

TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN DRIP LINES

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE

ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING

TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED

TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH FLAGGING PRIOR TO THE TREE CLEARING OPERATIONS

PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE

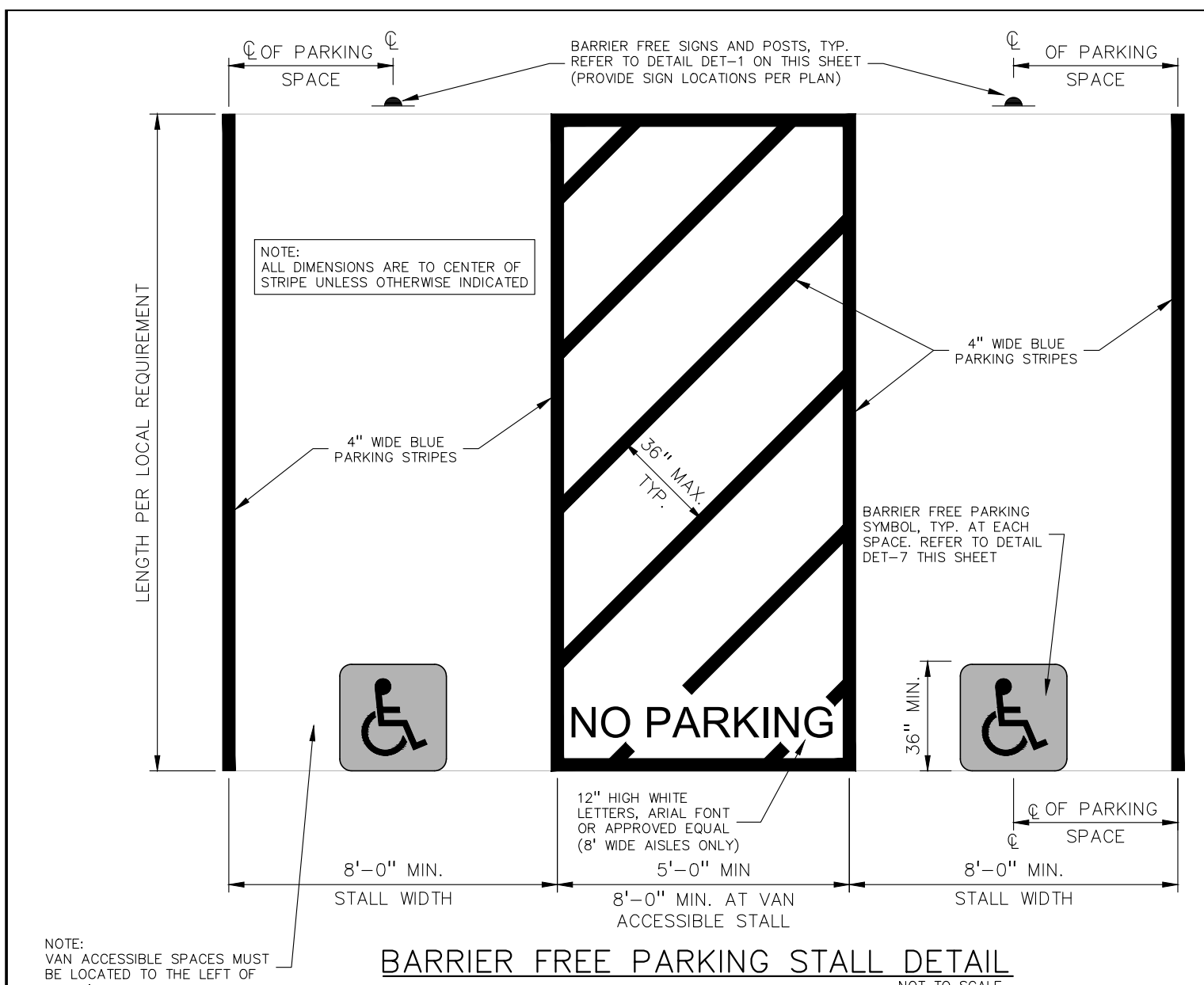
FENCE SHALL BE PLACED IN A CIRCLE WITH A MINIMUM RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND

4' HIGH PROTECTIVE FENCING WITH STEEL POSTS - 10' O.C.

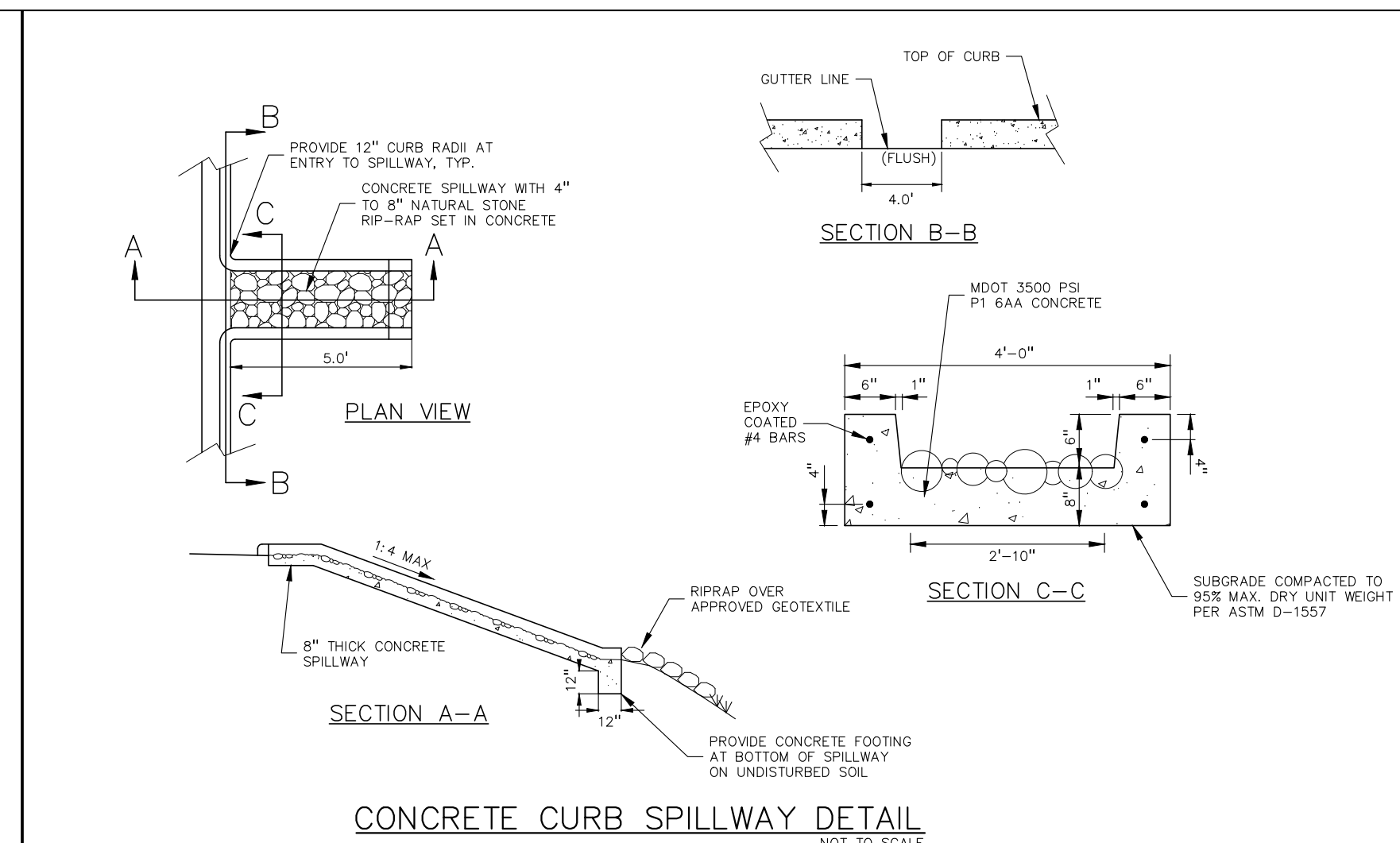
EXISTING SOIL

TREE PROTECTION DETAIL

SCALE: 1" = 3'-0"



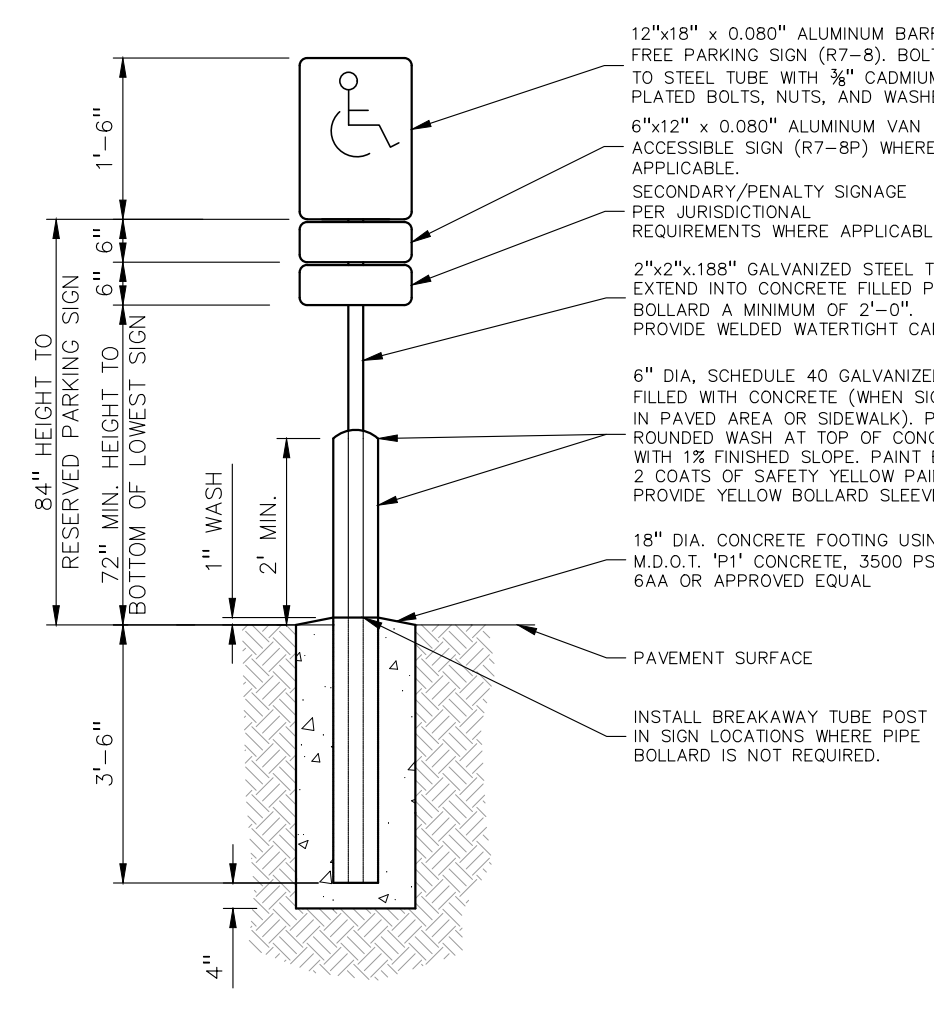
Barrier Free Parking Stall Detail



CONCRETE CURB SPILLWAY DETAIL

Barrier Free Sign Notes:

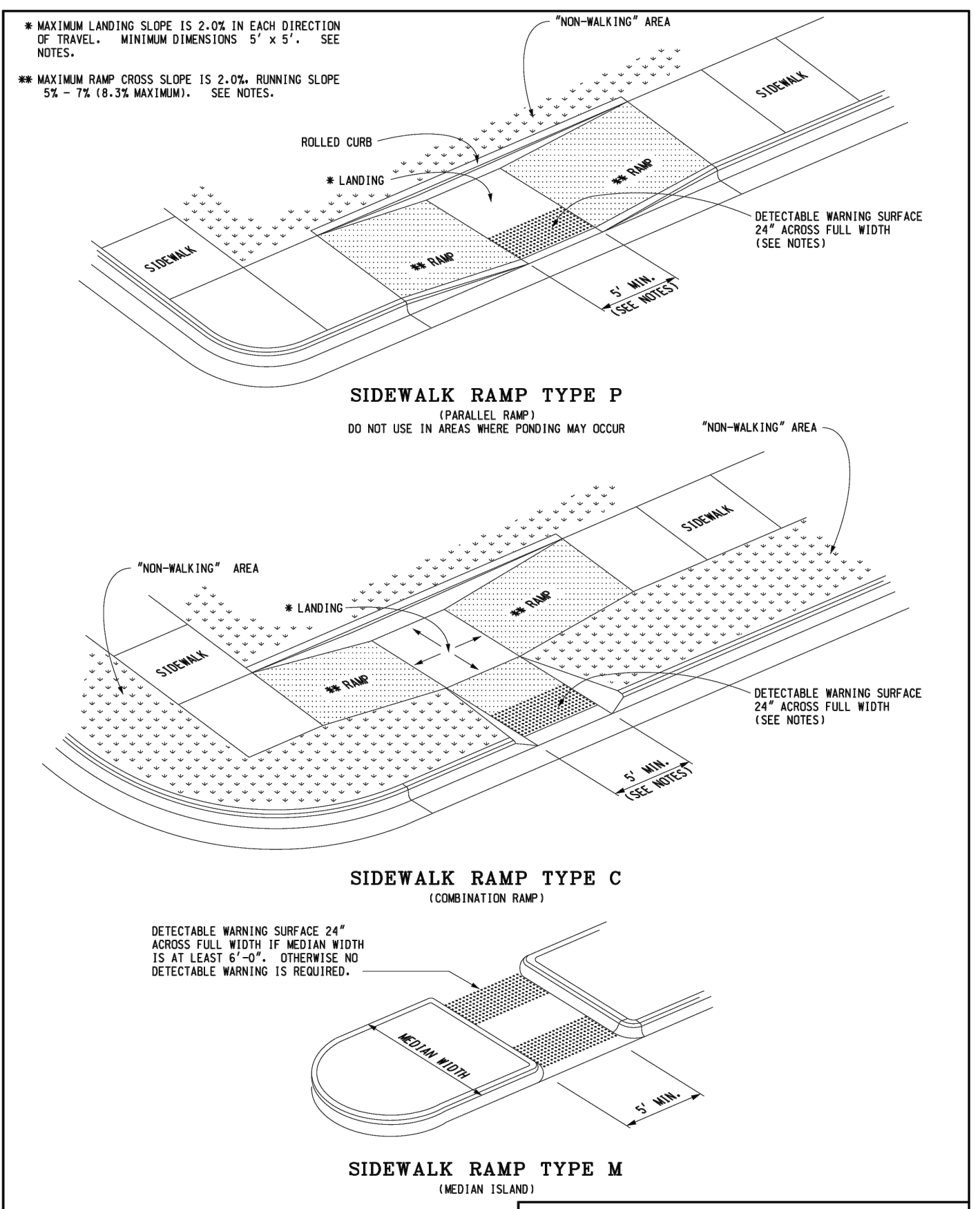
- ONE SIGN IS REQUIRED AT EACH BARRIER FREE PARKING SPACE.
- ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
- WHEN TWO BARRIER FREE PARKING SPACES ARE ADJACENT AND FACING EACH OTHER, TWO SIGNS ARE REQUIRED, BUT CAN BE MOUNTED ON THE SAME POST.
- SIGN POSTS SHALL BE 2" NOM. SQUARE 14-GAUGE GALVANIZED STEEL TUBE WITH 7/16" HOLES AT 1" CENTERS. POSTS SHALL TELESCOPE INSIDE ANCHOR POSTS A MINIMUM OF 12".
- ANCHOR POSTS SHALL BE 2.25" NOM. SQUARE 12-GAUGE GALVANIZED STEEL POST.
- IF THESE NOTES AND DETAILS CONFLICT WITH LOCAL CODES AND ORDINANCES, THE STRICTER REQUIREMENT SHOULD BE USED.
- ALTERNATE MATERIALS MAY BE USED IF IN COMPLIANCE WITH A.D.A. GUIDELINES AND LOCAL REQUIREMENTS.



Barrier Free Sign and Post Detail

SECTION		
ITEM	MATERIAL	LAYER THICKNESS
SURFACE STORAGE		6 INCH
VEGETATION/SURFACE TREATMENT	TURF GRASS PLANTINGS.	
BIORETENTION SOIL	BIORETENTION SOIL MIX.	9 INCH
CHOKER LAYER	MDOT 34G, AASHTO #8 OR APPROVED EQUIVALENT.	3 INCH
RESERVOIR LAYER	MDOT 44A OR 6AA, AASHTO #3, #5 OR #57 OR APPROVED EQUIVALENT.	24 INCH
FILTER LAYER	MDOT 34G, AASHTO #8 OR APPROVED EQUIVALENT.	3 INCH
UNDERDRAIN	PERFORATED PVC OR HDPE UNDERDRAIN WHEN CALLED FOR PER DESIGN PLANS. CLEANOUT AT TERMINAL ENDS DWG NO. Q51. PIPE BEDDING AND CATCH BASIN CONNECTION DWG NO. Q52. 4" TYP. 6" MAX PIPE DIAMETER.	6 INCH
UNDERDRAIN OFFSET	OFFSET DISTANCE UNDERDRAIN SET ABOVE THE FILTER LAYER.	0 INCHES
GEOTEXTILE	GEOTEXTILE CLASS 2. LOCATED ON SIDES OF FACILITY ONLY.	
SUBGRADE	REFER TO CITY OF DETROIT SPECIFICATIONS FOR SUBGRADE PREPARATION.	

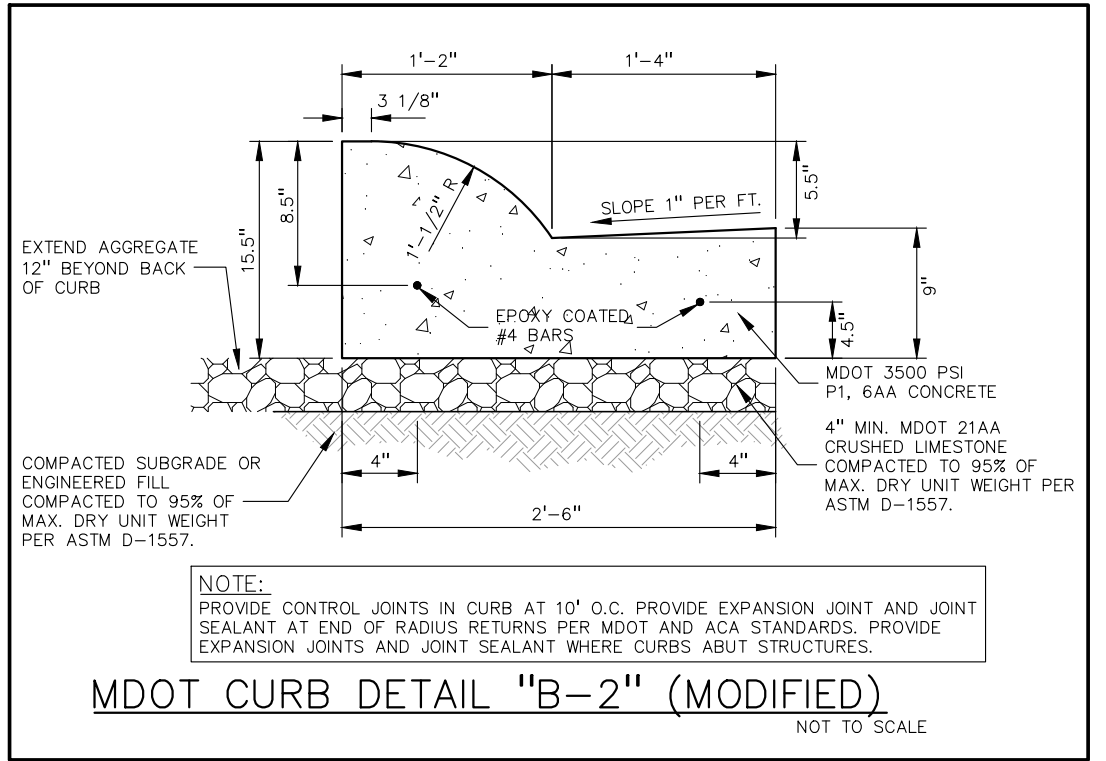
Bioswale Detail



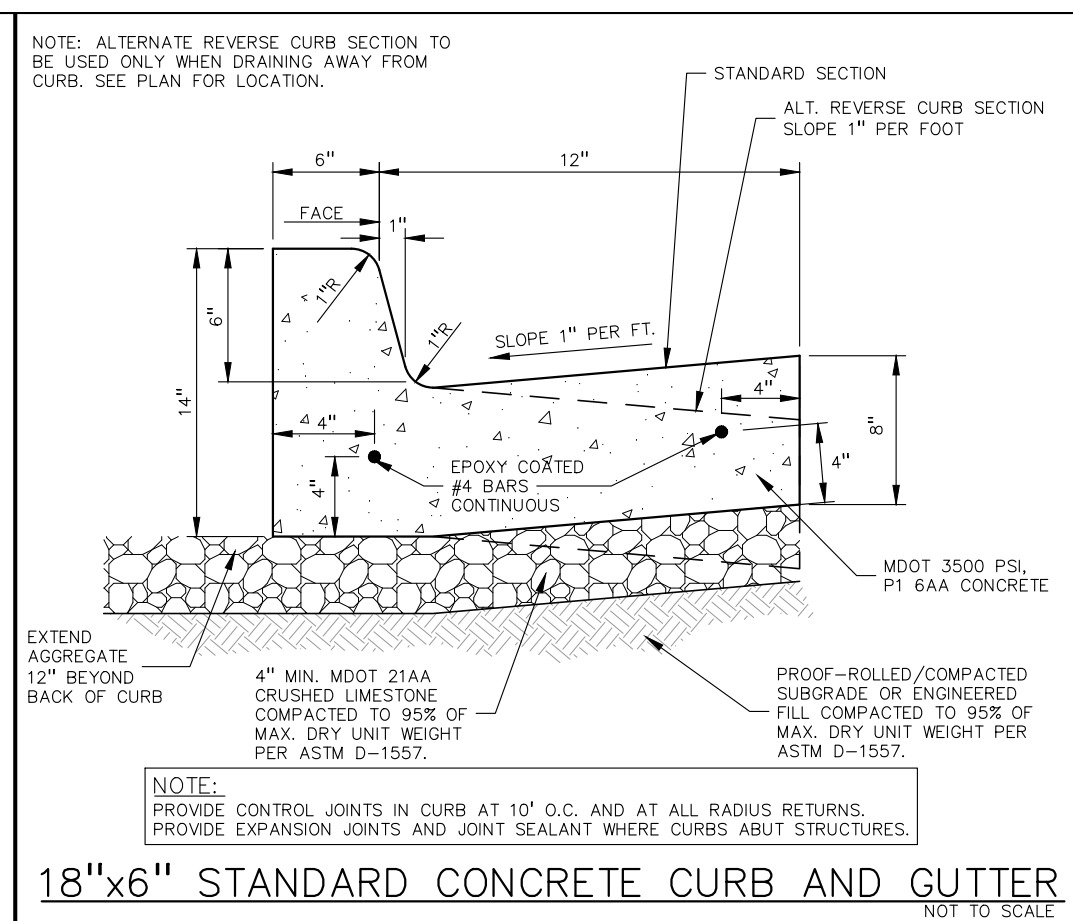
Sidewalk Ramp Type M

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS

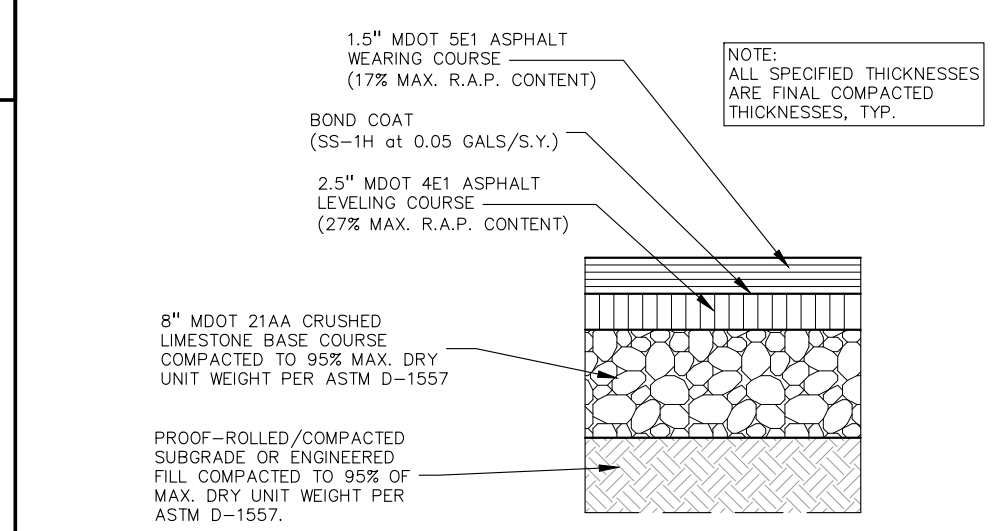
DESIGNED BY: R-28-J
DATE: 6-27-2013
SHEET: 3 OF 7



MDOT CURB DETAIL "B-2" (MODIFIED)



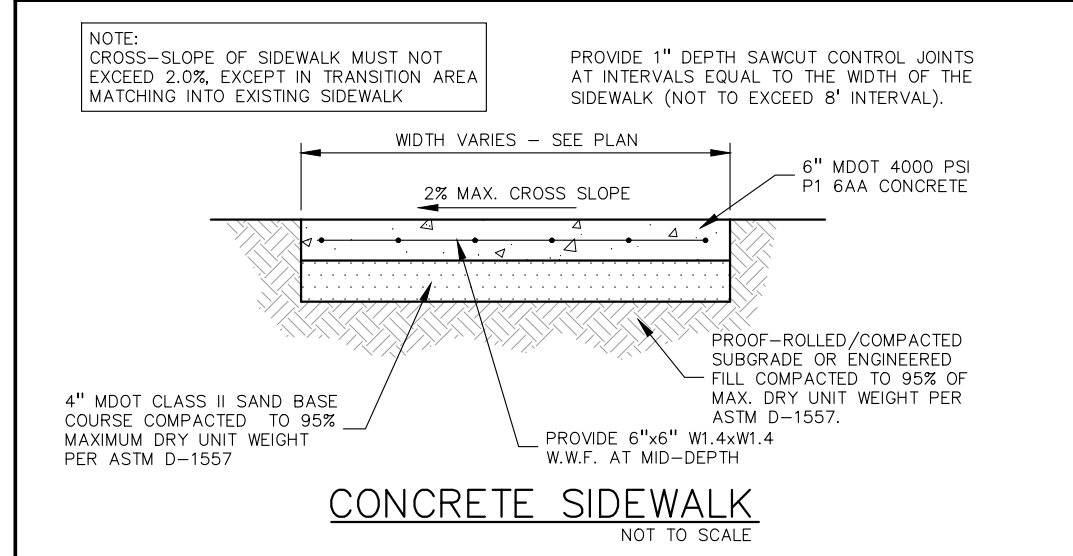
18"x6" STANDARD CONCRETE CURB AND GUTTER



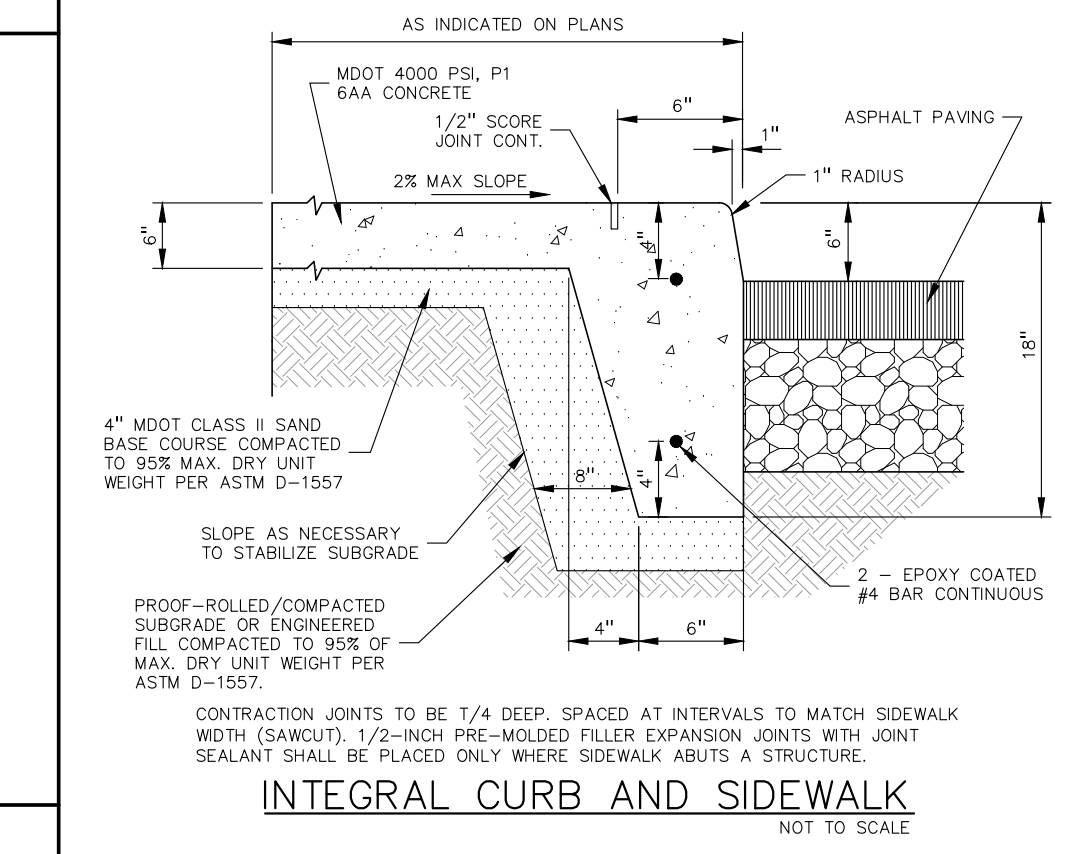
STANDARD DUTY ASPHALT DETAIL

AGGREGATE BASE NOTE:
THIS PAVEMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LIMESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LIMESTONE MATERIAL, PEA GROUP WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PEA GROUP THAT SHOWS THAT THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 902, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.

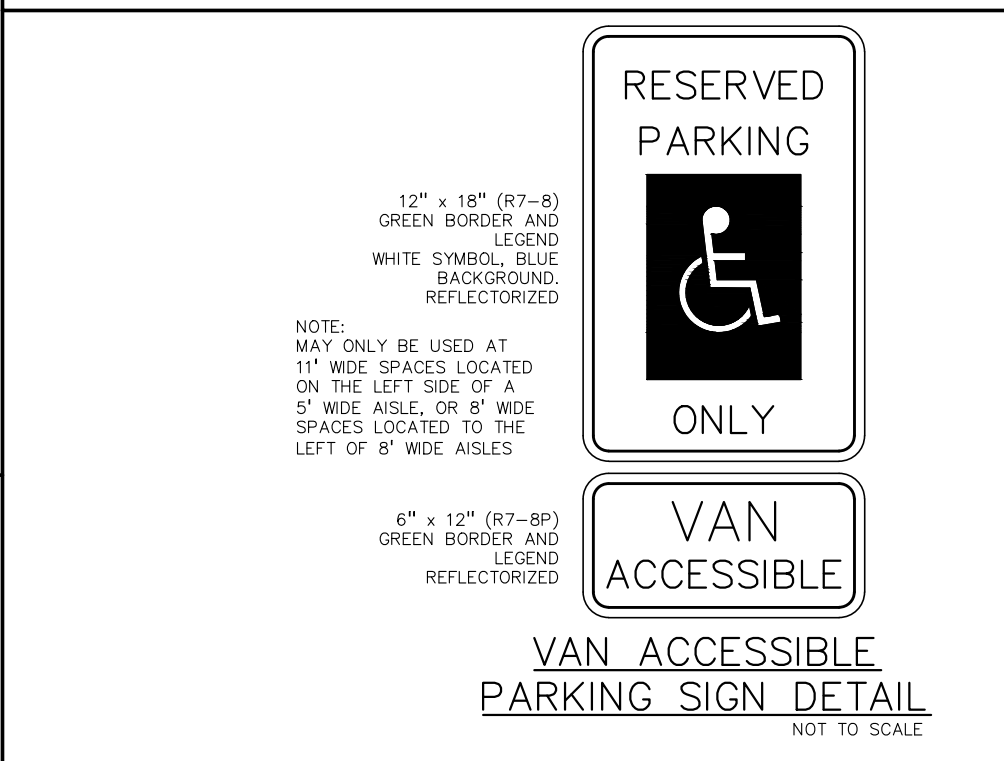
ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 12SP50(E). THE BINDER GRADE FOR THIS WORK IS PG64-28. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT TIER 1 OR TIER 2 REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA GROUP FOR REVIEW PRIOR TO CONSTRUCTION.



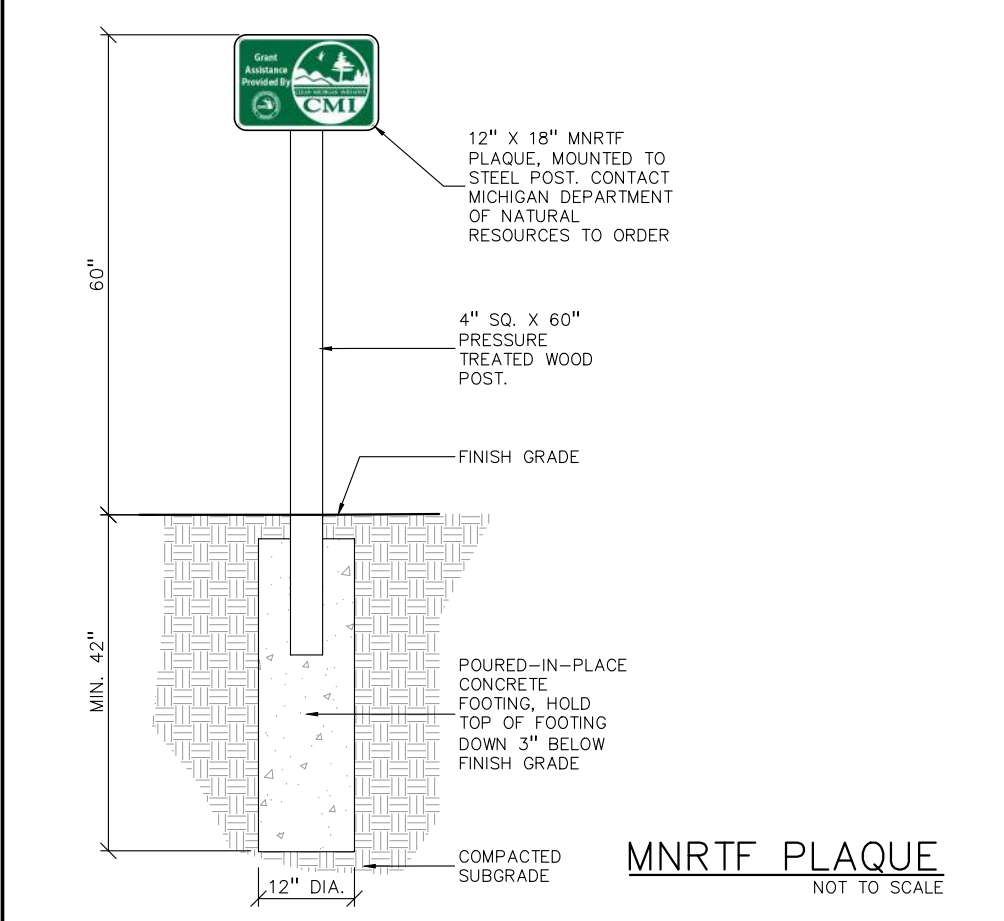
CONCRETE SIDEWALK



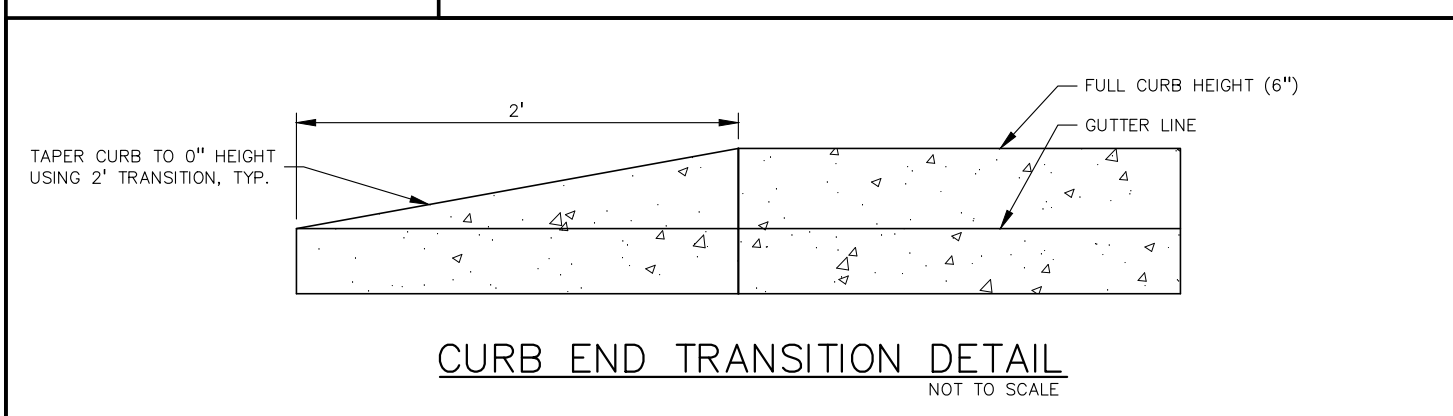
INTEGRAL CURB AND SIDEWALK



VAN ACCESSIBLE PARKING SIGN DETAIL



MNRTF PLAQUE

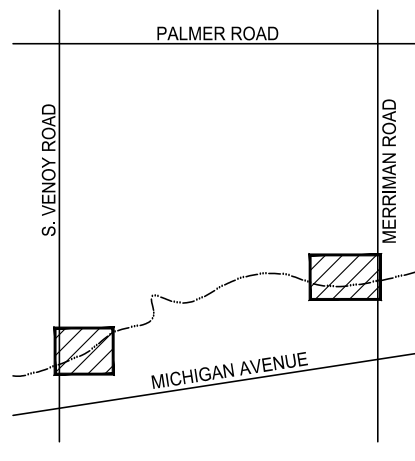


CURB END TRANSITION DETAIL

PEA GROUP
t: 844.813.2949
www.peagroup.com



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATIONS. NO GUARANTEE OR WARRANTIES OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
WAYNE COUNTY PARKS
33175 ANN ARBOR TRAIL
WESTLAND, MI

PROJECT TITLE
VENJOY DORSEY KAYAK LAUNCHES
WAYNE, MI

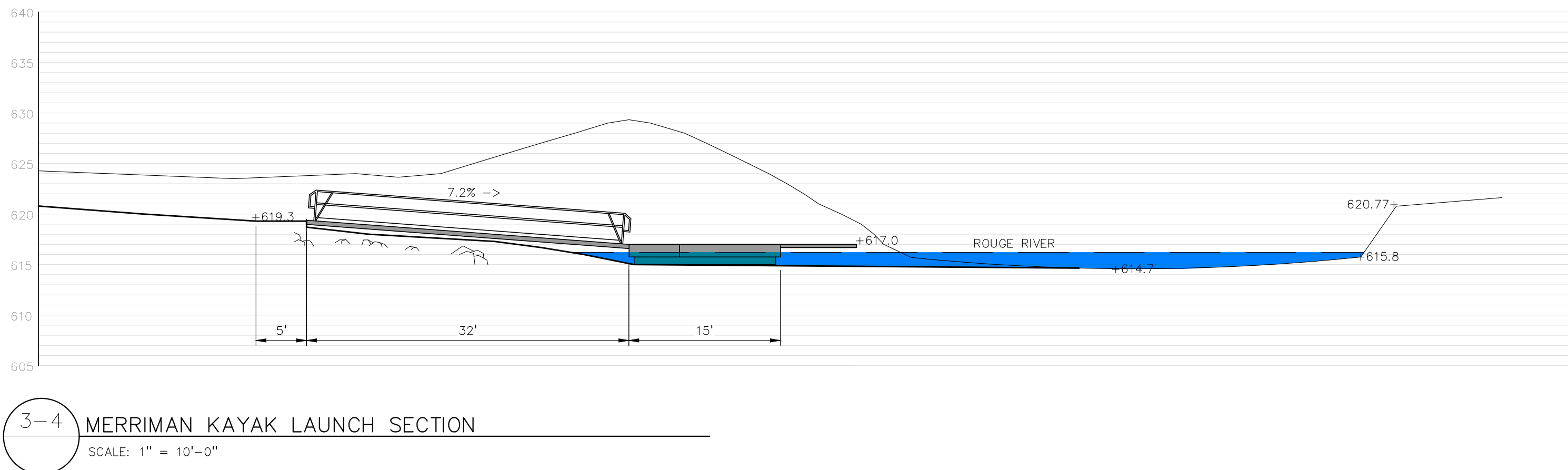
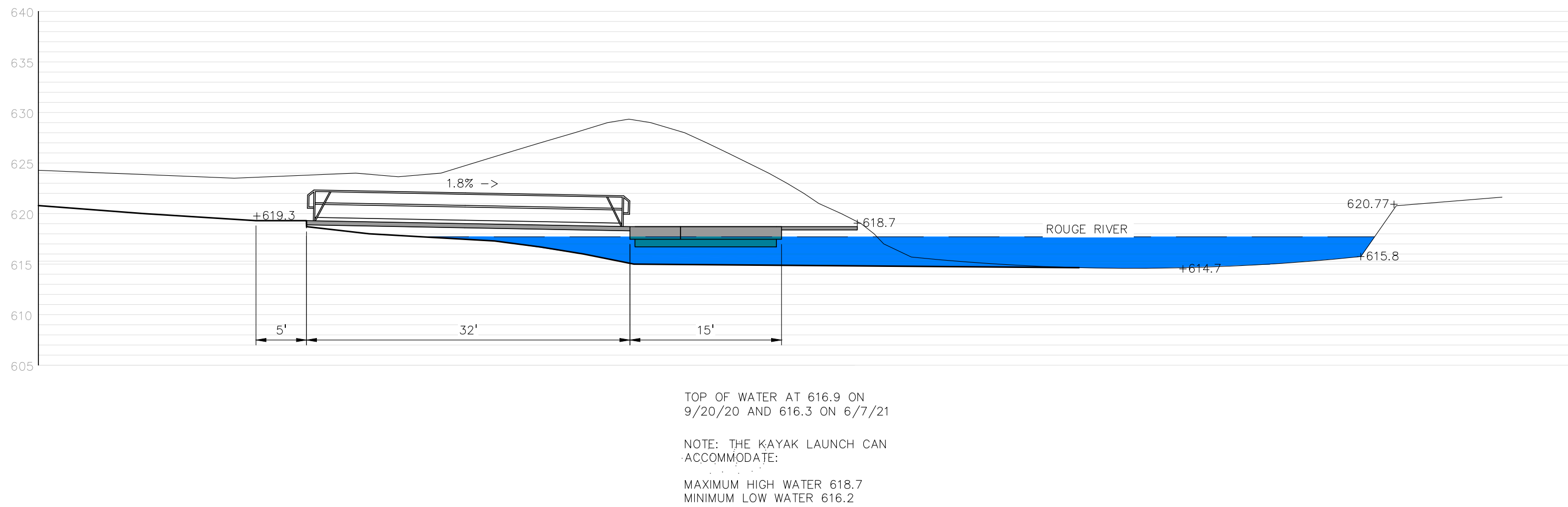
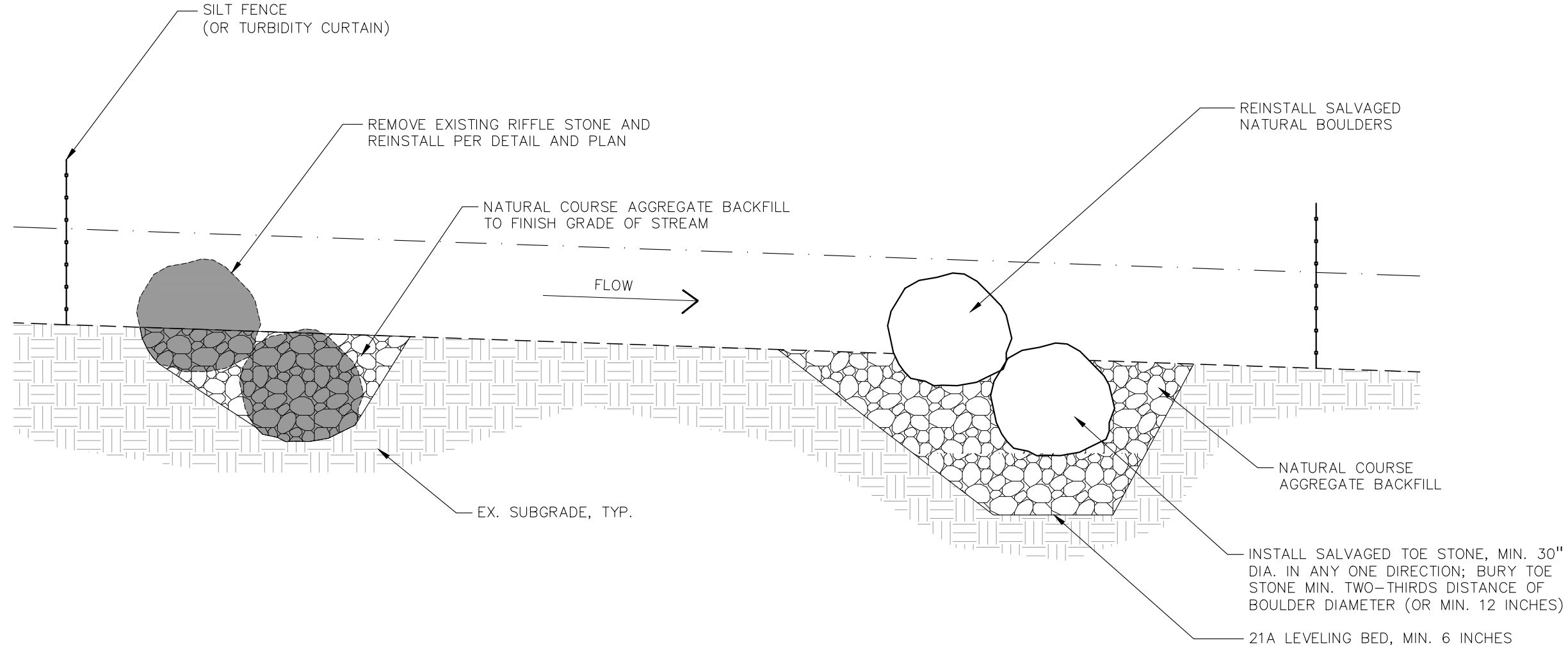
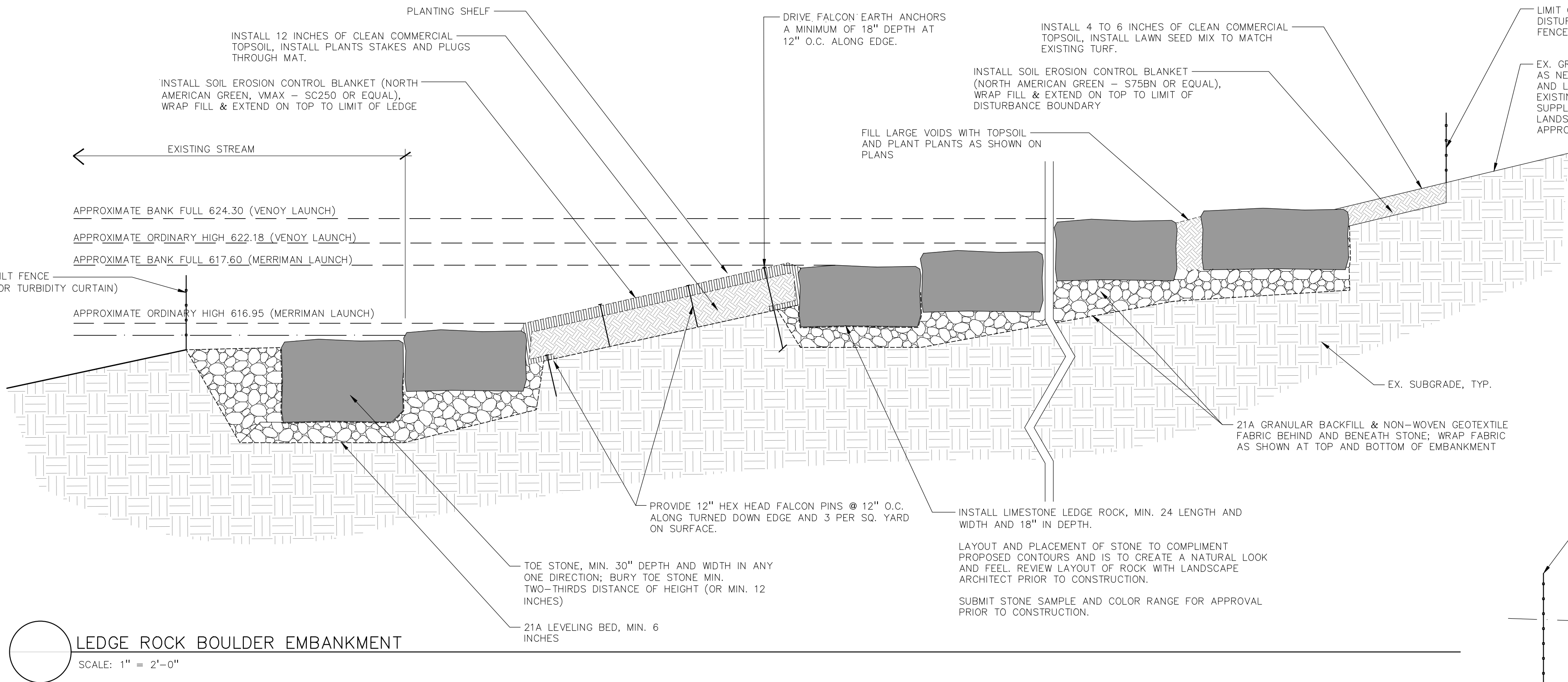
REVISIONS		
95% CD		10/08/21
MDNR REVIEW		02/04/22
MDNR REVISIONS		03/10/22
MDNR REVISIONS		04/25/22
WAYNE COUNTY		07/12/22
WAYNE CO. REVISIONS		10/25/22
BIDS		11/30/22
ADDENDUM #1		12/16/22
WAYNE CO. REVISIONS		01/30/23
REBID		06/05/23

ORIGINAL ISSUE DATE:
MARCH 2, 2021

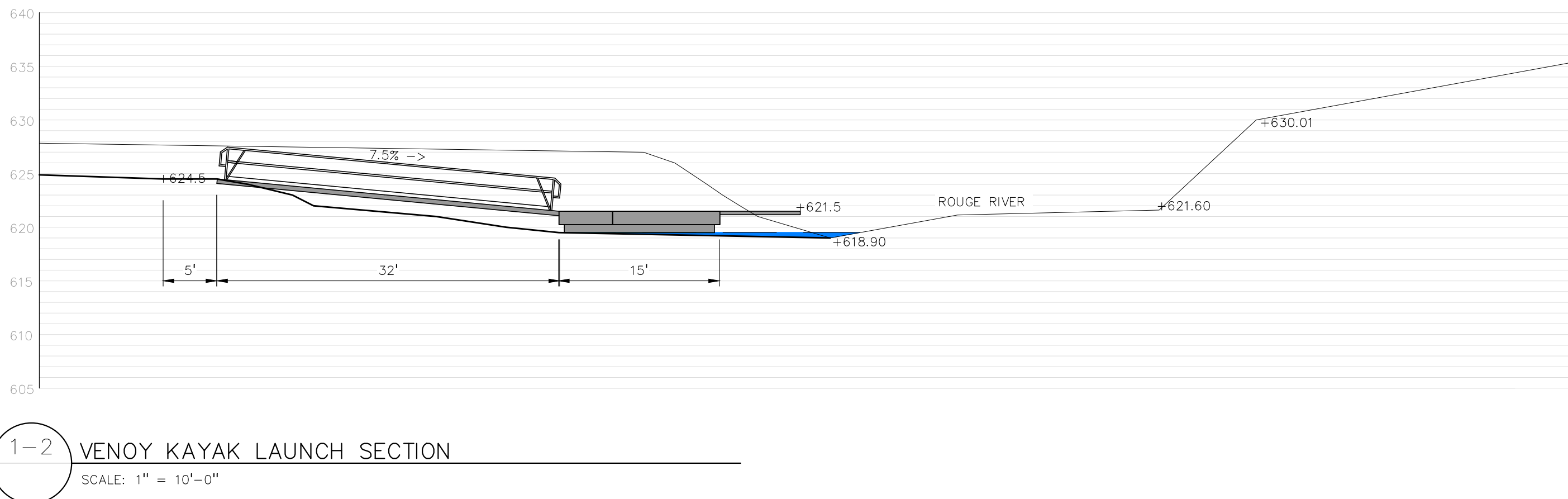
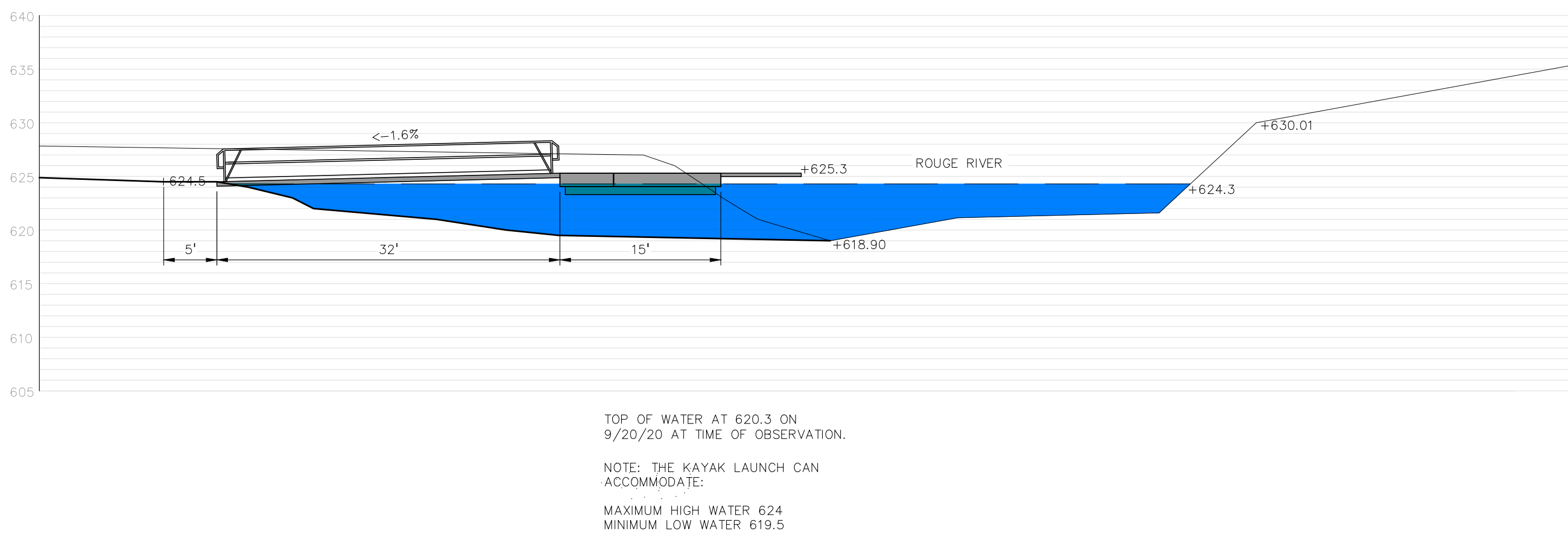
DRAWING TITLE
SITE DETAILS

PEA JOB NO.	2020-0310
P.M.	BWJ
DN.	JRW
DES.	BWJ/JRW
DRAWING NUMBER:	

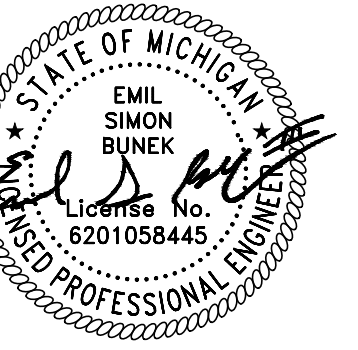
C-20.0



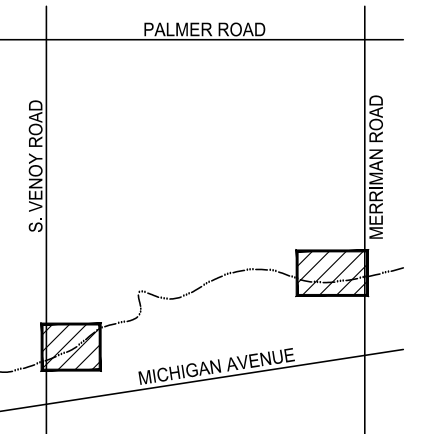
3-4 MERRIMAN KAYAK LAUNCH SECTION
SCALE: 1" = 10'-0"



1-2 VENOY KAYAK LAUNCH SECTION
SCALE: 1" = 10'-0"



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
WAYNE COUNTY PARKS
33175 ANN ARBOR TRAIL
WESTLAND, MI

PROJECT TITLE
VENOY DORSEY KAYAK LAUNCHES
WAYNE, MI

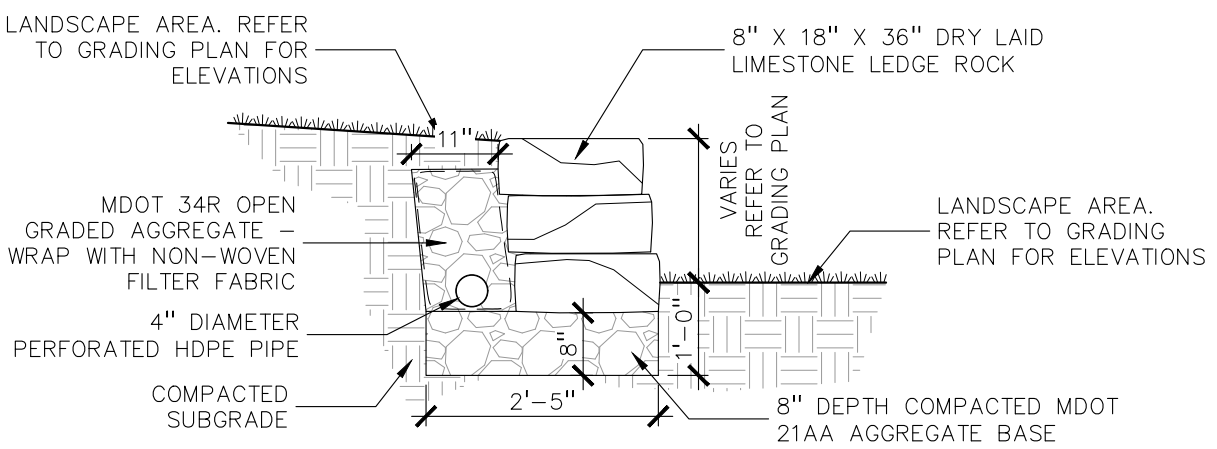
REVISIONS		
95% CD		10/08/21
MDNR REVIEW		02/04/22
MDNR REVISIONS		03/10/22
MDNR REVISIONS		04/25/22
WAYNE COUNTY		07/12/22
WAYNE CO. REVISIONS		10/25/22
BIDS		11/30/22
ADDENDUM #1		12/16/22
WAYNE CO. REVISIONS		01/30/23
REBID		06/05/23

ORIGINAL ISSUE DATE:
MARCH 2, 2021
DRAWING TITLE
SITE DETAILS

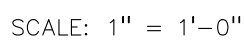
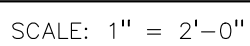
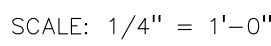
PEA JOB NO. 2020-0310
P.M. BWJ
DN. JRW
DES. BWJ/JRW
DRAWING NUMBER:

C-20.1

SCALE: 1" = 1'-0"



SCALE: 1" = 1'-0"



MDOT	09-30-2005	F&S-1-A	SHEET
------	------------	---------	-------



PROJECT TITLE

**VENOY DORSEY
KAYAK LAUNCHES**

WAYNE, MI

REVIEWS	
95% CD	10/08/21
MDNR REVIEW	02/04/22
MDNR REVISIONS	03/10/22
MDNR REVISIONS	04/25/22
WAYNE COUNTY	07/12/22
WAYNE CO. REVISIONS	10/25/22
BIDS	11/30/22
ADDENDUM #1	12/16/22
WAYNE CO. REVISIONS	01/30/23
REBID	06/05/23

ORIGINAL ISSUE DATE:
MARCH 2, 2021

DRAWING TITLE

SITE DETAILS

PEA JOB NO.	2020-0310
P.M.	BWJ
DN.	JRW
DES.	BWJ/JRW

DRAWING NUMBER:

C-20.2

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.

2. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

3. THE CONTRACTOR MUST CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.

4. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.

5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

6. CONTRACTOR TO VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.

7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.

8. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.

9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, CITY AND STATE SHALL NOT BE HELD UABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.

10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

11. THE PROPOSED WORK IS LOCATED WITHIN THE ROUGE RIVER FLOODPLAIN AND THE AREA OF WORK MAY BE IMPACTED BY THE RIVER IN SIGNIFICANT RAIN EVENTS. THE CONTRACTOR IS TO TAKE APPROPRIATE PRECAUTIONS IN CONSTRUCTION SCHEDULE, STAGING, AND MEANS AND METHODS TO PROTECT THE WORK FROM DAMAGE IN HIGH WATER / FLOOD CONDITIONS.

PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO PROVIDE CONSTRUCTION SCHEDULE FOR REVIEW BY OWNER / ENGINEER DETAILING LIMITS OF WORK PER PHASE AND SEQUENCING TO MINIMIZE POTENTIAL DAMAGE TO THE WORK FOR APPROVAL.

THE CONTRACTOR UNDERSTANDS AND ACKNOWLEDGES THAT THE PERFORMANCE OF THE WORK IS REQUIRED WITHIN THE ROUGE RIVER SYSTEM AND FLOODPLAIN AND THAT THE ROUGE RIVER WATER LEVEL FLUCTUATES, ROUGE RIVER HAS A VERY SHORT RESPONSE TIME TO STORMWATER RUNOFF.

THE CONTRACTOR UNDERSTANDS AND ACKNOWLEDGES THAT THEY HAVE TAKEN INTO ACCOUNT THE POTENTIAL FOR ANY WATER LEVEL CHANGES THAT MIGHT OCCUR IN COSTING, SCHEDULING, AND FEASIBILITY OF PERFORMING THE CONTRACT WORK UNDER THE PREVAILING ENVIRONMENTAL CONDITIONS. THE CONTRACTOR ACKNOWLEDGES THAT ANY FLUCTUATION IN THE WATER LEVELS, FLOODING, OR INUNDATION DURING/OVER THE COURSE OF THE PROJECT IS LIKELY AND DOES NOT CONSTITUTE A CHANGE IN CONDITION OR AN UNFORESEEN SITE CONDITION.

THE CONTRACTOR SHALL BE FULLY AWARE OF THE ROUGE RIVER HYDROLOGY AND CURRENT WEATHER CONDITIONS SO THAT WORK CAN BE SECURED AND PROTECTED AT ALL TIMES, SO THAT SAFE JOB SITE WORKING CONDITIONS ARE MAINTAINED, AND SO THAT SOIL EROSION IS CONTROLLED IN ACCORDANCE WITH ALL APPLICABLE PERMITS AND ENVIRONMENTAL LAWS.

THE CONTRACTOR ACKNOWLEDGES THAT DELAYS IN THE START OF, OR COMPLETION OF, WORK DUE TO FLUCTUATIONS IN WATER LEVEL THROUGHOUT THE DURATION OF THE PROJECT SHALL NOT CONSTITUTE A CHANGE IN CONDITIONS NOR SHALL BE THE BASIS FOR ANY EXTENSION OF TIME OR DAMAGES, IF THE CONTRACTOR SHALL BE UNAVOIDABLY DELAYED IN BEGINNING OR FULFILLING THE CONTRACT BY REASONS OF CHANGING WATER LEVELS, STORMS, INUNDATION OR FLOODS, THE CONTRACTOR SHALL HAVE NOT VALID CLAIM FOR DAMAGES BUT SHALL, IN SUCH CASE, BE ENTITLED TO AN EXTENSION OF THE TIME AS THE ENGINEER/OWNER SHALL DEEM REASONABLE, PROVIDED THAT FORMAL CLAIM FOR AN EXTENSION OF TIME IS MADE IN WRITING BY THE CONTRACTOR WITHIN 14 DAYS OF THE ALLEGED DELAY.

THE ENGINEER RESERVES THE RIGHT TO SUSPEND WORK ACTIVITIES WHEN IT IS IN THE BEST INTEREST OF THE PROJECT TO DO SO DUE TO WEATHER, FLOW, OR WATER LEVEL CONDITIONS. THE DIRECTIVE TO SUSPEND WORK ACTIVITIES SHALL BE SUBMITTED TO THE CONTRACTOR, BY THE ENGINEER, IN WRITING, SUCH SUSPENSION SHALL NOT BE BASIS FOR CLAIM FOR ADDITIONAL COST BUT CAN BE BASIS FOR EXTENSION OF TIME.

THE CONTRACTOR SHALL RESEARCH AVAILABLE INFORMATION AND PERFORM ITS OWN INDEPENDENT INVESTIGATIONS AS NEEDED IS AN EFFORT TO FULLY UNDERSTAND ENVIRONMENTAL CONDITIONS ASSOCIATED WITH THE PROJECT SITE, THE CONTRACTOR SHALL UNDERSTAND THE SITE CONDITIONS THAT WILL AFFECT THE COST, SCHEDULE, OR PERFORMANCE OR WORK IN ADVANCE OF STARTING WORK.

PAVING NOTES:

1. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.

2. PROVIDE EXPANSION JOINTS AND JOINT SEALANT AT TWO "END-OF-RADIUS" LOCATIONS (OPPOSITE SIDES AT EACH LONG END) OF CONCRETE CURB ISLANDS.

3. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.

4. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTIOPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.

5. CONCRETE PAVEMENT JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:

5.1. WHERE PROPOSED CONCRETE ABUTS A STRUCTURE PROVIDE A MINIMUM ½"EXPANSION JOINT WITH SEALANT, THE JOINT FILLER BOARD MUST BE AT LEAST THE FULL DEPTH OF THE CONCRETE AND HELD DOWN A ½"INCH TO ALLOW FOR SEALING

5.2. WHERE PROPOSED CONCRETE ABUTS EXISTING CONCRETE OR IN BETWEEN POURS OF PROPOSED CONCRETE (CONSTRUCTION JOINT) PROVIDE 5/8" DOWELS EVERY 30" CENTER TO CENTER HALF WAY ALONG THE THICKNESS OF THE PROPOSED PAVEMENT. ALTERNATE DOWELS SIZES AND SPACING MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS

5.3. WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK PROVIDE A MINIMUM ½"EXPANSION JOINT WITH SEALANT

5.4. WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED CURBING PROVIDE A MINIMUM ½"EXPANSION JOINT WITH SEALANT

5.5. CONTROL, LONGITUDINAL AND/OR TRANSVERSE JOINTS SHALL BE PLACED TO PROVIDE PANELS WITHIN THE PAVEMENT AS SQUARE AS POSSIBLE WITH THE FOLLOWING MAXIMUM SPACING PARAMETERS:

5.5.1. 6–INCH THICK CONCRETE PAVEMENT: 12' X 12'

5.5.2. 8–INCH THICK CONCRETE PAVEMENT: 15' X 15'

5.6. IRREGULAR-SHAPED PANELS MAY REQUIRE THE USE OF REINFORCING MESH OR FIBER MESH AS DETERMINED BY THE ENGINEER. THE USE OF MESH MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS

5.7. IF A JOINT PLAN IS NOT PROVIDED IN THE PLANS, THE CONTRACTOR SHALL SUBMIT ONE TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.

6. CONCRETE CURBING JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:

6.1. WHERE PROPOSED CONCRETE CURBING ABUTS A STRUCTURE PROVIDE A MINIMUM ½"EXPANSION JOINT WITH SEALANT

6.2. WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK PROVIDE A MINIMUM ½"EXPANSION JOINT WITH SEALANT

6.3. WHERE PROPOSED CONCRETE ABUTS EXISTING CURBING PROVIDE A MINIMUM ½"EXPANSION JOINT WITH SEALANT

6.4. IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT)

6.4.1. CARRY THE REBAR CONTINUOUSLY BETWEEN POURS

6.4.2. IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS

6.5. CONTROL JOINTS SHALL BE PLACED A MAXIMUM 10' CENTER TO CENTER AND AT ALL RADIUS RETURNS

GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.

2. ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.

3. THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.

4. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE CITY OF DETROIT PRIOR TO CONSTRUCTION.

5. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.

6. REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.

7. THE DETENTION BASIN SIDE SLOPES AND ALL SLOPE EXCEEDING 1:6 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.

8. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.

9. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.

10. ON–SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON–SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.

11. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.

12. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.

13. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.

14. ANY SUB–GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.

GENERAL UTILITY NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT.

2. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D–1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.

3. WHENEVER EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.

4. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR TO FIELD VERIFY UTILITIES.

5. THE CONTRACTOR MUST COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.

6. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.

STORM SEWER NOTES:

1. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C–76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C–443).

2. ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.

3. ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE SDR 26.

4. JOINTS FOR P.V.C. PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D–3212.

WATER MAIN NOTES:

1. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6.0' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5") DEGREE BENDS, PROPERLY ANCHORED.

2. ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.

3. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL REQUIRED TESTING IS SATISFACTORILY COMPLETED.

4. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY/STORM SEWER OR STRUCTURE.

5. NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY OF DETROIT.

6. ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.

7. WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.

8. ALL FIRE HYDRANTS SHALL BE EJIW #5BR MODEL #250 PER CITY OF DETROIT STANDARDS.

9. ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.

10. ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY OF DETROIT.

11. THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION OF THE CITY OF DETROIT AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

SANITARY SEWER NOTES:

1. DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.

2. ALL SANITARY LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.

3. ALL SANITARY SEWER 10" OR LARGER SHALL BE P.V.C. TRUSS PIPE (ASTM D2680) AND FITTINGS, WITH ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.

4. ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.

5. SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.

CONSTRUCTION MATERIAL SUBMITTALS

UNLESS REQUIRED OTHERWISE IN THE PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL ONLY SUBMIT THE FOLLOWING CONSTRUCTION MATERIAL SUBMITTALS, AS APPLICABLE TO THE PLANS, FOR REVIEW BY THE ENGINEER. UNLESS APPROVED IN ADVANCE AND IN WRITING BY THE ENGINEER, ANY MATERIAL SUBMITTALS PROVIDED TO THE ENGINEER FOR REVIEW IN ADDITION TO THIS LIST SHALL BE RETURNED TO THE CONTRACTOR WITHOUT A REVIEW BEING PERFORMED.

1. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

2. UTILITY TRENCH BACKFILL MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER

3. RIP RAP MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER

4. STORM AND SANITARY SEWER PIPING INCLUDING JOINTS

5. STORM AND SANITARY SEWER STRUCTURES

6. STORM AND SANITARY SEWER STRUCTURE FRAME AND COVERS INCLUDING CLEAN OUTS

7. WATER DISTRIBUTION SYSTEM PIPING INCLUDING JOINTS

8. WATER DISTRIBUTION SYSTEM STRUCTURES

9. WATER DISTRIBUTION SYSTEM STRUCTURE FRAME AND COVERS

10. WATER DISTRIBUTION SYSTEM SHUT OFF BOXES

11. WATER DISTRIBUTION SYSTEM FIRE HYDRANTS

12. WATER DISTRIBUTION SYSTEM GATE VALVES

13. STORM WATER MANAGEMENT OUTLET CONTROL STRUCTURES INCLUDING COVERS OR GRATES

14. STORM WATER MANAGEMENT OUTLET SEDIMENTATION BASIN RISERS INCLUDING GRATES

15. STORM WATER MANAGEMENT MECHANICAL PRE-TREATMENT UNITS INCLUDING COVERS

16. STORM WATER MANAGEMENT OIL/GREASE SEPARATORS

17. STORM WATER MANAGEMENT UNDERGROUND DETENTION SYSTEM MATERIAL AND SHOP DRAWINGS DEPICTING THE LAYOUT OF THE SYSTEM

18. PAVEMENT AGGREGATE BASE MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER

19. PAVEMENT UNDERDRAIN MATERIAL AND BACKFILL WITH ALL BACKFILL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER

20. PAVEMENT MIX DESIGNS SUBMITTED FOR REVIEW BY THE ENGINEER MUST FOLLOW THE CURRENT MDOT REVIEW CHECKLISTS AS SUMMARIZED BELOW AND ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER:

1. 8.1. CONCRETE MIX DESIGN REVIEW CHECKLIST (FORM 2000)

2. 8.2. SUPERPAVE MIX DESIGN CHECKLIST (FORM 1862)

3. 8.3. MARSHALL MIX DESIGN CHECKLIST (FORM 1849)

21. SITE FENCING AND GATES INCLUDING FOOTINGS

22. SITE RAILINGS INCLUDING FOOTING OR EMBEDMENTS

23. ANY ITEMS SHOWN IN THE PLANS OR DETAIL SHEETS THAT SPECIFICALLY STATE FOR THE CONTRACTOR TO SUBMIT A SHOP DRAWING TO THE ENGINEER FOR REVIEW. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO;

24. RETAINING WALL MATERIAL AND STRUCTURAL CALCULATIONS

25. TRENCH DRAIN MATERIAL AND SHOP DRAWING DEPICTING THE LAYOUT OF THE SYSTEM

26. ANY SPECIALITY ITEMS SHOWN IN THE PLANS OR DETAIL SHEETS THAT SPECIFICALLY DO NOT STATE FOR THE CONTRACTOR TO SUBMIT A SHOP DRAWING TO THE ENGINEER FOR REVIEW BUT THE CONTRACTOR REQUESTS TO BE REVIEWED. THE CONTRACTOR'S REQUEST FOR REVIEW MUST BE IN WRITING AND APPROVED BY THE ENGINEER PRIOR TO SUBMITTING THE INFORMATION.

WAYNE COUNTY D.P.S. GENERAL NOTES:

1. ALL WORK WITHIN THE WAYNE COUNTY ROAD RIGHT-OF-WAY (ROW) AND DRAIN EASEMENT SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND GENERAL SPECIFICATIONS, INCLUDING SOIL EROSION AND SEDIMENTATION CONTROL OF THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES AND MDOT 2012 SPECIFICATIONS FOR CONSTRUCTION.

2. THESE PLANS ARE NOT VALID WITHOUT ATTACHMENT OF THE WAYNE COUNTY PERMIT SPECIFICATIONS FOR CONSTRUCTION WITHIN THE ROAD RIGHT-OF-WAY, PARKS, DRAIN EASEMENT OR SANITARY SEWER UNDER JURISDICTION OF THE WAYNE COUNTY (07/01/93) REVISED 12/15/2004.

3. CONTRACTOR SHALL CONTACT MISS DIG AT 811 TO IDENTIFY AND FLAG/MARK THE LOCATIONS OF ALL UNDERGROUND UTILITIES AT THE PROPOSED CONSTRUCTION AREAS PRIOR TO START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES AND RESOLVE ANY CONFLICT BETWEEN THE PROPOSED WORK AND THE EXISTING UNDERGROUND OR ABOVEGROUND UTILITIES.

4. CONTRACTOR SHALL MAINTAIN 18" MINIMUM VERTICAL CLEARANCE AND 3 FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN THE PROPOSED AND EXISTING UTILITIES. ANY PROPOSED UTILITY PERMITTED TO CROSS UNDER THE ROAD OR DRAIN MUST BE PLACED A MINIMUM OF 7 FEET BELOW THE LOWEST POINT OF THE ROAD, OR 6 FEET BELOW THE DRAIN BOTTOM. OVERHEAD WIRES/CABLES MUST BE INSTALLED 18 FEET MINIMUM ABOVE THE ROAD CENTERLINE. TO RELOCATE ANY UTILITY WITHIN THE ROAD R.O.W., THE CONTRACTOR SHALL COORDINATE THE RELOCATION WITH THE UTILITY COMPANY AND AS DIRECTED BY THE WAYNE COUNTY ENGINEER.

5. ALL SURVEY MONUMENTS/CORNERS AND BENCH MARKS LOCATED WITHIN THE CONSTRUCTION AREA MUST BE PRESERVED IN ACCORDANCE WITH PUBLIC ACT 74 AS AMENDED (INCLUDING ACT 34, P.A. 2000) AND AS PER WAYNE COUNTY PERMIT RULE 1.5. THE PERMIT HOLDER AND CONTRACTOR SHALL COORDINATE THE WORK WITH A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF MICHIGAN DURING CONSTRUCTION ACTIVITIES FOR THE PURPOSE OF WITNESSING, PRESERVING OR REPLACING SURVEY MONUMENTS AND MONUMENT BOXES.

6. EXPOSURE OF ANY UTILITIES UNDER THE PAVEMENT WILL NOT BE PERMITTED UNLESS APPROVED BY THE WAYNE COUNTY ENGINEER. PAVEMENT REMOVAL AND REPLACEMENT SHALL BE PERFORMED PER APPLICABLE WAYNE COUNTY STANDARD DETAILS AND AS DIRECTED BY THE WAYNE COUNTY ENGINEER.

7. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITHIN THE WAYNE COUNTY ROAD RIGHT-OF-WAY AND DRAIN EASEMENT WITH 3" OF TOPSOIL, THM SEED MIX AND MULCH. SLOPES STEEPER THAN 1 ON 3 SHALL BE RESTORED BY PLACING SOD ON 2" OF TOPSOIL.

8. ALL BACKFILLS UNDER OR WITHIN 3 FEET OF THE PROPOSED OR EXISTING PAVEMENT, CURB OR SIDEWALK SHALL CONFORM TO THE WAYNE COUNTY TRENCH 'B' BACKFILL REQUIREMENTS. TRENCH 'A' BACKFILL MAY BE USED WITHIN THE ROAD R.O.W. AREAS UNDER CONDITIONS OTHER THAN THOSE SPECIFIED FOR TRENCH 'B'.

9. CONTRACTOR IS RESPONSIBLE FOR RESTORING OR REPLACING ALL DISTURBED LANDSCAPED AREAS, SPRINKLER SYSTEMS, FENCES, SIGNS, MAIL BOXES, ETC. WITHIN THE WAYNE COUNTY ROAD R.O.W. AND/OR AS DIRECTED BY THE COUNTY ENGINEER.

10. CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES. OTHERWISE, DETOURING TRAFFIC MUST BE PER APPROVED PLANS. ALL SIGNING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

11. MAINTAIN A SAFE AND ADEQUATE TRAVEL ROUTE FOR PEDESTRIANS AT ALL TIMES THROUGHOUT THE PROJECT DURATION.

12. TUNNELING, BORING AND JACKING OPERATIONS SHALL BE IN ACCORDANCE WITH THE WAYNE COUNTY SPECIFICATIONS AND DETAILS. BORE PITS SHALL BE PLACED AT MINIMUM 10 FEET FROM THE BACK OF CURB OR EDGE OF PAVEMENT.

13. REMOVE ALL ABANDONED CONDUITS FROM THE COUNTY ROAD R.O.W. OR AS DIRECTED BY THE WAYNE COUNTY ENGINEER.

14. CONTRACTOR SHALL PROVIDE COLD WEATHER PROTECTION FOR ALL PROPOSED CONCRETE WORK (PAVEMENTS, SIDEWALKS, DRIVE APPROACHES, ETC.) AS DIRECTED BY THE WAYNE COUNTY ENGINEER.

15. OVERNIGHT VEHICLE PARKING AND STORAGE OF CONSTRUCTION MATERIALS AND EQUIPMENT ARE NOT PERMITTED WITHIN THE WAYNE COUNTY ROADS R.O.W.

16. CONTRACTOR SHOULD OBTAIN SOIL EROSION AND SEDIMENTATION CONTROL PERMIT FROM THE WAYNE COUNTY D.O.E. CONTACT MR. JOHN JONES AT (734) 326–5565.

17. CONTRACTOR SHALL NOTIFY THE WAYNE COUNTY TRAFFIC SIGNAL SHOP AT (734) 955–2154 AT LEAST 3 DAYS PRIOR TO START OF WORK AT/NEAR ANY SIGNALIZED INTERSECTIONS.

18. CONTRACTOR SHALL NOTIFY WAYNE COUNTY 72 HOURS PRIOR TO THE START OF CONSTRUCTION. CONTACT THE PERMIT OFFICE AT (734) 595–6504 EXT. 2009

WAYNE COUNTY INSPECTION NOTES:

1. THE MANUFACTURER OF THE TREATMENT UNIT AND OUTLET CONTROL STRUCTURE MUST CONTACT THE WAYNE COUNTY TESTING OFFICE AT (734) 595–6504 EXTENSION 2015 AT LEAST 3 WORKING DAYS PRIOR TO FABRICATION TO SCHEDULE AN INSPECTION DURING SYSTEM ASSEMBLY.

2. PRIOR TO INSTALLATION, STORM WATER MANAGEMENT SYSTEM COMPONENTS SHALL BE TESTED AND APPROVED BY THE WAYNE COUNTY TESTING OFFICE, AND SHALL BE OBSERVED DURING INSTALLATION BY WAYNE COUNTY PERMIT ENGINEER. CONTACT THE WAYNE COUNTY PERMIT OFFICE AT (734) 595–6504 EXTENSION 2008.

WAYNE COUNTY CMP NOTES:

1. CIRCULAR CMP SHOULD CONFORM TO AASHTO M36 (ASTM A760) AND SHOULD BE MADE FROM ALUMINUM COATED SHEET CONFORMING TO AASHTO M274. THE USE OF CONTINUOUS WELDED SEAM PROCESS IN THE APPLICATION OF THE PIPE IS NOT PERMITTED.

2. 60–INCH DIAMETER CMP WITH 2 2/3–INCH X 1/2–INCH CORRUGATION MUST HAVE 0.109–INCH 12 GAGE WALL THICKNESS (0.079–INCH 14 GAGE, FOR 3–INCH X 1–INCH OR 5–INCH X 1–INCH CORRUGATIONS). PIPES SMALLER THAN 60–INCHES MUST BE 0.079–INCH 14 GAGE FOR ANY CORRUGATION SIZE.

3. ALL WELDS FOR ALUMINIZED PIPE SHOULD BE COATED WITH A PAINT CONTAINING ZINC DUST AS DESCRIBED IN THE MATERIAL SECTION OF ASTM A780 AND SHOULD BE APPLIED TO A DRY FILM THICKNESS OF AT LEAST 0.005 INCHES. ANY REPAIRS TO DAMAGED ALUMINIZED COATING SHALL BE IN ACCORDANCE WITH ASTM A 760 SECTION 11.

4. WELDING ON SITE IS NOT PERMITTED UNLESS APPROVED BY THE COUNTY PERMIT ENGINEER, AND CMP CONNECTIONS SHOULD BE PER MANUFACTURER'S RECOMMENDATIONS.

5. CMP DETENTION PIPES REQUIRE 2G, 34G, 6A, OR 21AA STONE OR GRAVEL BACKFILL TO A MINIMUM OF 6–INCHES ABOVE THE TOP OF THE PIPES. IF DIFFERENT BACKFILL IS USED ABOVE THE 2G, 34G, 6A, OR 21AA STONE OR GRAVEL, A GEOTEXTILE SEPERATION FABRIC SHALL BE USED BETWEEN THE TWO DIFFERENT MATERIALS.

S:\PROJECTS\2020-2025-2030-WENY DORSEY BOAT LAUNCHES\DWG\CONSTRUCTION\C-20.01 DETAILS-202010.dwg

PEA GROUP

t. 844.813.2949
www.peagroup.com

STATE OF MICHIGAN
EMIL SIMON
BUNKER
LICENSE NO. 5201058445
PROFESSIONAL ENGINEER

811 know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATIONS. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

PALMER ROAD

S. VERNON ROAD

MICHIGAN AVENUE

WATERMAN ROAD

CLIENT

WAYNE COUNTY PARKS

33175 ANN ARBOR TRAIL
WESTLAND, MI

PROJECT TITLE

VENYO DORSEY KAYAK LAUNCHES

WAYNE, MI

REVISIONS

95% CD	10/08/21
MDNR REVIEW	02/04/22
MDNR REVISIONS	03/10/22
MDNR REVISIONS	04/25/22
WAYNE COUNTY	07/12/22
WAYNE CO. REVISIONS	10/25/22
BIDS	11/30/22
ADDENDUM #1	12/16/22
WAYNE CO. REVISIONS	01/30/23
REBID	06/05/23

ORIGINAL ISSUE DATE:
MARCH 2, 2021

DRAWING TITLE
SITE DETAILS

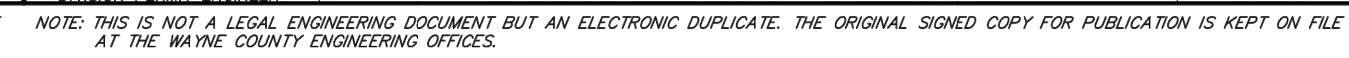
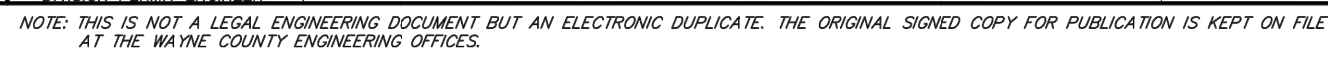
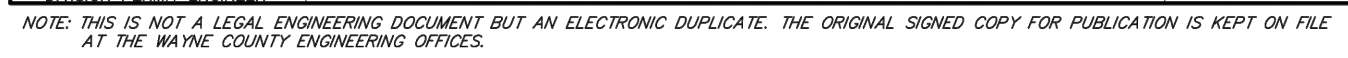
PEA JOB NO. 2020-0310

P.M. BWJ

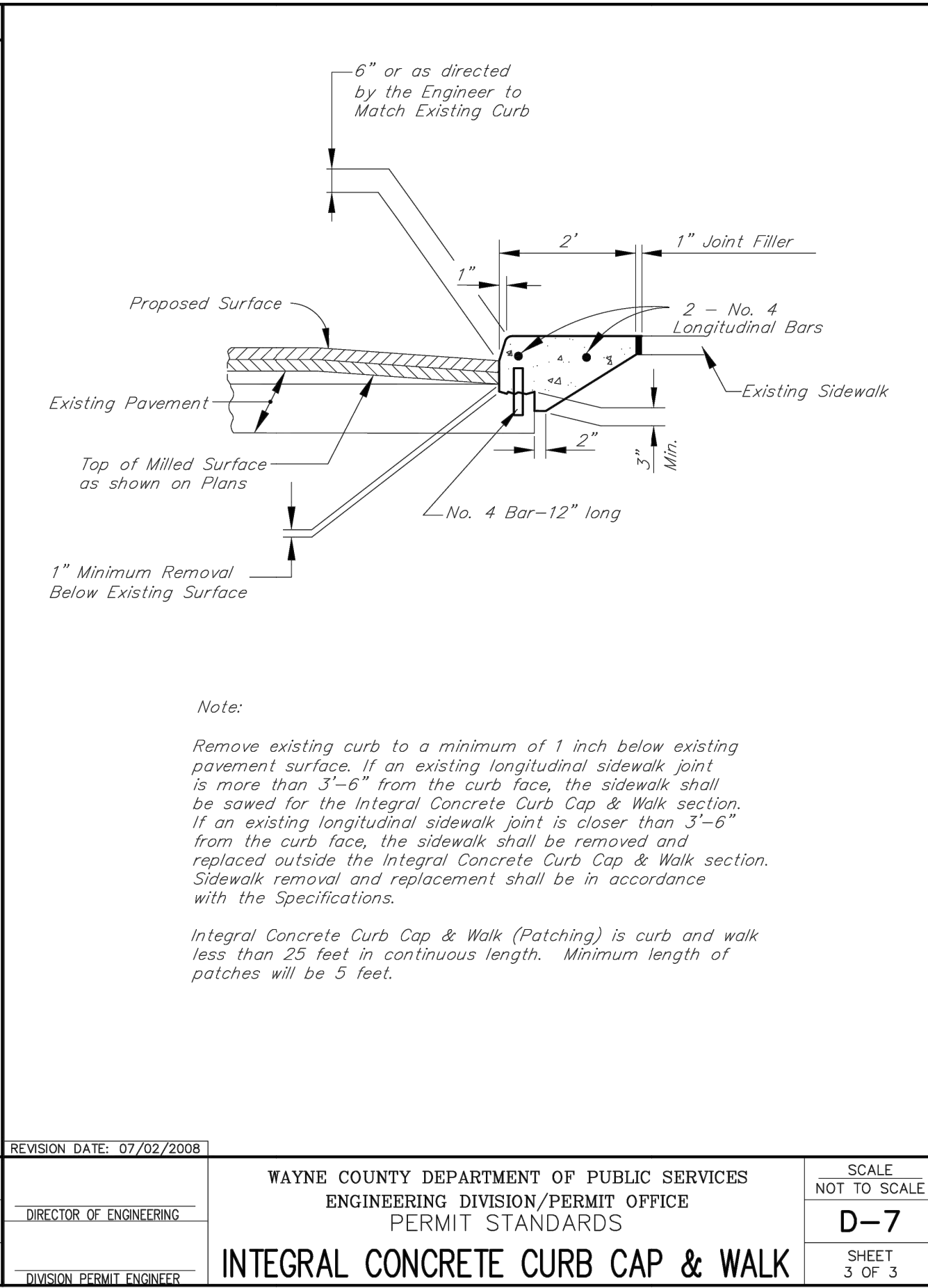
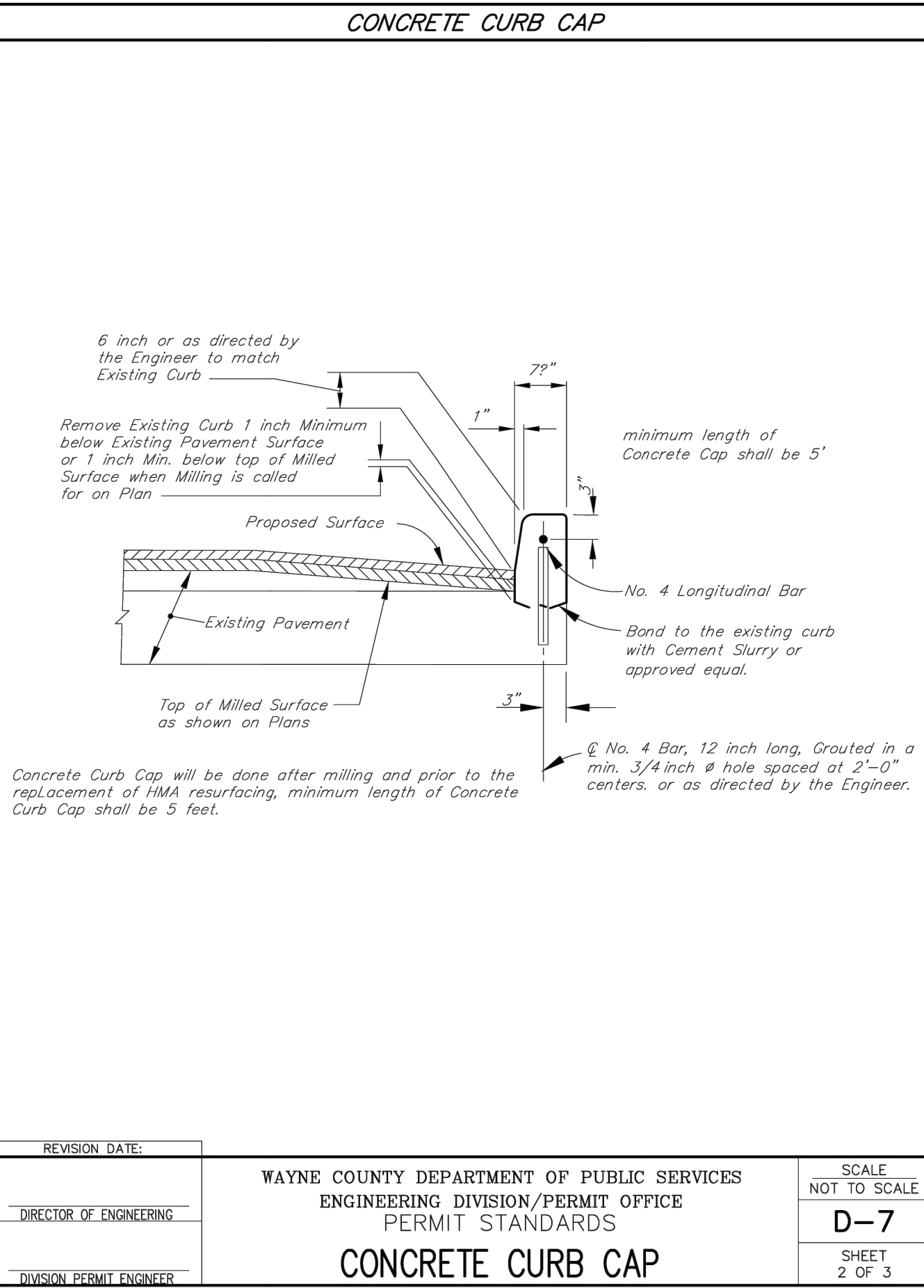
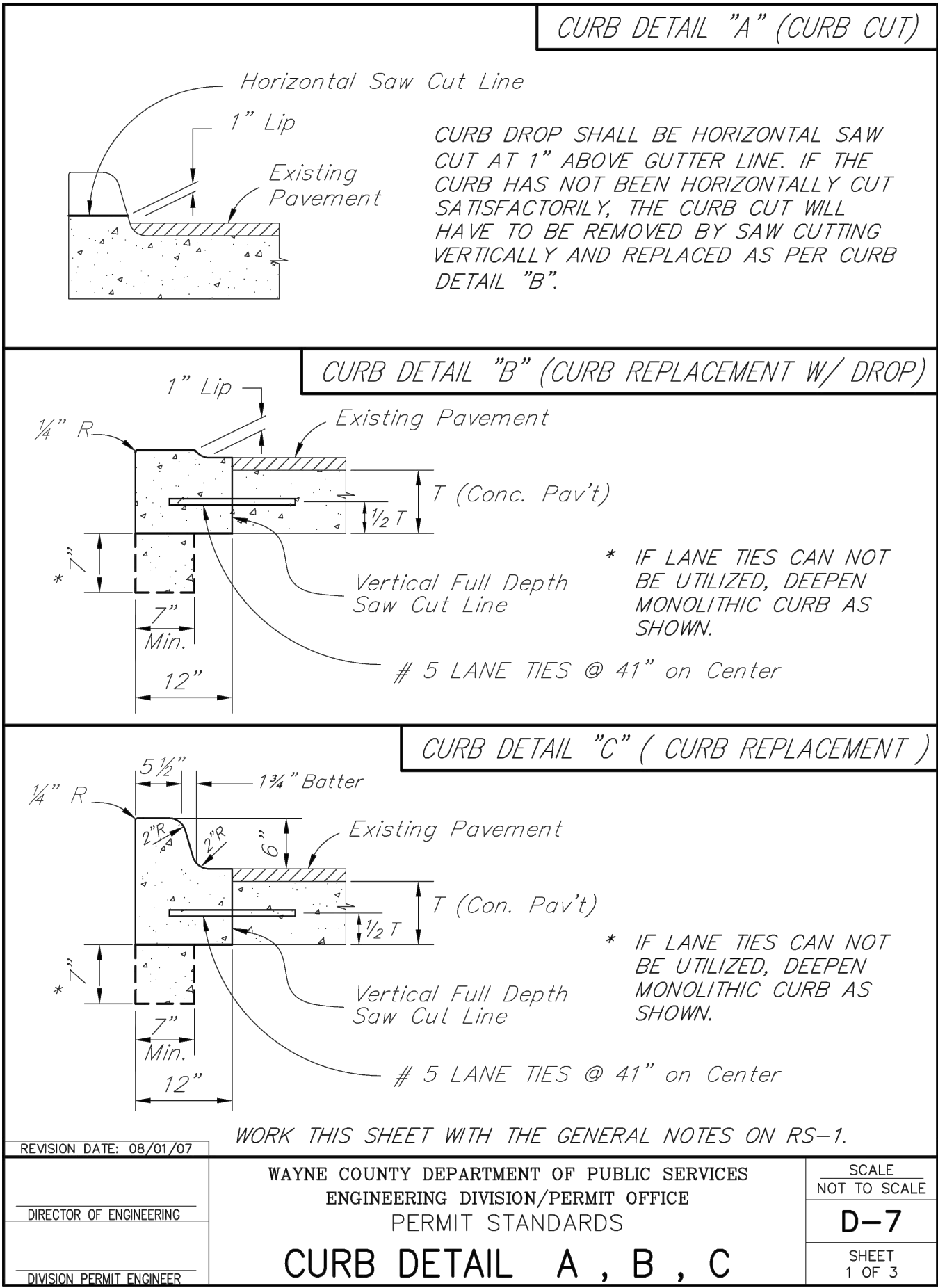
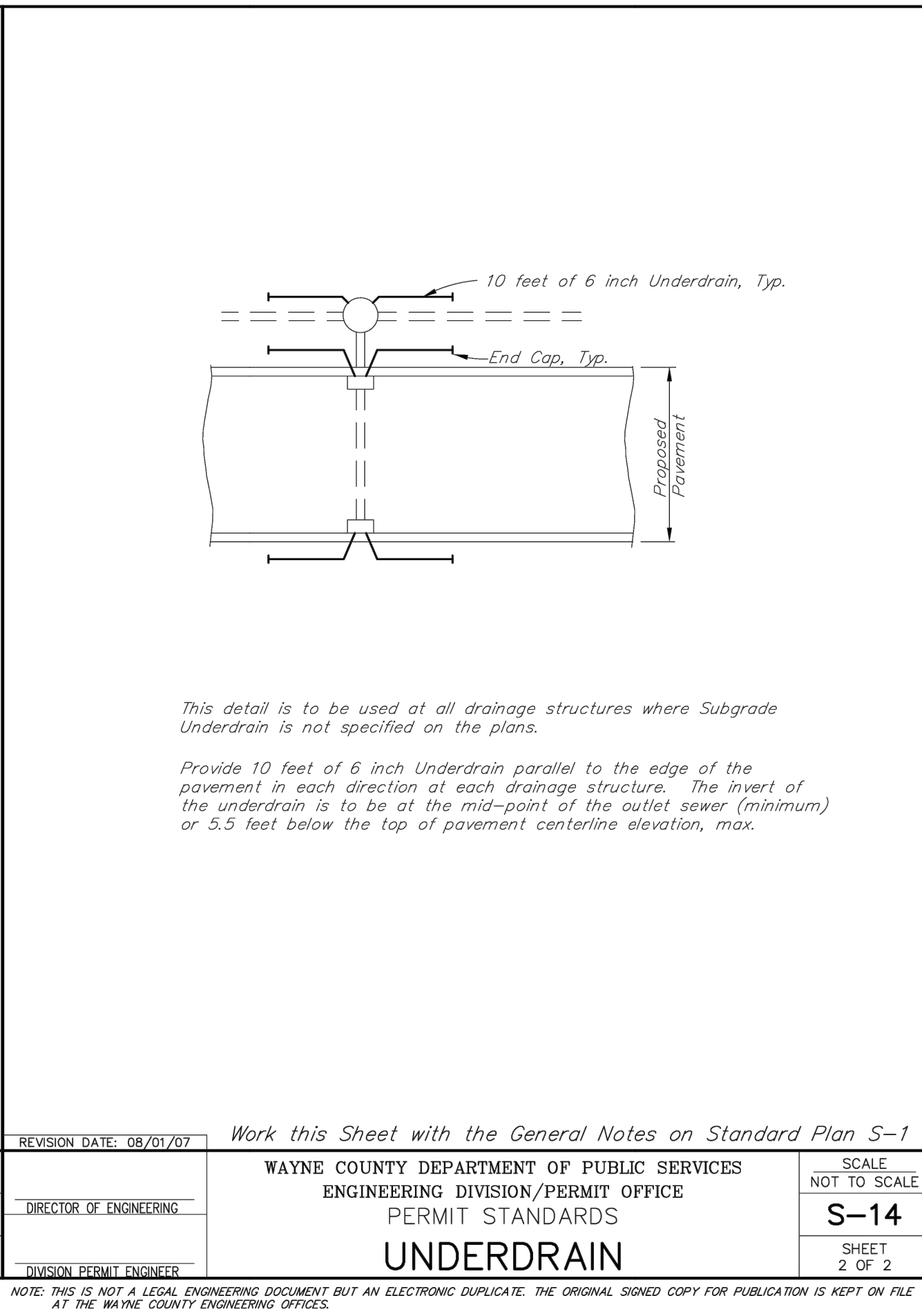
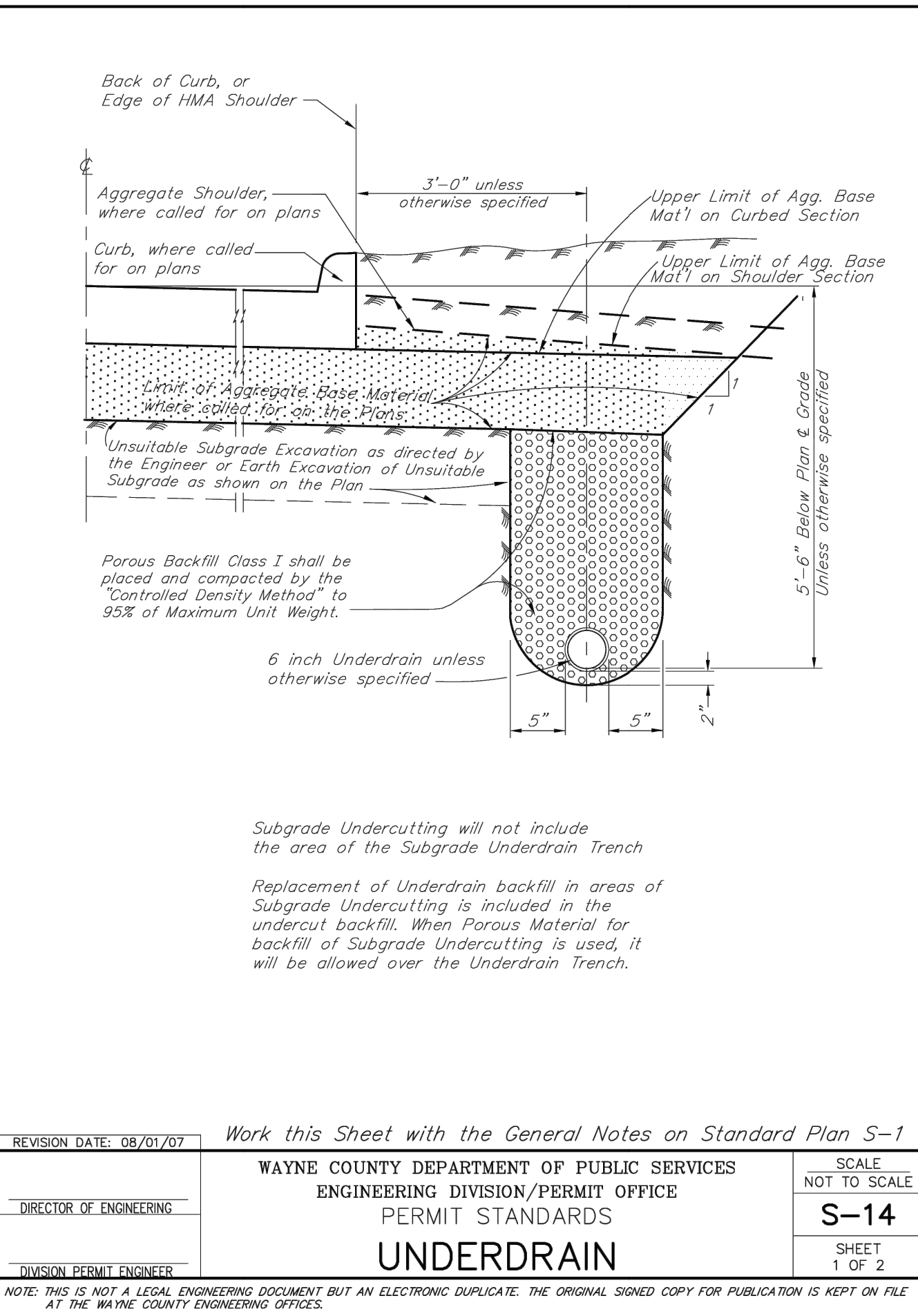
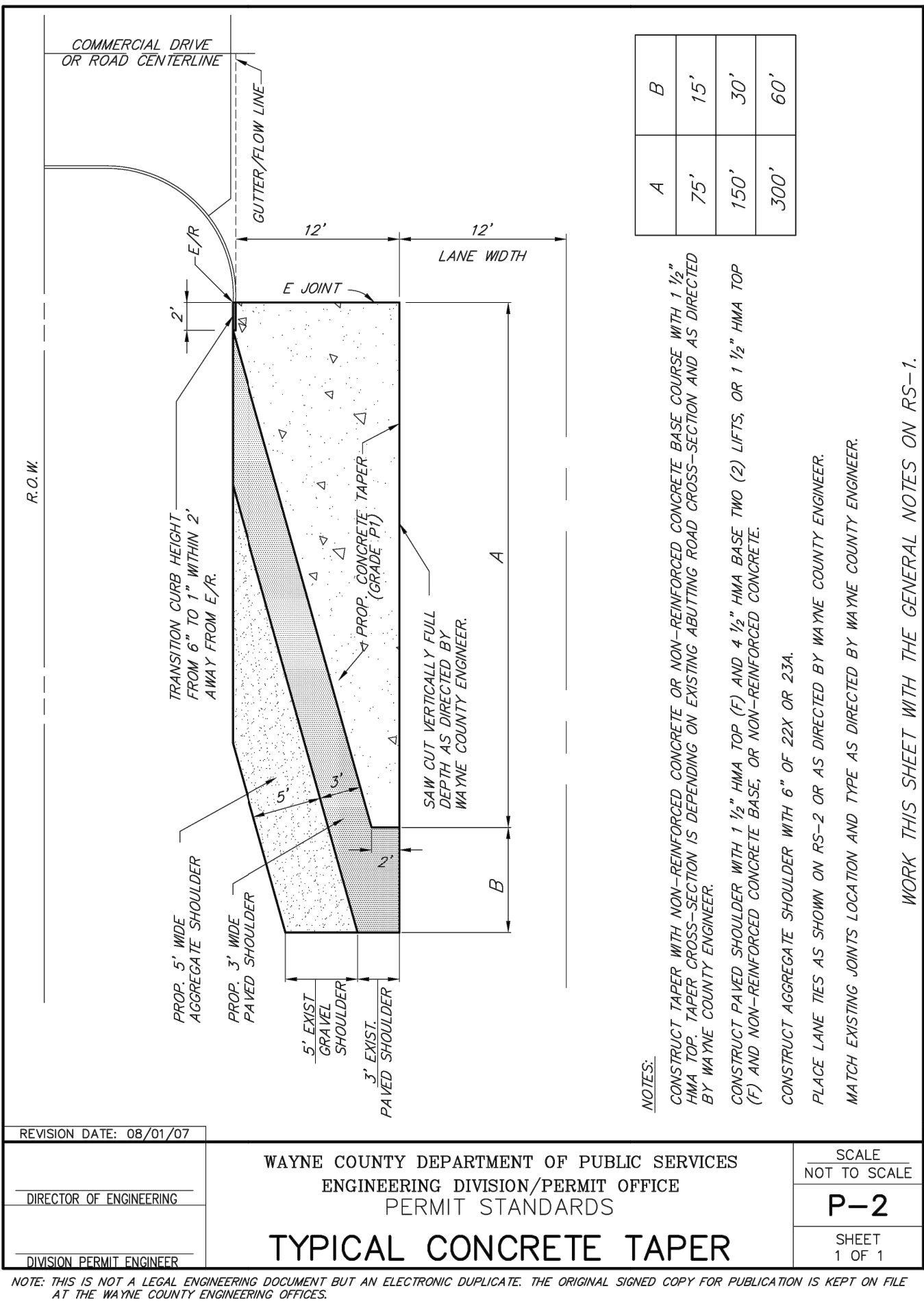
DN. JRW

DES. BWJ/JRW

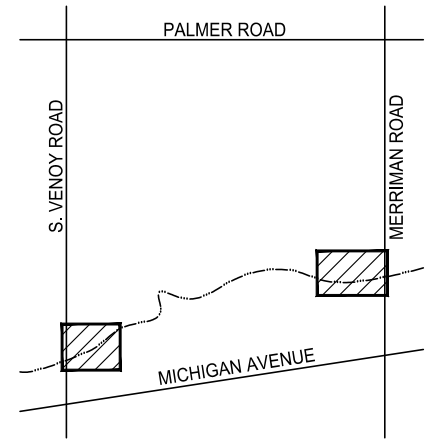
DRAWING NUMBER:
C-20.3



S:\PROJECTS\2020\2020-0310 VENOY DORSEY BOAT LAUNCHES\DWG\CONSTRUCTION\C-20.0 DETAILS-202010.dwg



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
WAYNE COUNTY PARKS
33175 ANN ARBOR TRAIL
WESTLAND, MI

PROJECT TITLE
VENOY DORSEY KAYAK LAUNCHES
WAYNE, MI

REVISIONS		
95% CD		10/08/21
MDNR REVIEW		02/04/22
MDNR REVISIONS		03/10/22
MDNR REVISIONS		04/25/22
WAYNE COUNTY		07/12/22
WAYNE CO. REVISIONS		10/25/22
BIDS		11/30/22
ADDENDUM #1		12/16/22
WAYNE CO. REVISIONS		01/30/23
REBID		06/05/23

ORIGINAL ISSUE DATE:
MARCH 2, 2021

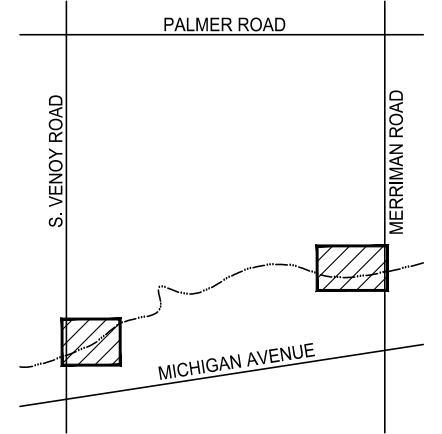
DRAWING TITLE
SITE DETAILS

PEA JOB NO. 2020-0310
P.M. BWJ
DN. JRW
DES. BWJ/JRW
DRAWING NUMBER:

C-20.6



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
WAYNE COUNTY PARKS
33175 ANN ARBOR TRAIL
WESTLAND, MI

PROJECT TITLE
VENOY DORSEY KAYAK LAUNCHES
WAYNE, MI

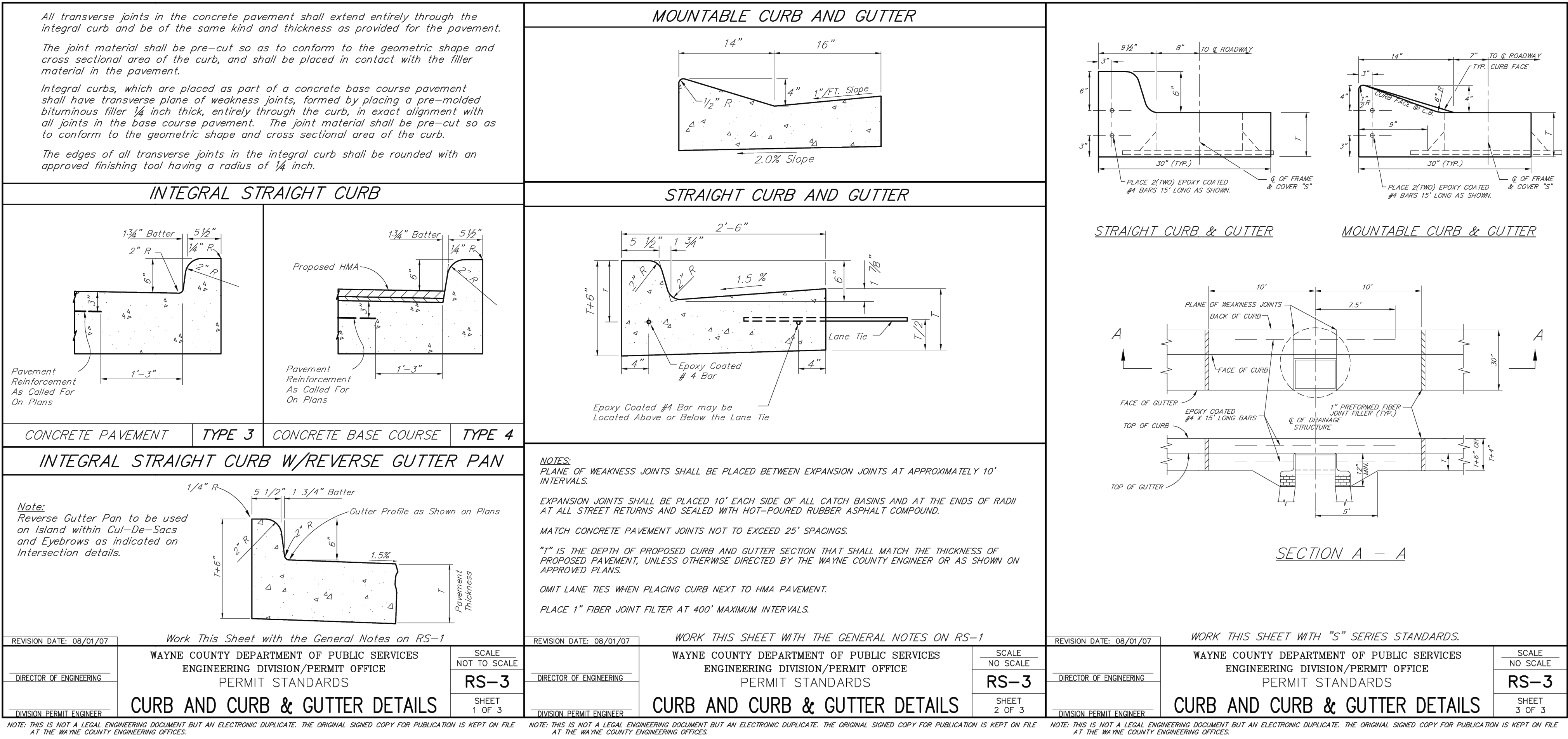
REVISIONS		
95% CD		10/08/21
MDNR REVIEW		02/04/22
MDNR REVISIONS		03/10/22
MDNR REVISIONS		04/25/22
WAYNE COUNTY		07/12/22
WAYNE CO. REVISIONS		10/25/22
BIDS		11/30/22
ADDENDUM #1		12/16/22
WAYNE CO. REVISIONS		01/30/23
REBID		06/05/23

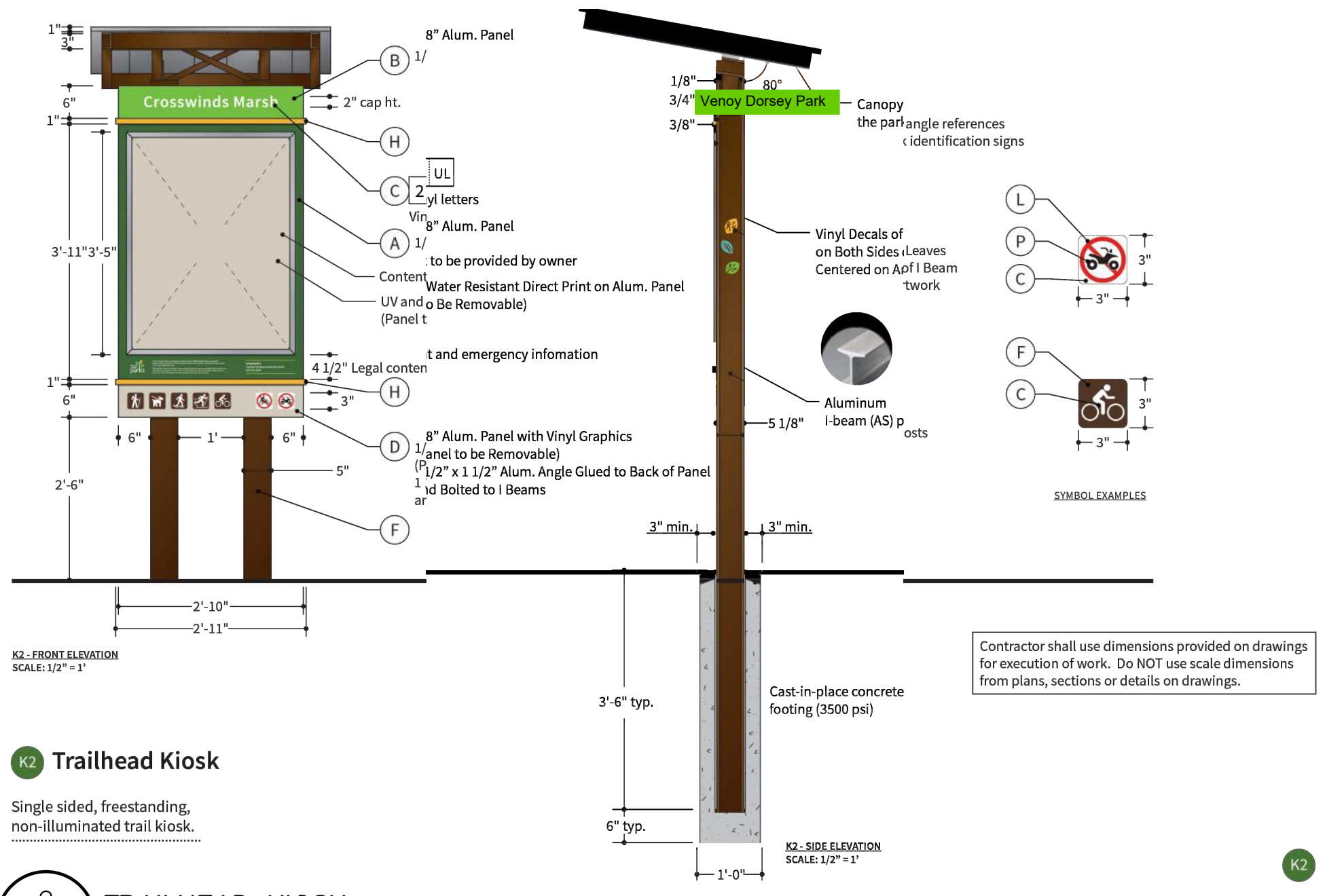
ORIGINAL ISSUE DATE:
MARCH 2, 2021

DRAWING TITLE
SITE DETAILS

PEA JOB NO. 2020-0310
P.M. BWJ
DN. JRW
DES. BWJ/JRW
DRAWING NUMBER:

C-20.7



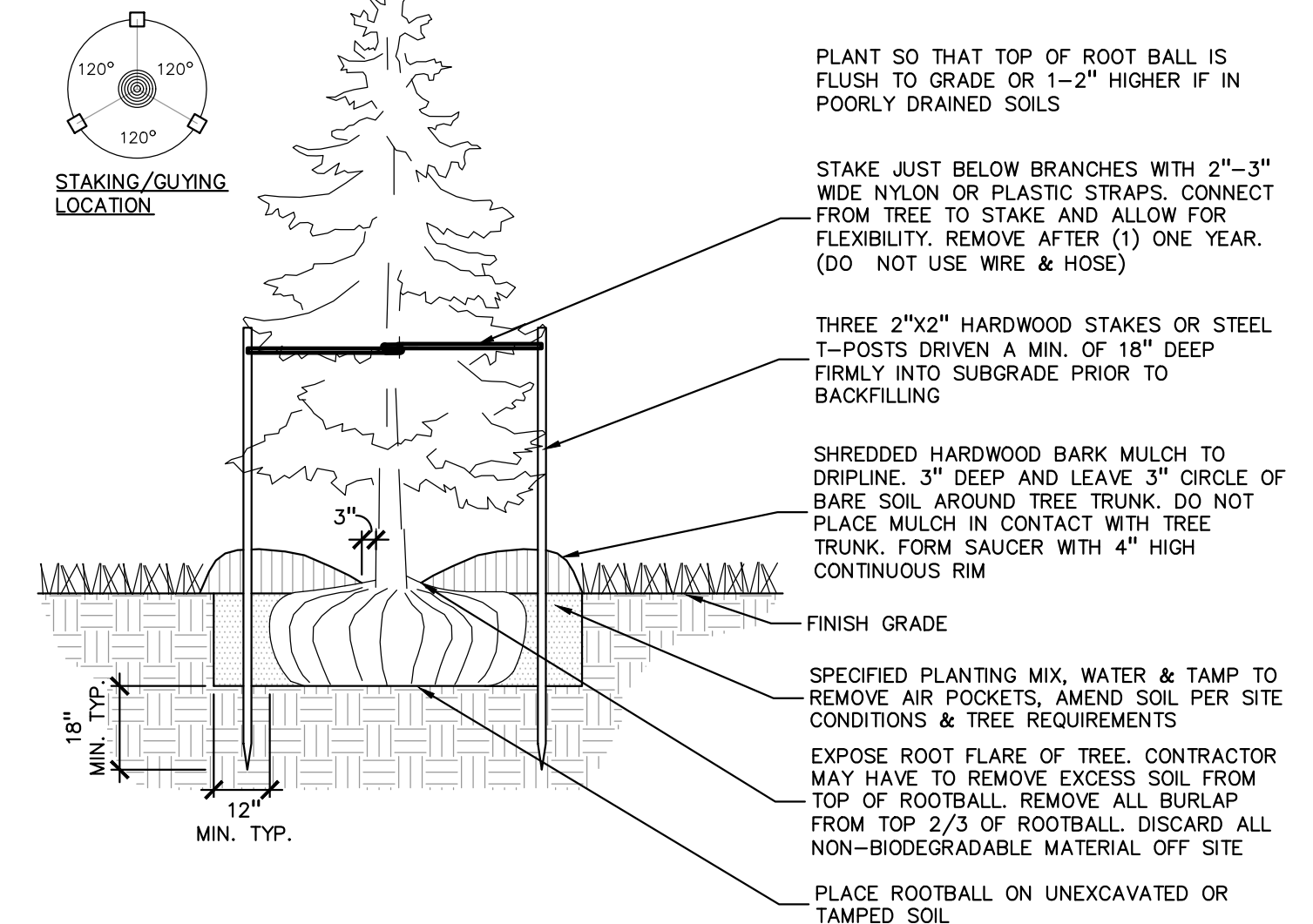
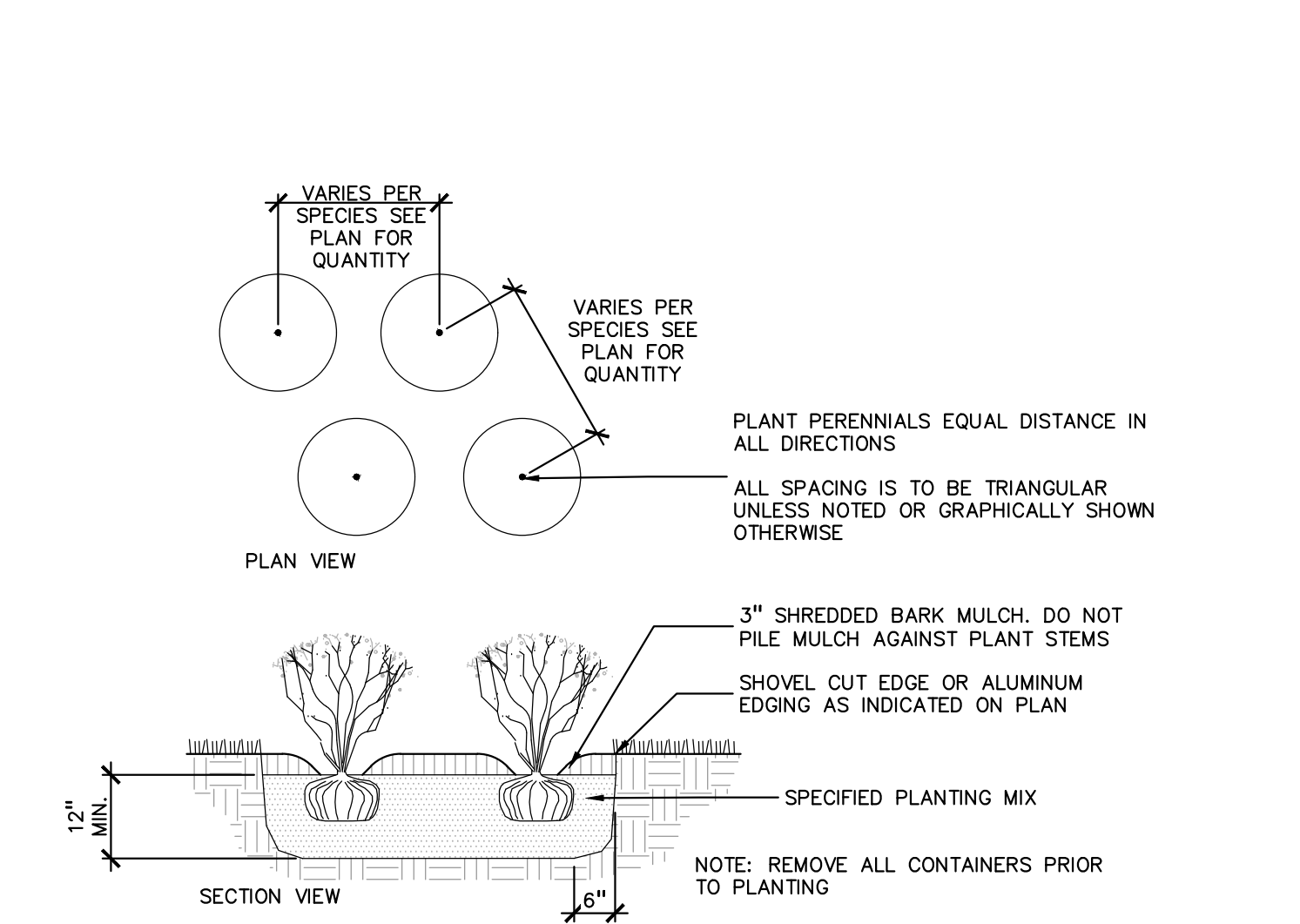
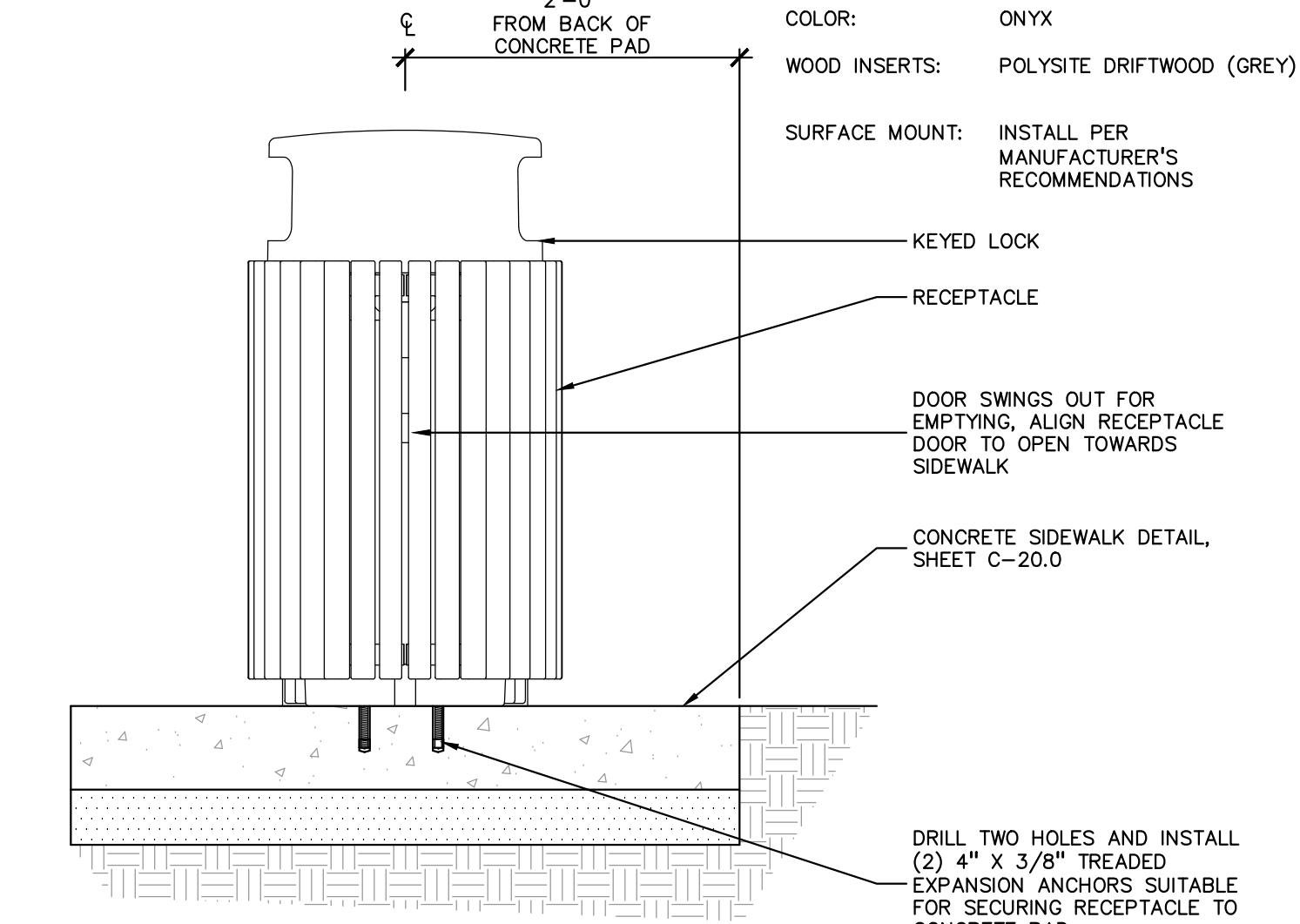


9 TRAILHEAD KIOSK
NOT TO SCALE

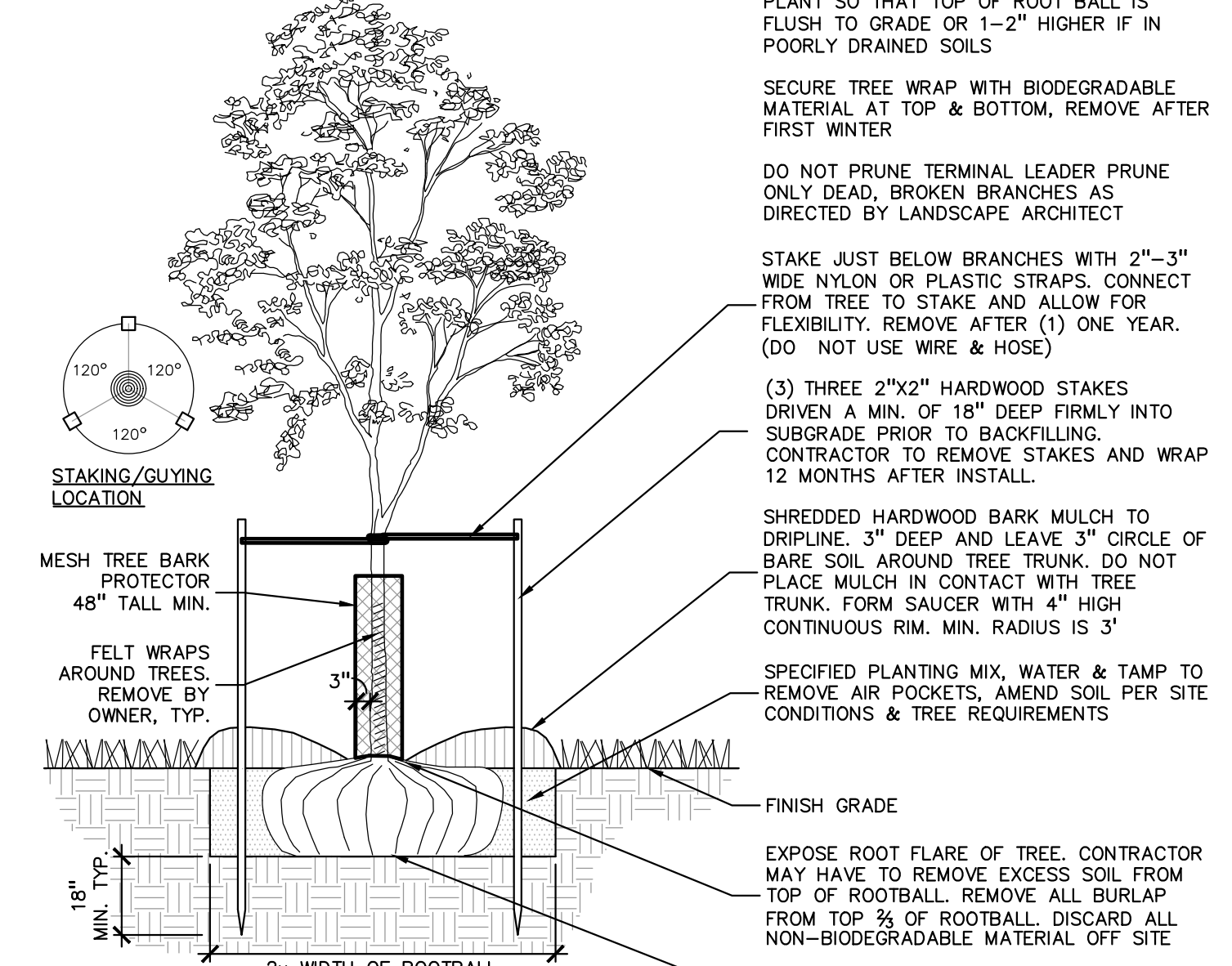
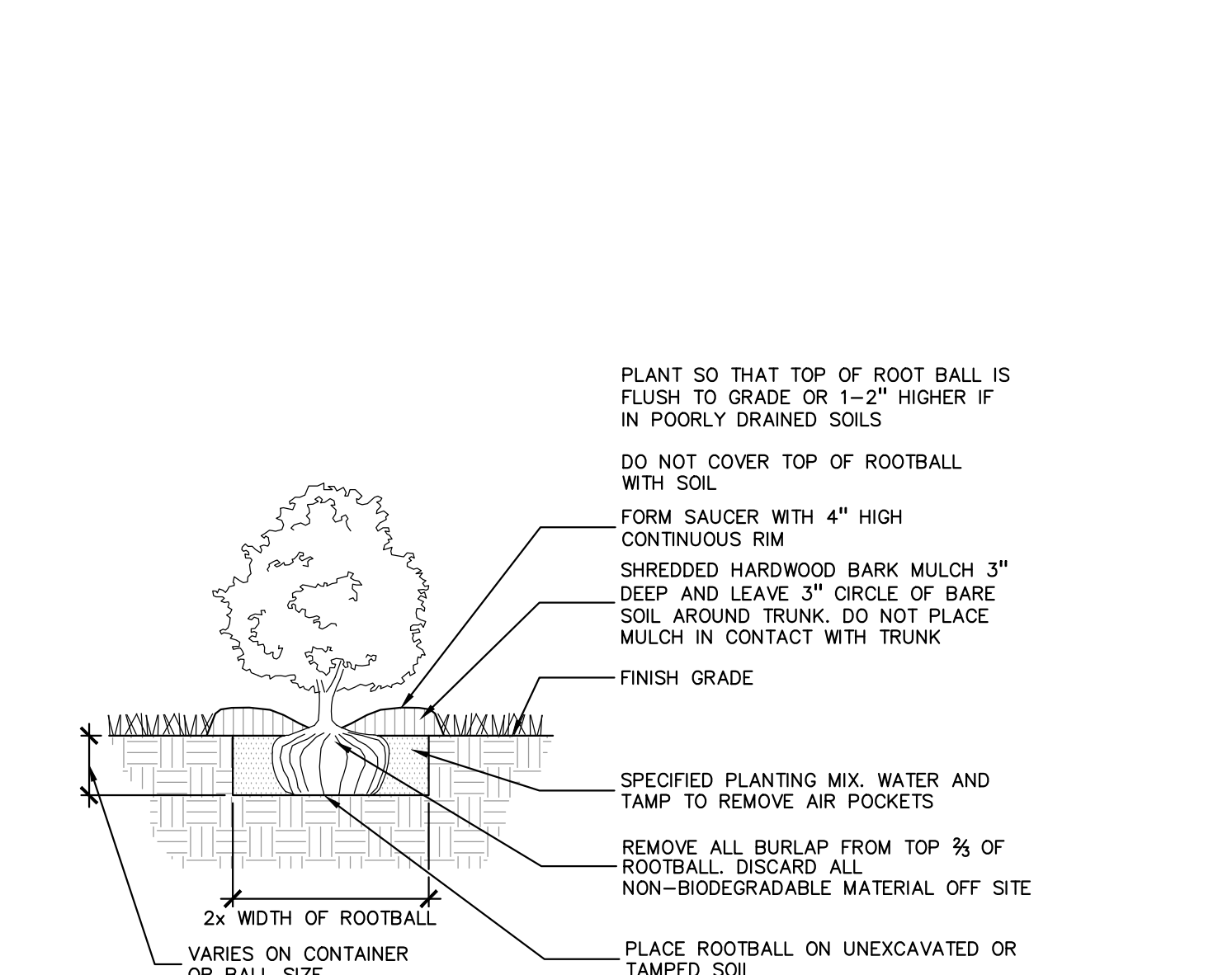
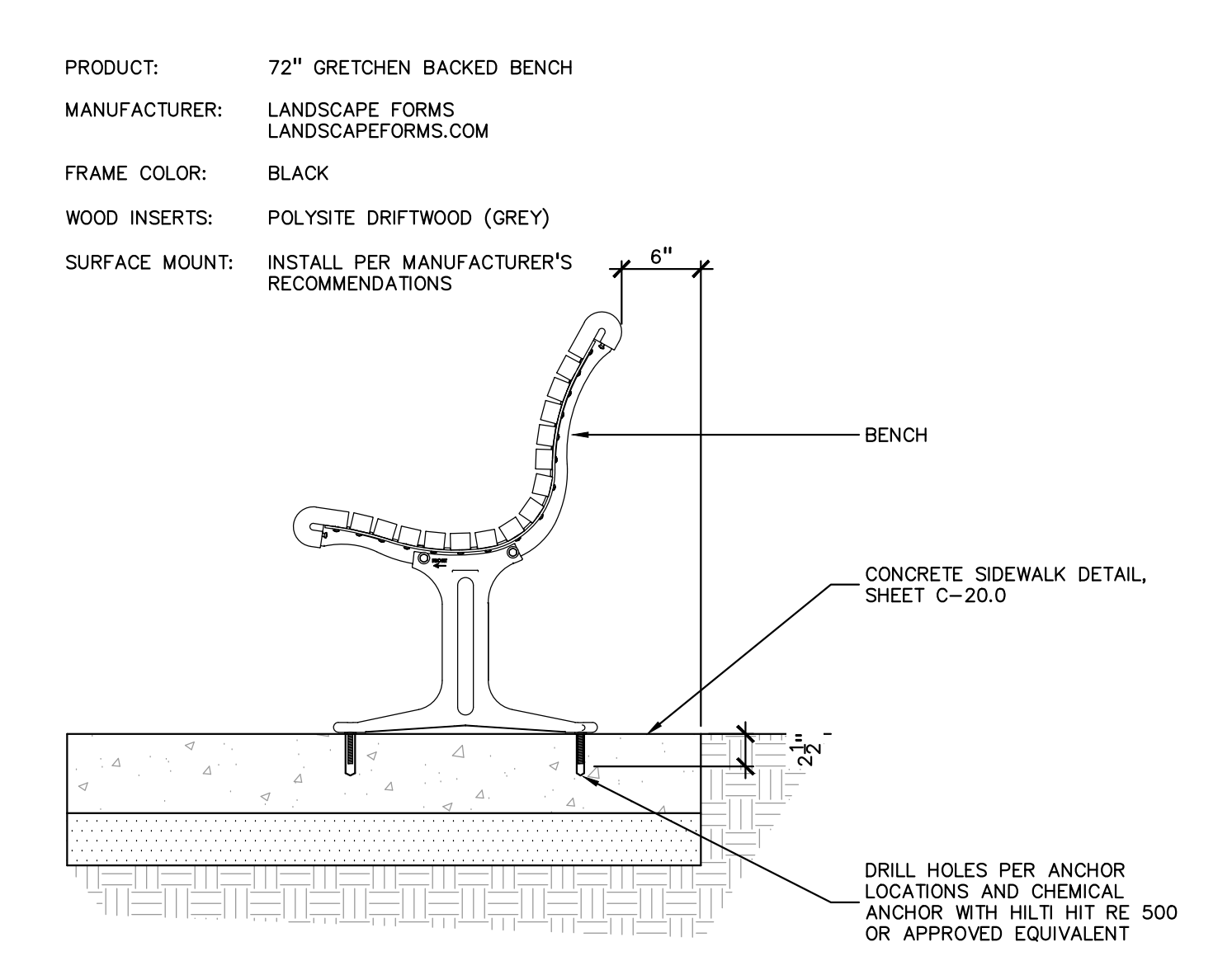
6 DETAIL OMITTED
SCALE: 3" = 1'-0"

3 DETAIL OMITTED
SCALE: 1" = 3'-0"

Economy Prairie Seed Mix	
CARDNO 574-586-2412 cardnonativeplantnursery.com	
Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
<i>Andropogon gerardi</i>	Big Bluestem
<i>Bouteloua curtipendula</i>	Side Oats Grama
<i>Carex spp.</i>	Prairie Sedge Mix
<i>Elymus canadensis</i>	Canada Wild Rye
<i>Panicum virgatum</i>	Switch Grass
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Sorghastrum nutans</i>	Indian Grass
Temporary Cover:	
<i>Avena sativa</i>	Common Oat
<i>Lolium multiflorum</i>	Annual Rye
Forbs & Shrubs:	
<i>Asclepias syriaca</i>	Common Milkweed
<i>Asclepias tuberosa</i>	Butterfly Weed
<i>Chamaecrista fasciculata</i>	Partridge Pea
<i>Coreopsis lanceolata</i>	Sand Coreopsis
<i>Echinacea purpurea</i>	Broad-leaved Purple Coneflower
<i>Helopsis helianthoides</i>	False Sunflower
<i>Lupinus perennis</i>	Wild Lupine
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Penstemon digitalis</i>	Foxglove Beard Tongue
<i>Pycnanthemum virginianum</i>	Common Mountain Mint
<i>Ratibida pinnata</i>	Yellow Coneflower
<i>Rudbeckia hirta</i>	Black-Eyed Susan
<i>Solidago speciosa</i>	Showy Goldenrod
<i>Symphoricarum laeve</i>	Smooth Blue Aster
<i>Symphoricarum novae-angliae</i>	New England Aster



Stormwater Seed Mix	
CARDNO 574-586-2412 cardnonativeplantnursery.com	
Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
<i>Boboschoenus fluviatilis</i>	River Bulrush
<i>Carex cristatella</i>	Crested Oval Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Juncus effusus</i>	Common Rush
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Panicum virgatum</i>	Switch Grass
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush
<i>Scirpus atrovirens</i>	Dark Green Rush
<i>Scirpus cyperinus</i>	Wool Grass
Temporary Cover:	
<i>Avena sativa</i>	Common Oat
<i>Lolium multiflorum</i>	Annual Rye
Forbs & Shrubs:	
<i>Alisma spp.</i>	Water Plantain (Various Mix)
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Bidens spp.</i>	Bidens (Various Mix)
<i>Helianthus autumnale</i>	Sneezeweed
<i>Iris virginica</i>	Blue Flag
<i>Lycopus americanus</i>	Common Water Horehound
<i>Mimulus ringens</i>	Monkey Flower
<i>Oligoneuron riddellii</i>	Riddell's Goldenrod
<i>Penthorum sedoides</i>	Ditch Stonecrop
<i>Polygonum spp.</i>	Pinkweed (Various Mix)
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan
<i>Rudbeckia triloba</i>	Brown-Eyed Susan
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Senna hebecarpa</i>	Wild Senna
<i>Symphoricarum novae-angliae</i>	New England Aster
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue



PEA GROUP
t: 844.813.2949
www.peagroup.com

BURKE JENKINS
LANDSCAPE ARCHITECT
No. 3901001359



811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
WAYNE COUNTY PARKS
33175 ANN ARBOR TRAIL
WESTLAND, MI

PROJECT TITLE
VENYO DORSEY KAYAK LAUNCHES
WAYNE, MI

REVISIONS		
95% CD		10/08/21
MDNR REVIEW		02/04/22
MDNR REVISIONS		03/10/22
MDNR REVISIONS		04/25/22
WAYNE COUNTY		07/12/22
WAYNE CO. REVISIONS		10/25/22
BIDS		11/30/22
ADDENDUM #1		12/16/22
WAYNE CO. REVISIONS		01/30/23
REBID		06/05/23

ORIGINAL ISSUE DATE:
MARCH 2, 2021

DRAWING TITLE
LANDSCAPE DETAILS

PEA JOB NO.	2020-0310
P.M.	BWJ
DN.	KAD
DES.	BWJ/JRW
DRAWING NUMBER:	

C-20.8