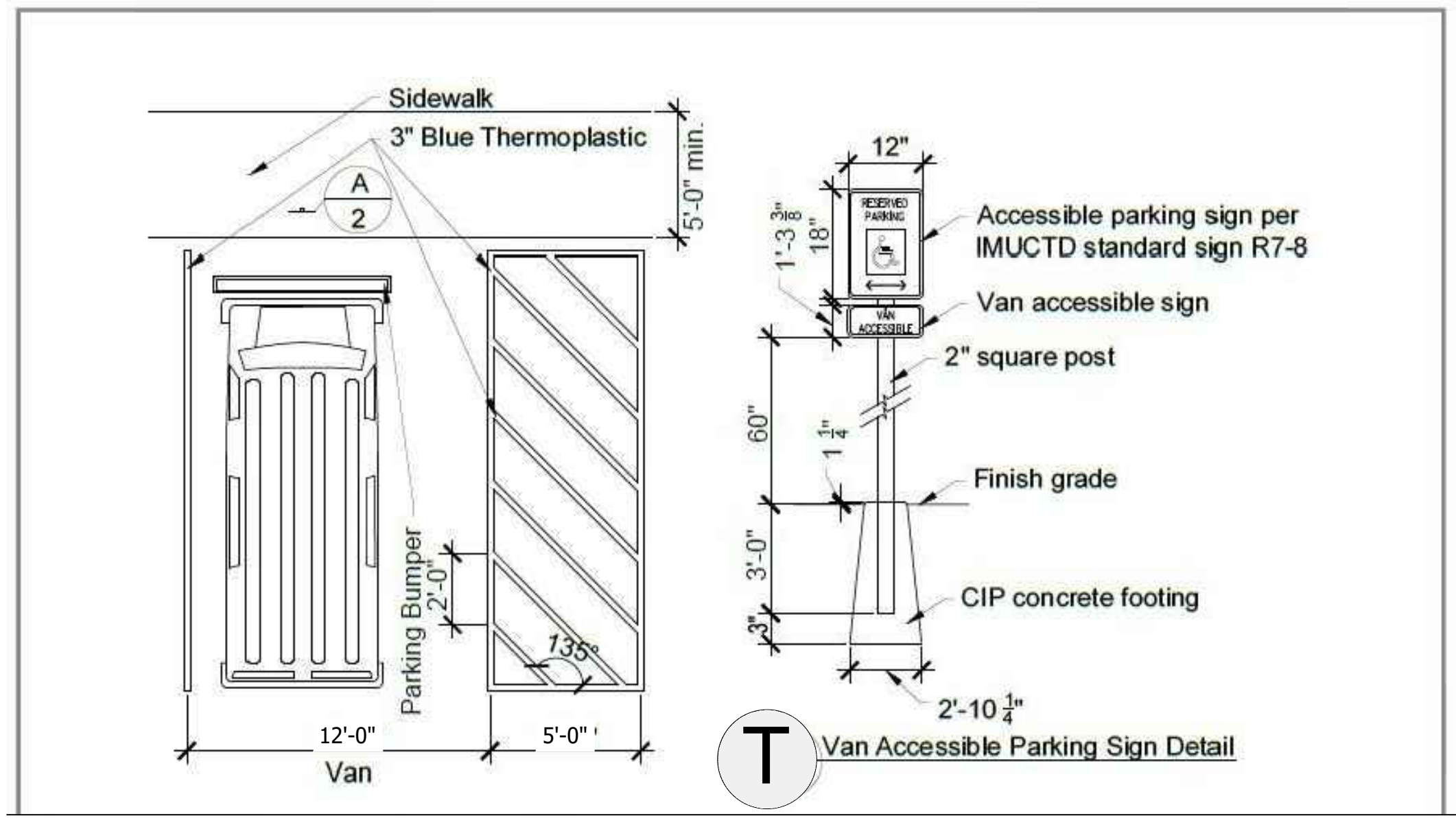
D ADA COMPLIANT CONCRETE PARKING
NOT TO SCALE



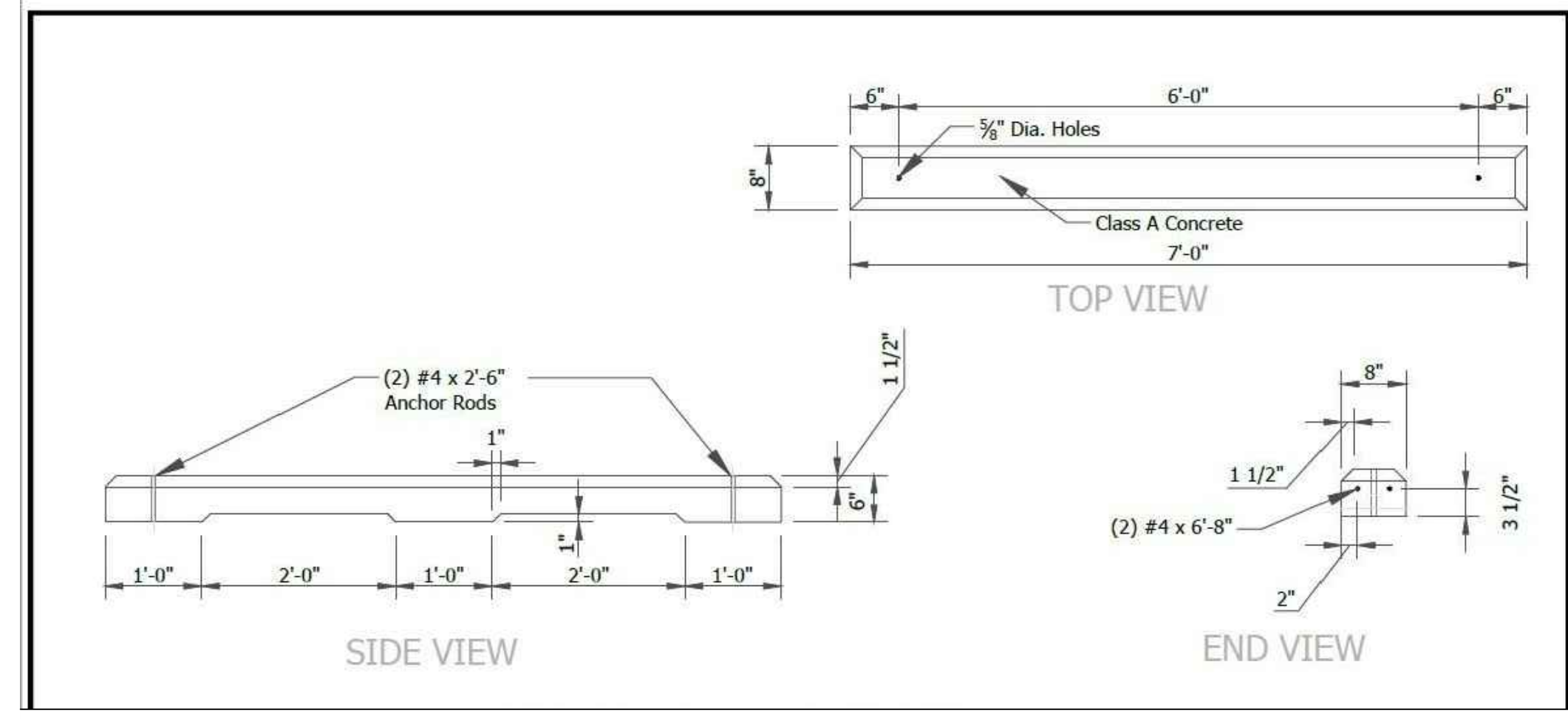
STANDARD CONTROL JOINT
NOT TO SCALE



STANDARD EXPANSION JOINT
NOT TO SCALE



ADA VAN ACCESSIBLE PARKING DETAIL
NOT TO SCALE
(NOTE: DETAIL PROVIDED BY DNR DIVISION OF ENGINEERING)



W CONCRETE PARKING WHEELSTOP DETAIL
NOT TO SCALE
(NOTE: DETAIL PROVIDED BY DNR DIVISION OF ENGINEERING)
(NOTE: TO BE USED WHEN EXISTING PARKING BUMPERS ARE DETERMINED TO BE UNSATISFACTORY BY OWNER/ENGINEER)

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12/9/2022
REGISTERED PROFESSIONAL ENGINEER
No. 10911265
STATE OF INDIANA
J. Shane Spicer

SCALE: AS SHOWN
DRAWN BY: ARC/BRB
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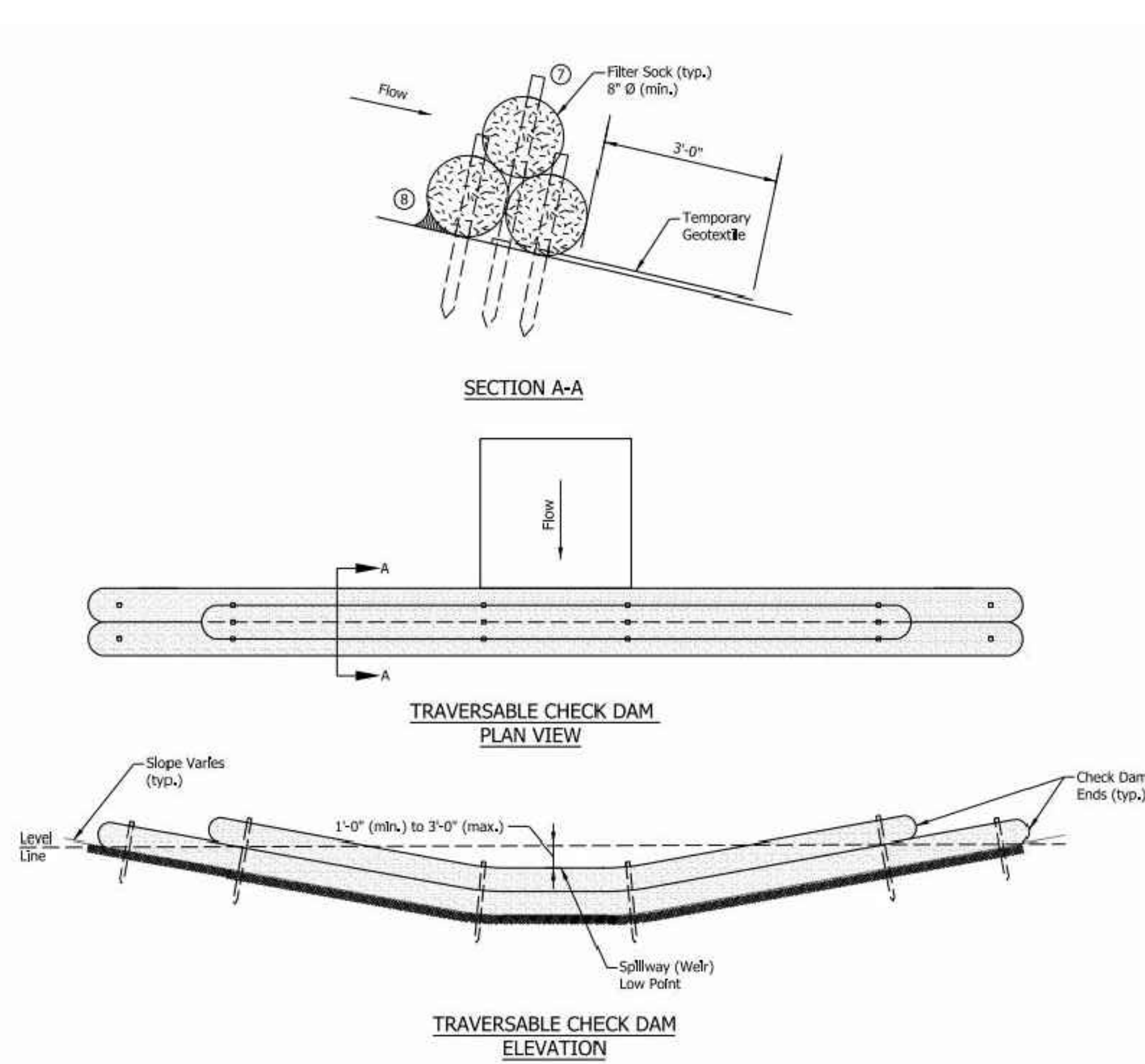
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PATOKA SOUTH BOAT RAMP IMPROVEMENTS

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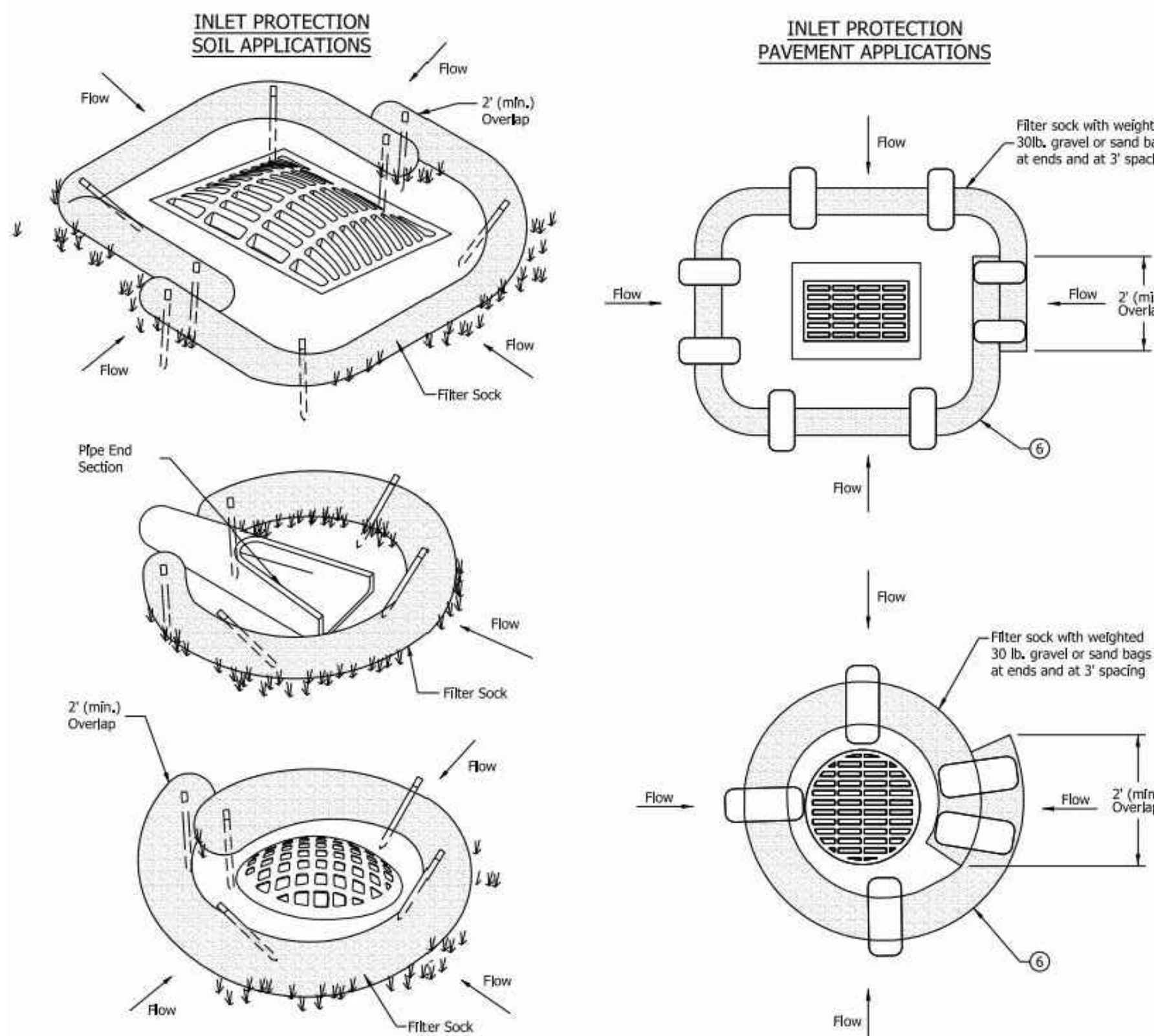
SHEET TITLE:
DETAILS (1 OF 2)

DESIGN PHASE:
FINAL PLANS

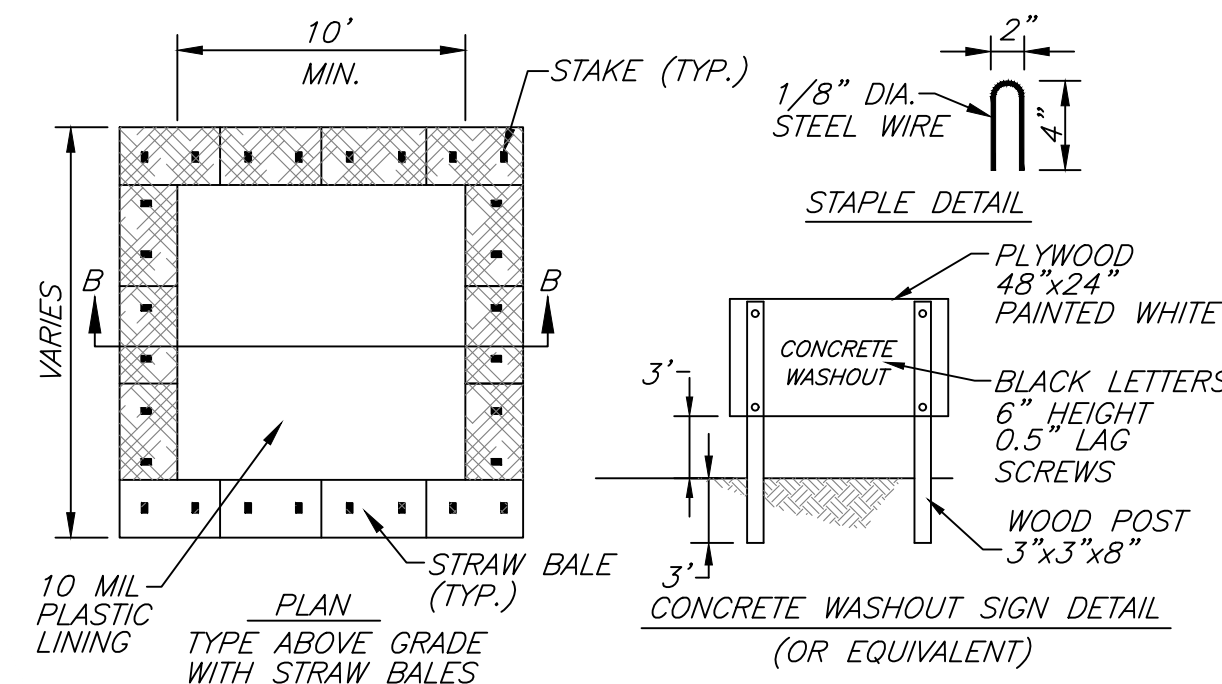
SHEET NUMBER:
C-5



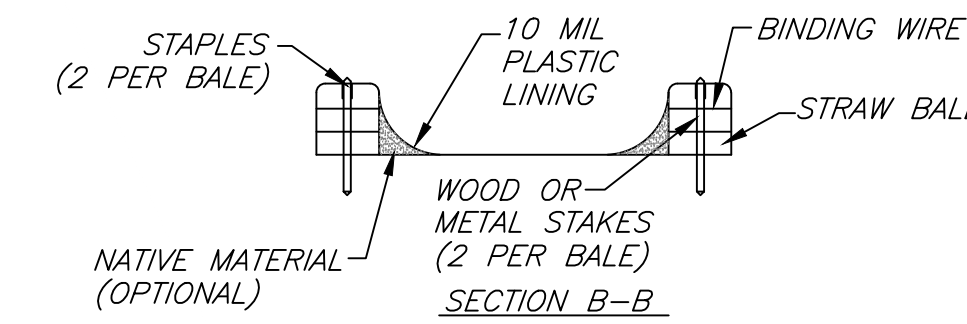
CD ****TEMPORARY CHECK DAM (PER INDOT STD. DWG E205-TECD-08)**
NOT TO SCALE



FS ****TEMPORARY INLET PROTECTION (E205-TECD-02)**
NOT TO SCALE

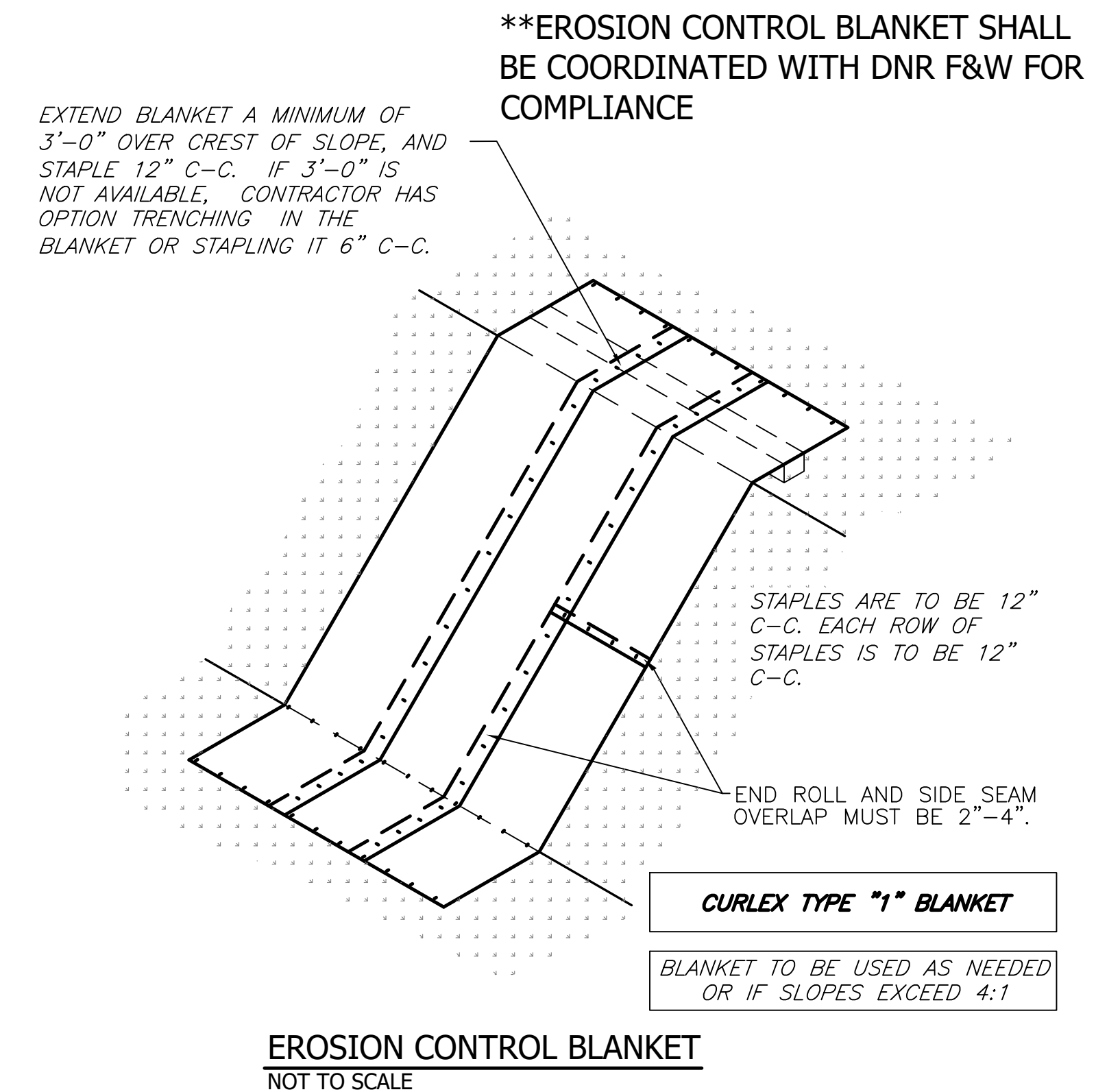


NOTES:
1.) ACTUAL LAYOUT DETERMINED IN FIELD
2.) THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONC. WASHOUT FACILITY.



W **CONCRETE WASHOUT DETAIL**
NOT TO SCALE

CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF WASHOUT. WASHOUT SHALL BE KEPT AS FAR AWAY FROM WATERWAYS AND STORM SEWERS AS POSSIBLE.



EROSION CONTROL BLANKET
NOT TO SCALE

EROSION CONTROL NOTES

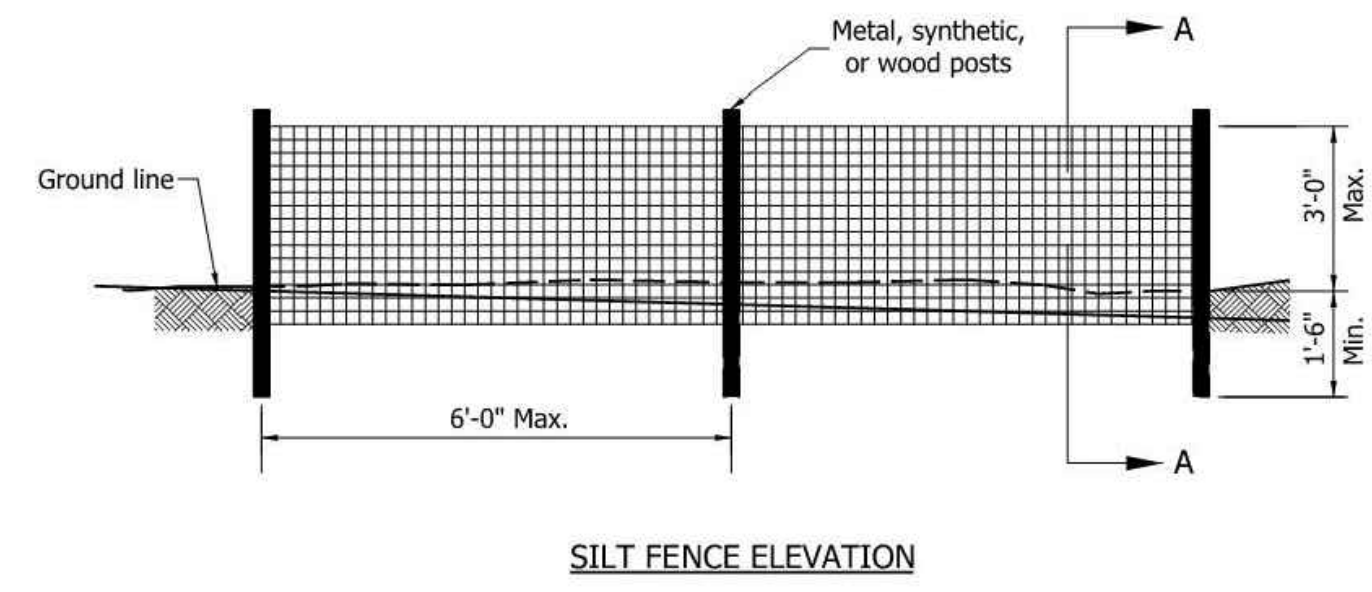
****FILTER SOCK MAINTENANCE & MONITORING REQUIREMENTS**

1. Inspect within 24 hours of a rain event and at least once every seven calendar days. When installed in a series at intervals on a slope, inspection should be done daily.
2. Remove accumulated sediment when it reaches one-quarter the height of the filter sock. Inspect to ensure that the sock is maintaining its integrity and producing adequate flow.
3. Repair eroded and damaged areas. If ponding becomes excessive, socks should be removed and either reconstructed or new product installed. Reseed, if applicable.
4. If the filter sock is not designed as a permanent filter or part of the natural landscape and the contributing drainage area has been stabilized, use a blade or knife to cut open sock and use a bulldozer, loader, rake, or other device to incorporate the organic material into the soil, or spread it over the top of the soil surface for final seeding. Remove and dispose of sock if necessary.

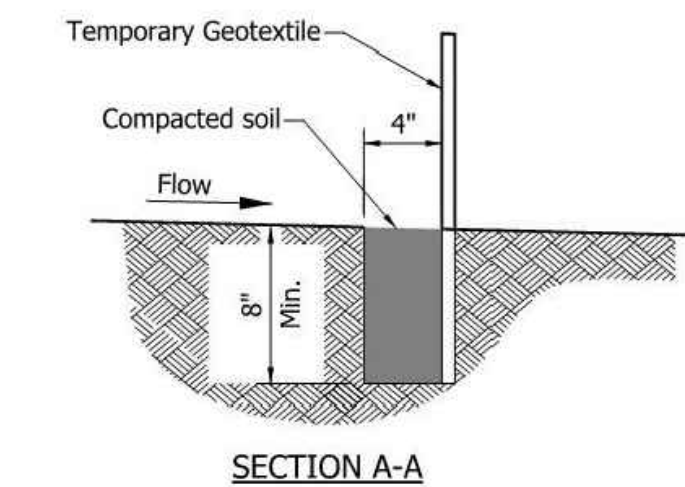
1. PRIOR TO LAND DISTURBANCE, INSTALL SEDIMENT CONTROL MEASURES (SILT FENCE, INLET PROTECTION, ETC.) AS SHOWN TO PREVENT SEDIMENT DISCHARGE OFF THE SITE.
2. CONTRACTOR SHALL STRIP TOPSOIL FROM CONSTRUCTION AREAS PRIOR TO PLACING ANY FILL MATERIALS. STRIPPED TOPSOIL SHALL BE REDISTRIBUTED OVER CONSTRUCTION AREA AFTER GRADING IS COMPLETE AND PRIOR TO MULCH SEEDING. CONTRACTOR SHALL FIELD VERIFY TOPSOIL THICKNESS AND PROVIDE 4" - 6" MINIMUM.
3. INSTALL CONCRETE WASHOUT PRIOR TO POURING ANY CONCRETE. WASHOUT SHALL BE WATERTIGHT PER WASHOUT DETAIL OR DUMPSTER (3 CYD OR LARGER) LINED WITH PLASTIC. CONTRACTOR SHALL MONITOR WASHOUT AND ENSURE MINIMUM OF 12" OF FREEBOARD IS PROVIDED AT ALL TIMES IN WASHOUT. CONTRACTOR SHALL ALLOW WASH WATER TO EVAPORATE/HARDEN AND THEN DISPOSE OF HARDENED CONCRETE. IF DISPOSED OF ONSITE, CONCRETE SHALL BE COMPLETELY BURIED AND COVERED WITH 2 FEET OR MORE OF FILL DIRT. CONTRACTOR SHALL PROVIDE SWCD IC203 DOCUMENTATION FOR ANY OFFSITE PERMITTED SPOIL SITES THAT ARE TO BE USED.

****SILT FENCE MAINTENANCE & MONITORING REQUIREMENTS**

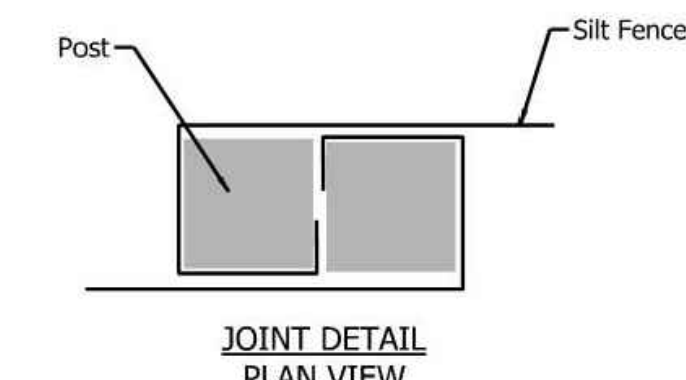
1. Inspect within 24 hours of a rain event and at least once every seven calendar days. When installed in a series at intervals on a slope, inspection should be done daily.
2. Remove accumulated sediment when it reaches one-quarter the height of the silt fence. Inspect to ensure that the fence is maintaining its integrity and producing adequate flow.
3. Repair eroded and damaged areas. If ponding becomes excessive, fence should be removed and either reconstructed or new product installed. Reseed, if applicable.
5. PERFORM FINAL GRADING AND COORDINATE WITH OWNER ON PERMANENT SEED STABILIZATION MIX. IF NO DIRECTION IS PROVIDED STABILIZE WITH PERMANENT SEED MIXTURE TYPE 'U' IN ACCORDANCE WITH CURRENT INDOT SPECIFICATION SECTION 621.06. APPLY FERTILIZER AND MULCH PER INDOT SPECIFICATION 621.05. SEEDING SHALL BE IN ACCORDANCE WITH INDOT SPEC SECTION 621.12 SEASONAL LIMITATIONS: WARRANTY BOND REQUIRED FOR SEEDING DONE BETWEEN OCTOBER 16 AND JANUARY 31. SEEDING WITHOUT MULCH SHALL NOT BE DONE BETWEEN MAY 1 AND AUGUST 15. AS PART OF FINAL GRADING AND STABILIZATION, CONTRACTOR SHALL REMOVE ANY SEDIMENT ACCUMULATED IN TRAPPING DEVICES. IMMEDIATELY SEED SLOPES WITH MULCH SEEDING TYPE U OR EROSION CONTROL BLANKET WITH SEEDING. TYPE U SEED MIX SHALL BE APPLIED AT 196.5LB/ACRE CONSISTING OF 100LB/ACRE 4-WAY BLEND OF TURF TYPE TALL FESCUE, 50LB/ACRE CREEPING RED FESCUE, 45 LB/ACRE OF PERENNIAL RYE GRASS AND 1.5 LB/ACRE WHITE DUTCH CLOVER. REFER TO INDOT SPEC SECTION 621 FOR ADDITIONAL DETAILS. IF SLOPES EXCEED 3:1, EROSION CONTROL BLANKET IS REQUIRED. SEE SPECS FOR REQUIREMENTS.
6. AFTER PERMANENT EROSION CONTROL MEASURES (i.e. PERMANENT SEEDING) ARE WELL ESTABLISHED THE TEMPORARY EROSION CONTROL MEASURES (i.e. SILT FENCE, ETC.), SHALL BE REMOVED.



SILT FENCE ELEVATION



SECTION A-A



JOINT DETAIL PLAN VIEW

****TEMPORARY SILT FENCE (PER INDOT STD. DWG E205-TECP-11)**
NOT TO SCALE

GENERAL NOTE:
All construction to meet or exceed all state, local, and federal codes & requirements, including but not limited to current INDOT, ISBH, IDEM, OSHA, local requirements & codes. The drawings & specs. that make up the work of this project are interrelated & dependent on every other drawing and spec. section. The contractor shall review all other specs., drawing & addendum (if applicable) to coordinate all work that relates to this project. If an item is drawn or specified on any spec. section or drawing, it shall be as if it were part of this work and shall be provided for in the contract.

NOTES:
1. This sheet is to be: ANSI D 22" X 34"

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12/9/2022
No. 10911265
STATE OF INDIANA
REGISTERED PROFESSIONAL ENGINEER
J. Shane Sien

SCALE: AS SHOWN
DRAWN BY: ARC/BRB
CHECKED BY: ARC
DATE: DECEMBER 09, 2022

Revision	Drawn By	Date

FILE NO: 22-12509
CLIENT NAME:
INDIANA DEPARTMENT OF NATURAL RESOURCES

PROJECT DESCRIPTION:
PATOKA SOUTH BOAT RAMP IMPROVEMENTS

SHEET TITLE:
DETAILS (2 OF 2)

DESIGN PHASE:
FINAL PLANS

SHEET NUMBER:
C-6