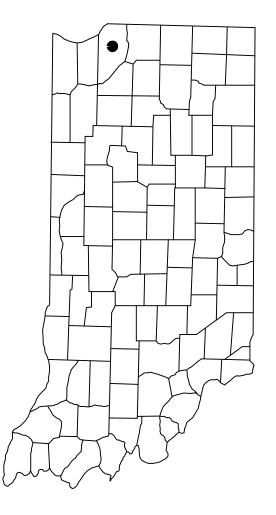
#### OWNER/DEVELOPER: FOUR FIRST LLC 2134 WATERMARK DRIVE GRAND RAPIDS, MI, 49546 PHONE: 708-351-7777

ENGINEER/SURVEYOR: DUNELAND GROUP INC. 1498 POPE CT. CHESTERTON, IN, 46304 PHONE: 219-926-1007

#### <u>UTILITIES:</u> ELECTRIC & GAS - NIPSCO TELEPHONE – TBD WATER - CITY OF LAPORTE SEWER - CITY OF LAPORTE CABLE TV - TBD





● - LOCATION OF PROJECT



### VICINITY MAP NOT TO SCALE



#### <u>RECORD DESCRIPTION:</u>

A parcel of land situated in the Northwest Quarter (NW¼) of Section Twenty-five (25), Township Thirty-seven (37) North, Range Three (3) West, LaPorte County, Indiana, and being more particularly described as follows: Commencing at a cast iron monument marking the Northwest corner of Section Twenty-five (25) Township Thirty-seven (37) North, Range Three (3) West, LaPorte County, Indiana; thence South twenty degrees nineteen minutes zero seconds East (S20'19'00''E), along the center line of County Road 100 West, a distance of One thousand one hundred ninety-six and sixty hundredths (1196.60) feet to a bolt; thence South twenty-nine degrees thirty minutes ten seconds East (S29'30'10'E), continuing along said center line, a distance of Four hundred seventy-two and fifty hundredths (472.50) feet to a bolt; thence South forty-six degrees fifty-six minutes zero seconds East (S46'56'00'E), continuing along said center line, a distance of Two hundred then the point of beginning; thence North forty-three degrees four minutes zero seconds East (N43'04'00'E), a distance of Ninety-eight and eighty-five hundredths (98.85) feet to an iron pipe; thence North eighty-eight degrees forty-one minutes five seconds East (N88\*4105"E), a distance of Two hundred twenty-five (225.00) feet to a railroad spike on the center line of Park Road; thence South one degree eighteen minutes fifty-five seconds East (S01\*18'55'E), along said center line, a distance of One hundred seventy-one and sixty-six hundredths (171.66) feet to a railroad spike; thence South four-degrees forty-two minutes zero seconds East (S04\*42'00'E), continuing along said center line, a distance of one hundred seventy-one and sixty-six hundredths (171.66) feet to a railroad spike; thence South four-degrees forty-two minutes zero seconds East (S04\*42'00'E), continuing along said center line, a distance of Two hundred thirty-three and fifty hundredths (233.50) feet to an iron pipe marking the center line of County Road 100 West; thence North forty-one degrees fifty-three minutes thirty seconds West (N41\*53'30'W), along the center line of County Road 100 West; a distance of Two hundred four and ten hundredths (204.10) feet to a bolt; thence North forty-four degrees twenty-four minutes fifteen seconds West (N44'24'15''W), continuing along said center line, a distance of One hundred twenty-three and ninety-six hundredths (123.96) feet to a bolt; thence North forty-six degrees fifty-six minutes zero seconds West (N46'56'00'W), continuing along said center line, a distance of One hundred twenty-six and sixty hundredths (126.60) feet to the point of beginning, containing One and four hundred eighty-six thousandths (1.486) acres, more or less, subject to the right of way of County Road 100 west and the right of way of Park Road.

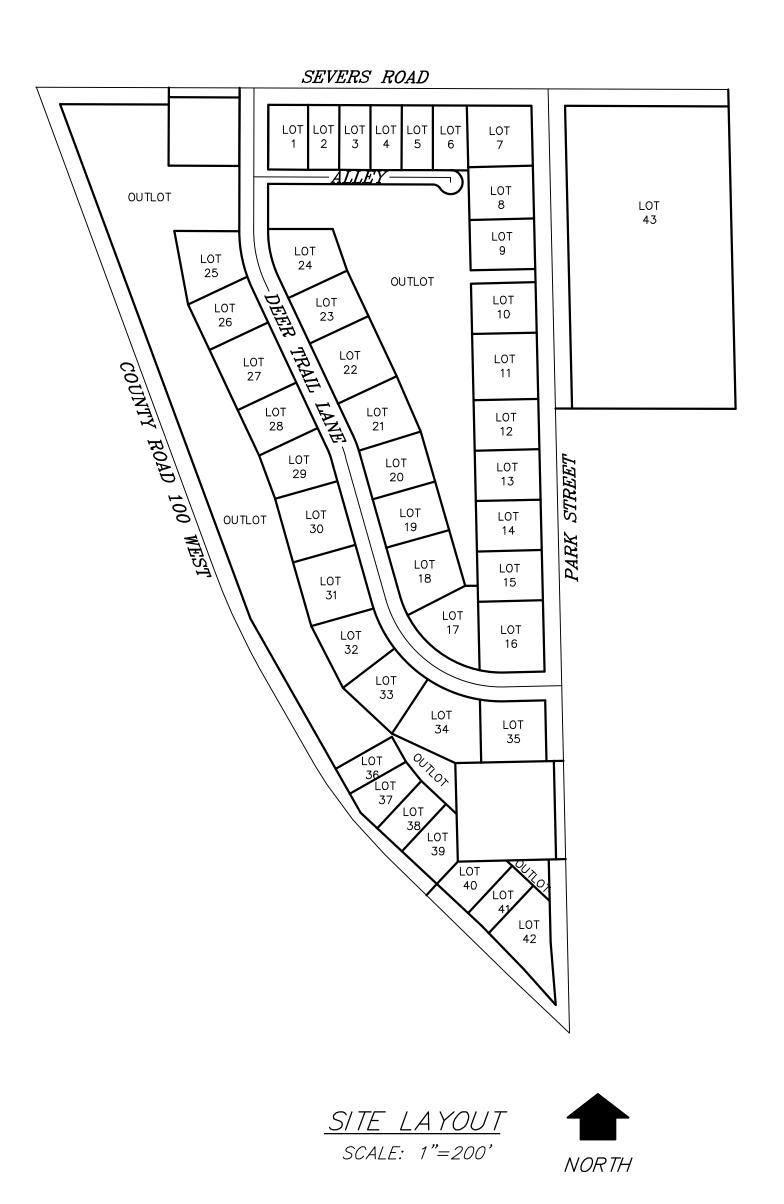
#### ALSO

A parcel of land situated in the Northwest Quarter (NW  $\frac{1}{4}$ ) of Section Twenty-five (25), Township Thirty-seven (37) North, Range Three (3) West, LaPorte County, Indiana, being more particularly described as follows: Commencing at a cast iron monument marking the Northwest corner of Section Twenty-five (25), Township Thirty-seven (37) North, Range Three (3) West, LaPorte County, Indiana, for the point of beginning; thence South eighty-nine degrees forty-eight minutes twenty-five seconds East (S 89° 48' 25" E), along the North line of said Section Twenty-five (25), a distance of two hundred seventy-seven and two hundred the Northwest corner of a parcel of land as described in Deed Record Six (6) Page One hundred seventy-three (173); thence South zero degrees eleven minutes thirty-five seconds West (S 0° 11' 35" W), along the West line of said parcel, a distance of one hundred sixty-two and fifty hundredths (162.50) feet to an iron pipe marking the Southwest corner thereof; thence South eighty-nine degrees forty-eight minutes twenty-five seconds East (S 89' 48' 25" E), along the South line of said parcel, a distance of one hundred forty-seven and fifty-eight hundredths (147.58) feet to an iron pipe marking the Southeast corner thereof; thence North zero degrees eleven minutes thirty-five seconds East (N 0' 11' 35" E), along the East line of said parcel, a distance of one hundred sixty-two and fifty hundredths (162.50) feet to a masonry nail on the North line of said Section Twenty-five seconds East (S 89° 48' 25" E), along the North line of said Section Twenty-five (25), a distance of one thousand eighteen and nine hundredths (1018.09) feet to a masonry nail; thence South one degree eighteen minutes fifty-five and Sixty-two hundredths (665.62) feet to an iron pipe; thence North eighty-nine degrees forty-eight minutes twenty-five seconds West (N 89° 48' 25" W), a distance of three hundred seventy-five and seventy-four hundredths (375.74) feet to a railroad spike on the centerline of Park Road; thence South one degree eighteen minutes fifty-five seconds East (S 1° 18' 55" E), along the centerline of Park Road, a distance of one thousand one hundred eleven and seven hundred thirty-three and fifty hundred this (1111.07) feet to a railroad spike; thence South four degrees forty-two minutes zero seconds East (S 4° 42' 00" E), continuing along the centerline of Park Road, a distance of two hundred thirty-three and fifty hundred this (233.50) feet to an iron pipe marking the centerline of County Road 100 West; thence North forty-one degrees fifty-three minutes thirty seconds West (N 41° 53' 30" W), along the centerline of County Road 100 West, a distance of two hundred four and ten hundredths (204.10) feet to a bolt; thence North forty-four degrees twenty-four minutes fifteen seconds West (N 44° 24' 15" W), continuing along said centerline, a distance of one hundred the (123.96) feet to a bolt; thence North forty-six degrees fifty-six minutes zero seconds West (N 46° 56'00" W), continuing along said centerline, a distance of three hundred forty-nine and seventy hundredths (349.70) feet to an iron pipe; thence North twenty-nine degrees thirty minutes ten seconds West (N 29° 30' 10" W), continuing along said centerline, a distance of four hundred seventy-two and fifty hundredths (472.50) feet to a bolt; thence North twenty-degrees nineteen minutes zero seconds West (N 20' 19' 00" W), continuing along said centerline, a distance of one thousand one hundred ninety-six and sixty hundredths (1196.60) feet to the point of beginning, containing Thirty-five and two hundred eighty-six thousandths (35.286) acres.

#### EXCEPTING THEREFROM:

A parcel of land situated in the Northwest Quarter (NW¼) of Section Twenty-five (25), Township Thirty-seven (37) North, Range Three (3) West, LaPorte County, Indiana, and being more particularly described as follows: Commencing at a cast iron monument marking the Northwest corner of Section Twenty-five (25), Township Thirty-seven (37) North, Range Three (3) West, LaPorte County, Indiana; thence South Twenty degrees Nineteen minutes Zero seconds East (S20\*19'00''E), along the centerline of County Road 100 West, a distance of One Thousand One Hundred Ninety-six and Sixty hundredths (1196.60) feet to a bolt; thence South Twenty-nine degrees Thirty minutes Ten seconds East (S29°3010"E), continuing along said centerline, a distance of Four Hundred Seventy-two and Fifty hundredths (472.50) feet to a bolt; thence South Forty-six degrees Fifty-six minutes Zero seconds East (S46'56'00"E), continuing along said centerline, a distance of Two Hundredths (223.10) feet to the point of beginning; thence North Forty-three degrees Four minutes Zero seconds East (N43'04'00"E), a distance of Ninety-eight and Eighty-five hundredths (98.85) feet to an iron pipe; thence North One degree Eighteen minutes Fifty-five seconds West (N11855"W), a distance of Two Hundred Five and Thirteen hundredths (205.13) feet to an iron pipe; thence North Eighty-eight degrees Forty-one minutes Five seconds East (N88'41'05''E) a distance of Two Hundred Twenty-five (225.00) feet to a railroad spike on the centerline of Park Road; thence South one degree Eighteen minutes Fifty-five seconds East (S1'18'55''E), along said centerline, a distance of Three Hundred Seventy-six and Seventy-nine hundredths (376.79) feet to a railroad spike; thence South Four degrees Forty-two minutes Zero seconds East (S4°42'00"E) continuing along said centerline, a distance of Two Hundred Thirty-three and Fifty hundredths (233.50) feet to an iron pipe marking the centerline of County Road 100 West; thence North Forty-one degrees Fifty-three minutes Thirty seconds West (N41\*53'30"W), along the centerline of County Road 100 West, a distance of Two Hundred Four and Ten hundredths (204.10) feet to a bolt; thence North Forty-four degrees Twenty-four minutes Fifteen seconds West (N44°24'15"W), continuing along said centerline, a distance of One Hundred Twenty-three and Ninety-six hundredths (123.96) feet to a bolt; thence North Forty-six degrees Fifty-six minutes Zero seconds West (N46°56'00"W), continuing along said centerline, a distance of One Hundred Twenty-six and Sixty hundredths (126.60) feet to the point of beginning, containing Two and Five Hundred Forty-five thousandths (2.545) acres, more or less.

## HUNTER WOODS CITY OF LA PORTE, INDIANA Section 25, Township 37 N, Range 03 W APPROXIMATE CENTER OF PROJECT 41°37' 59" N and 86°42'58" W

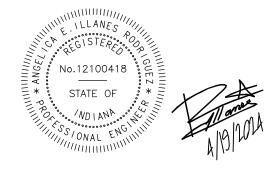


<u>DRAWING LIST</u>	
COVER	
SHEET C-1: NOTE SHEET	
SHEET P-1: BOUNDARY EXHIBIT SHEET C-2: PRIMARY PLAT - W	
SHEET $C-3$ : PRIMART PLAT - W SHEET $C-3$ : PRIMARY PLAT - E	
SHEET C-4: ADJACENT PROPERT	
SHEET C-5: EXISTING CONDITION	5
SHEET C-6: EXISTING CONDITION	_
SHEET C-7: EXISTING CONDITION	
SHEET C-8: EXISTING CONDITION SHEET C-9: EXISTING CONDITION	-
SHEET C-10: UTILITY PLAN OVER	
SHEET C-11: UTILITY PLAN ENLA	RC
SHEET C-12: UTILITY PLAN ENLA	
SHEET C-13: UTILITY PLAN ENLA	
SHEET C-14: UTILITY PLAN - E SHEET C-15: GRADING PLAN OV	
SHEET C-16: GRADING PLAN EN	
SHEET C-17: GRADING PLAN EN	
SHEET C-18: GRADING PLAN EN	'_AI
SHEET C-19: GRADING PLAN OV	
SHEET C-20: DEER TRAIL LANE	
SHEET C-21: DEER TRAIL LANE SHEET C-22: ALLEY SANITARY F	
SHEET C-22: ALLET SAWTART F SHEET C-23: CR 100 W SANITAR	
SHEET C-24: STORM PLAN / PF	
SHEET C-25: STORM PLAN / PF	
SHEET C-26: OUTLET CULVERT H	
SHEET C-27: CR 100 W DITCH S	
SHEET C-28: CR 100 W DITCH S	
SHEET C-29: PARK STREET DITO SHEET C-30: PARK STREET DITO	
SHEET C-31: CENTRAL POND ST	
SHEET C-32: EAST POND STORN	
SHEET C-33: STORM WATER DET	ΓA /
SHEET C-34: LOW-PRESSURE S	
SHEET C-35: WATER PLAN/PROP	
SHEET C-36: COUNTRY ROAD 10 SHEET C-37: SIDEWALK AND CU	
SHEET C-38: CURB RAMP DETAI	
SHEET C-39: CITY OF LA PORTE	
SHEET C-40: CITY OF LA PORTE	<sup>-</sup> D
SHEET C-41: CITY OF LA PORTE	
SHEET C-42: CITY OF LA PORTE	
SHEET C-43: CITY OF LA PORTE SHEET C-44: EROSION CONTROL	
SHEET C-45: EROSION CONTROL	
SHEET C-46: EROSION CONTROL	
SHEET C-47: EROSION CONTROL	
SHEET C-48: EROSION CONTROL	
SHEET C-49: SIGN PLACEMENT/	
SHEET C-50: LANDSCAPING PLA	' V

#### DRAWING DATE

<u>REVISION DATE</u>

*04/19/2024* 04/19/2024 SHEET 04/19/2024 IDARY EXHIBIT 04/19/2024 ARY PLAT - WEST SIDE ARY PLAT – EAST SIDE 04/19/2024 CENT PROPERTY OWNERS 04/19/2024 ING CONDITIONS - WEST SIDE 04/19/2024 04/19/2024 ING CONDITIONS ENLARGED — WEST SIDE ING CONDITIONS ENLARGED — WEST SIDE 04/19/2024 TING CONDITIONS ENLARGED — WEST SIDE 04/19/2024 TING CONDITIONS – EAST SIDE 04/19/2024 04/19/2024 ITY PLAN OVERALL - WEST SIDE 04/19/2024 .ITY PLAN ENLARGED – WEST SIDE ITY PLAN ENLARGED - WEST SIDE 04/19/2024 ITY PLAN ENLARGED - WEST SIDE 04/19/2024 04/19/2024 ITY PLAN – EAST SIDE 04/19/2024 DING PLAN OVERALL - WEST SIDE 04/19/2024 DING PLAN ENLARGED - WEST SIDE 04/19/2024 DING PLAN ENLARGED — WEST SIDE 04/19/2024 DING PLAN ENLARGED - WEST SIDE 04/19/2024 DING PLAN OVERALL - EAST SIDE 04/19/2024 ER TRAIL LANE SOUTH PLAN/PROFILE 04/19/2024 R TRAIL LANE NORTH PLAN/PROFILE EY SANITARY PLAN / PROFILE 04/19/2024 100 W SANITARY PLAN / PROFILES 04/19/2024 04/19/2024 RM PLAN / PROFILES 04/19/2024 DRM PLAN / PROFILES 04/19/2024 LET CULVERT PIPE PLAN/PROFILE 04/19/2024 100 W DITCH STA. 2+00-10+00 100 W DITCH STA. 11+00-16+00 04/19/2024 04/19/2024 rk street ditch plan/profile 04/19/2024 rk street ditch plan/profile TRAL POND STORM WATER DETAILS 04/19/2024 ST POND STORM WATER DETAILS 04/19/2024 RM WATER DETAILS 04/19/2024 04/19/2024 -PRESSURE SYSTEM DETAILS ER PLAN/PROFILE 04/19/2024 UNTRY ROAD 100 WEST WATER PLAN/PROFILE 04/19/2024 WALK AND CURB RAMP DETAILS 04/19/2024 RB RAMP DETAILS 04/19/2024 OF LA PORTE DETAILS 04/19/2024 04/19/2024 OF LA PORTE DETAILS SION CONTROL PLAN 04/19/2024 SION CONTROL PLAN 04/19/2024 SION CONTROL PLAN 04/19/2024 04/19/2024 SION CONTROL PLAN SION CONTROL PLAN 04/19/2024 PLACEMENT/VISION CLEARANCE 04/19/2024



04/19/2024

**DUNELAND GROUP** Engineering & surveying 1498 POPE COURT CHESTERTON, INDIANA 46304 Ph: 219-926-1007 E-MAIL dgi@dunelandgroup.com

#### NOTES:

1. PARCEL IS ZONED R1C, R2B, R3A.

2. SURROUNDING PARCELS ARE ZONED M2 HEAVY INDUSTRIAL (CITY OF LA PORTE), AND R1B-SINGLE FAMILY (LAPORTE COUNTY).

- 3. ALL DIMENSIONS ARE IN FEET.
- 4. SEE BUILDING DIMENSIONAL REQUIREMENTS TABLE FOR BUILDING LINES.

	Max. build	ling height		*Min. set	backs (ft.)		% Lot c	overage	Min. flo	or area
District	Height (ft.)	Height (st.)	Front yard	Side yard	Total both sides	Rear yard	Building	Imper. surface	Floor area per unit (sq.ft.)	First floor (sq.ft.)
R1C Single										
family residential	35	2.5	25	5	15	25	45%	55%	1000	800
R2B Townhouse										
residential district	45	3.5	15	10	20	25	65%	85%	1000	
R3A Low-rise										
multiple family										
Townhouses	45	4	15	10	20	25	65%	75%	800	
Multiple-family	45	4	25	20	40	25	55%	75%	500	

5. 5/8" REBAR WITH ID CAPS WILL BE SET AT ALL LOT CORNERS AND POINTS OF

CUR VA TURE. 6. IN ACCORDANCE WITH THE FEMA FLOOD INSURANCE RATE MAP PANEL #18091C0165D, DATED 11/06/2013. THIS PARCEL IS IN FLOOD HAZARD ZONE X.

7. LOT AREAS ARE AS SHOWN ON DRAWING.

8. THIS PROPERTY IS IN THE LA PORTE COMMUNITY SCHOOL DISTRICT – HAILMANN ELEMENTARY SCHOOL, KESLING INTERMEDIATE SCHOOL, LA PORTE MIDDLE SCHOOL, AND LA PORTEHIGH SCHOOL.

9. THE SOILS ON THIS PROPERTY ARE CHB Charlton-Hollis-Rock (K=0.17). EsB Elston (K=0.28), HkA Haskins (K=0.37), TcA TRACY (K=0.24), TcB TRACY (K=0.24), TcC2 TRACY (K=0.10), TcD2 TRACY (K=0.10), Wh WHITAKER (K=0.37).

10. ALL GRAVITY SANITARY SEWERS SHALL BE 8" DIAMETER SDR-26

- 11. ALL WATERLINES SHALL BE 8" DIAMETER DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
- 12. ALL LOTS SHALL BE SERVED BY SANITARY SEWER.
- 13. ALL LOTS SHALL BE SERVED BY WATER SERVICE.

14. INTERIOR STREETS SHALL BE 30' WIDE - ASPHALT WITH CONCRETE CURB AND GUTTER.

15. SIDEWALKS SHALL BE 5' WIDE WITH HANDICAP RAMPS.

16. OUTLOTS "A", AND "B" SHALL BE DRAINAGE, AND UTILITY EASEMENT.

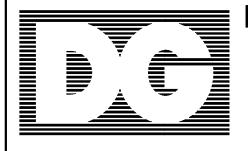
- 17. THE SUBDIVISION SPEED LIMIT SHALL BE POSTED AT 20 mph AND ALL MUTCD REQUIRED SIGNAGE (SPEED LIMIT, STOP SIGN, STREET NAMES, ASPHALT MARKINGS, ETC.) WILL BE PROVIDED BY THE DEVELOPER. STOP SIGNS TO BE PLACED AT THE EXITS OF DEER TRAIL LANE FROM THE SUBDIVISION AND AT LOCATIONS DETERMINED. BY THE STREET COMMISSIONER.
- 18. WARNING AND REGULATORY SIGNS SHALL BE PLACED ACCORDING TO THE INDIANA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS. LATEST ADDITION. THE SIGNS SHALL HAVE REFLECTIVITY. 10 10000

19.	AREAS:				
	SUBDI VISION	/ =	811,483.0 SQ. FT.	=	18.63 ± ACRES
	RIGHT OF W	VAY =	307,207.6 SQ. FT.	—	7.05 ± ACRES
	OUTLOTS	=	370,301.5 SQ. FT.	=	8.547 ± ACRES
	TOTAL=			=	<i>34.227 ± ACRES</i>

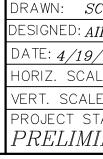
- 20. CURBS WILL BE STAMPED WITH AN "S" AT THE LOCATION OF THE SANITARY SEWER LA TERALS.
- 21. ALL SANITARY SEWERS LATERALS SHALL BE 6" DIAMETER PVC SDR-26.

22. SIDE YARD UTILITY AND DRAINAGE EASEMENTS OF ADJOINING LOTS IS 6 FT AND 6 FT UNLESS OTHERWISE SHOWN.

- 23. SEE LOW-PRESSURE SYSTEM DETAILS FOR TYPICAL GRINDER STATION EASEMENTS. 24. NO PHASING OF PROJECT.
- 25. PROPOSED STARTING DATE OF PROJECT JUNE 1. 2024 AND ENDING DATE SEPTEMBER 30. 2025.
- 26.  $34.227 \pm TOTAL$  ACRES WITH 13 LOTS/ UNITS (R1C); 29 LOTS/ 95 UNITS (R2B), 52 UNITS (R3A).
- 27. SEE DRAINAGE REPORT FOR STORM WATER DRAINAGE CALCULATIONS.
- 28. THE DESIGN FOR THIS PROJECT WAS BASED ON THE 2017 CITY OF LA PORTE REVISED JOINT ZONING ORDINANCE DESIGN & DEVELOPMENT STANDARDS, WHICH WERE ADOPTED ON MAY 16, 2016.
- 29. VISION CLEARANCE: A VISION CLEARANCE TRIANGLE WILL BE MAINTAINED AT EVERY INTERSECTION OF RIGHT-OF-WAY AND/OR DRIVEWAY. THE TRIANGLE LEG LENGTHS WILL BE TWENTY-FIVE (25) FEET FROM THE BACK OF CURB AT THE INTERSECTION OF TWO (2) STREET RIGHTS-OF-WAY AND FIFTEEN (15) FEET FROM THE BACK OF CURB AT THE INTERSECTION OF A PRIVATE DRIVEWAY AND STREET RIGHT OF-WAY. NO FENCING, WALLS, STRUCTURES OR SIGNS ARE PERMITTED TO BE PLACED OR TO PROJECT INTO THE VISION CLEARANCE TRIANGLE. LANDSCAPE MATERIALS ARE PERMITTED WITHIN THE VISION CLEARANCE TRIANGLE, BUT SHALL NOT EXCEED A MATURE HEIGHT OF THREE (3) FEET ABOVE THE STREET CURB.
- 30. THE CONTRACTOR SHALL ASSESS NECESSARY UTILITY SUPPORTS OR RELOCATION OF UTILITIES BEFORE CONSTRUCTION STARTS.
- 31. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
- 32. ALL RADII AND OTHER DIMENSIONS FOR 6'" STANDING CURB AND CONCRETE CURB AND WALK ARE TO THE FACE OF CURB AND/OR EDGE OF WALK. 33. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK OR FACING MATERIAL WHERE
- APPLICABLE. 34. BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE. REFER TO RECORDED PLATS AND SURVEYS FOR ADDITIONAL PROPERTY INFORMATION.
- 35. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS AND LOCATIONS OF UTILITY SERVICE ENTRY LOCATIONS AND PRECISE BUILDING DIMENSIONS.



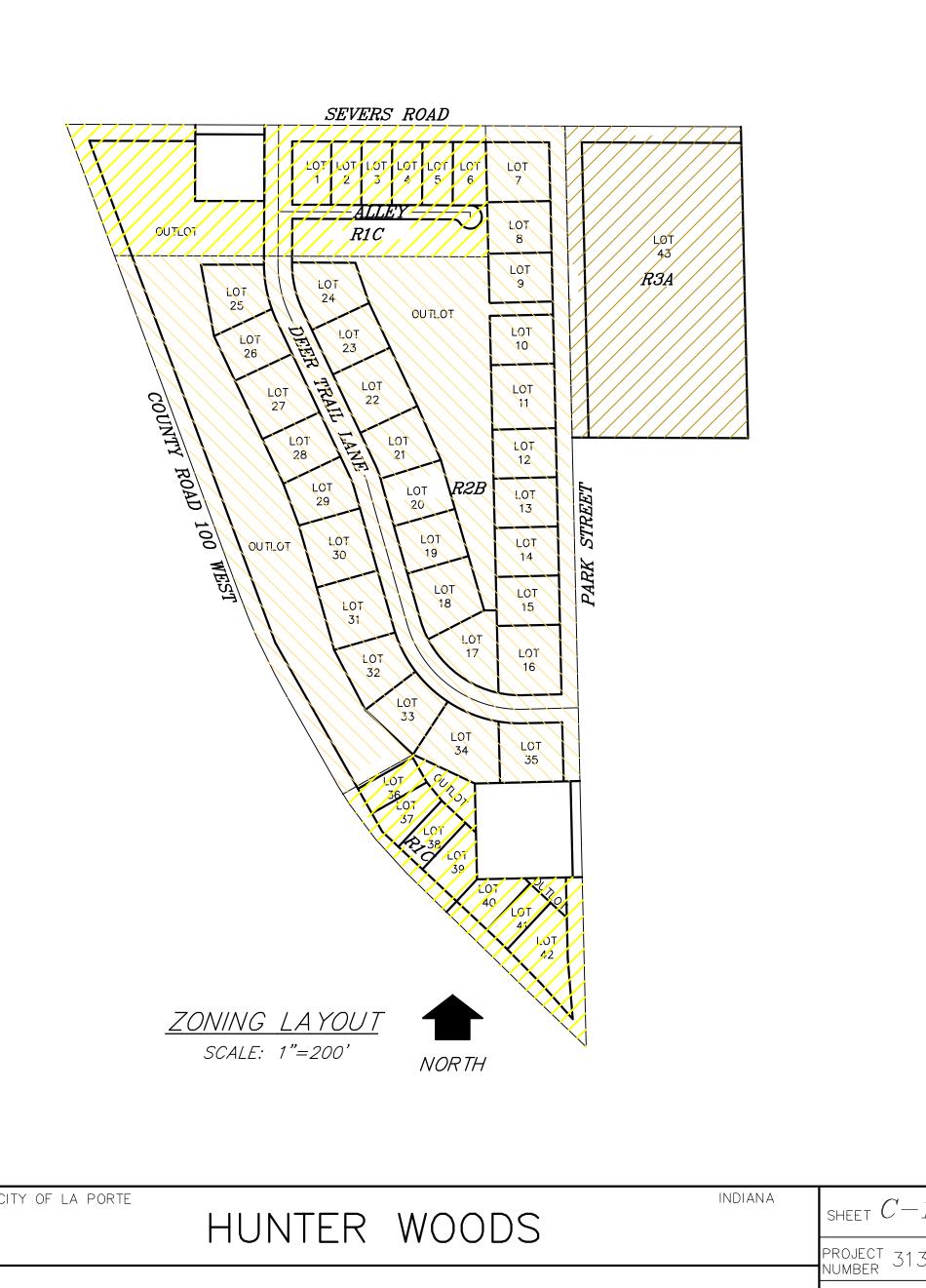




- 36. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES, INCLUDING IRRIGATION SLEEVING. PRIOR TO INSTALLATION OF PAVED SURFACES.
- 37. SIDEWALK EXPANSION JOINTS ARE TO BE PLACED AT ALL WALK INTERSECTIONS AND BETWEEN WALKS AND PLATFORMS. SIDEWALK SCORES AND CONTROL JOINTS ARE TO BE EQUALLY SPACED BETWEEN EXPANSION JOINTS AND PERPENDICULAR TO SIDEWALKS AT 5' INTERVALS OR LESS WITH AN EXPANSION JOINT EVERY 30' OR LESS.
- 38. PARKING SPACE STRIPES SHALL BE 4 INCHES WIDE. YELLOW OR WHITE STRIPES SHALL BE PROVIDED AT OWNER'S PREFERENCE UNLESS OTHERWISE SHOWN.
- 39. UNLESS OTHERWISE SHOWN. PERMANENT SIGNS SHALL BE MOUNTED ON A SINGLE U-CHANNEL DRIVE POST DRIVEN 42 INCHES BELOW GRADE, THE BOTTOM EDGE OF THE SIGN SHALL BE 6 FEET ABOVE THE NEAREST PAVEMENT EDGE ELEVATION.
- 40. ALL EXCAVATED AREAS TO BE SEEDED AND/OR SODDED AFTER FINISH GRADING UNLESS OTHERWISE NOTED. All NEWLY SODDED/SEEDED AREAS SHALL HAVE 4" TO 6" TOPSOIL. HOLD SOIL DOWN 1" FROM PAVEMENT ELEVATION. CONTRACTOR TO SUPPLY STRAW MULCH WHERE GRASS SEED HAS BEEN PLANTED.
- 41. MANHOLE CASTINGS LOCATED WITHIN ASPHALT PAVEMENT AREAS SHALL INCLUDE A CONCRETE PAVED COLLAR EXTENDING A MINIMUM OF 12 INCHES IN ALL DIRECTIONS FROM THE EDGE OF THE CASTING PER THE DETAILS.
- 42. RESURFACE OR Reconstruct AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE TRAFFIC BY CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS HAVE DAMAGED EXISTING PAVEMENT. LAWNS OR OTHER IMPROVEMENTS DURING CONSTRUCTION. AFTER CONSTRUCTION WORK IS COMPLETE.
- 43. FOR AREAS OUTSIDE THE PROPERTY LINES, REPAIR AND/OR REPLACE ALL DAMAGE DONE TO EXISTING ELEMENTS (SIDEWALKS, PAVING, LANDSCAPING, ETC.) AS REQUIRED BY OWNER AND/OR GOVERNING AUTHORITY.
- 44. ALL SIDEWALK CURB AND GUTTER STREET PAVING, CURS CUTS. DRIVEWAY APPROACHES, HANDICAP RAMP, ETC, Constructed OUTSIDE THE PROPERTY LINE IN THE RIGHT-OF-WAY SHALL CONFORM TO ALL MUNICIPAL AND/OR STATE SPECIFICATIONS AND REQUIREMENTS.
- 45. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 46. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
- 47. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO VERIFY AII EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF WORK. IT SHALL ALSO BE THE CONTRACTOR'S Responsibility TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATIONS FOR EACH UTILITY BEFORE WORK IS STARTED.
- 48. THE CONTRACTOR SHALL CHECK EXISTING GRADES. DIMENSIONS. AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER OR THE ENGINEER OF ANY CHANCES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMED.
- 49. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS. TOGETHER WITH EXERCISING PRECAUTIONS AT AII TIMES FOR THE PROTECTION OF PERSONS {INCLUDING EMPLOYEES} AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- 50. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR 10 BEGINNING WORK.
- 51. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
- 52. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
- 53. THIS SITE LAYOUT IS SPECIFIC TO THE APPROVALS NECESSARY FOR THE CONSTRUCTION IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. NO CHANCES TO THE SITE LAYOUT ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE OWNER. CHANGES MADE TO THE SITE LAYOUT WITHOUT APPROVAL IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CHANGES INCLUDE BUT ARE NOT LIMITED TO, INCREASED IMPERVIOUS PAVEMENT, ADDITION / DELETION OF PARKING SPACES, MOVEMENT OF CURB LINES, CHANGES TO DRAINAGE STRUCTURES AND PATTERNS, LANDSCAPING, ETC. 54. FOR PROPOSED GRADING AND TOPOGRAPHY, SEE THE GRADING PLAN.
- 55. FOR PROPOSED UTILITY LOCATIONS, SEE THE UTILITY PLAN.

C CHK'D: SCC	NO.	REVISION	BY	DATE	STORM		CI
R APPRV'D: CLR	$\triangle$				SANITARY	STORES CONTERNO	
2024					WATER	E S No.12100418	
E: 1"=60'					ROAD	No.12100418	
: N/A					EROSION	NDIANA WITH IN ANA	
ATUS							
NARY						- AND ALEN INT	

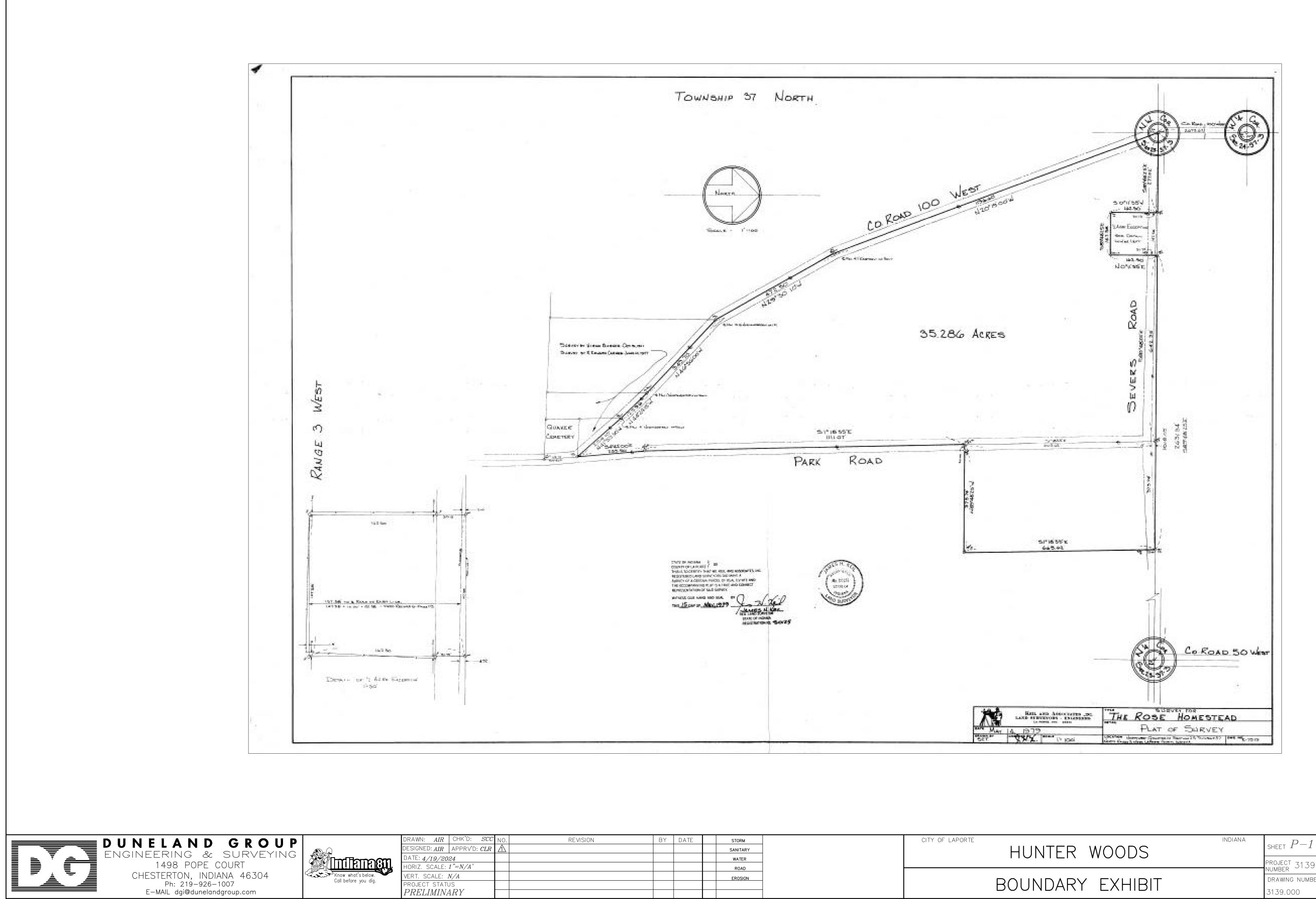
A PORTE	HUNTER WOODS	INDIANA	sheet <i>C</i> -1
			project 3139 Number 3139
	NOTE SHEET		DRAWING NUMBER 3139.000.1



		MASTER LEGEND
XXX	EXISTING CONTOUR	
FM	EXISTING SANITARY FORCE MAIN	W
——————————————————————————————————————	EXISTING ELECTRIC (BURIED)	PSAN
G	EXISTING GAS LINE (BURIED)	FM
<i>T</i>	EXISTING TELEPHONE (BURIED)	
OH	EXISTING OVERHEAD LINES	LATLAT
	EXISTING FENCE	<b>— + —</b>
	EXISTING TREE LINE	<b>~</b>
Ò	EXISTING POWER POLE	S
$\rightarrow$	EXISTING GUY ANCHOR	©
þ	EXISTING SIGN	Ð
	EXISTING STORM INLET	
G	EXISTING PIPELINE MARKER	Ŷ
MH	EXISTING MANHOLE (UNKNOWN USE)	
$\boxtimes$	EXISTING MAILBOX	$\bowtie$
##"	EXISTING TREE (DIAMETER IN INCHES)	$\rightarrow \rightarrow \rightarrow$
##" E	EXISTING EXVERGREEN TREE (DIAMETER INCHES	
$\bullet$	EXISTING SOIL BORING	(####)
G	EXISTING GAS MARKER	(\\\\\\\) (\\)
Т	EXISTING TELECOM. LINE MARKER	FG=XXX.XX
FD	EXISTING FIBER OPTIC MARKER	+ XXX.XX
F□	EXISTING FIBER OPTIC VAULT	+ CL=XXX.XX
$(\mathbf{S})$	EXISTING SANITARY MANHOLE	
0	PROPOSED STORM CLEANOUT	
+ + + + + + + + + + +	EXISTING WETLAND AREA	XX

PROPUSED	CUNTOURS
PROPOSED	WATER LINE
PROPOSED	SANITARY LINE
PROPOSED	FORCEMAIN
PROPOSED	STORM SEWER
PROPOSED	SANITARY LATERAL
PROPOSED	E-ONE SANITARY LINE
PROPOSED	E-ONE PUMP STATION AND LATERAL
PROPOSED	SANITARY MANHOLE
PROPOSED	CLEAN-OUT
PROPOSED	DRAINAGE MANHOLE
PROPOSED	CURB INLET/CATCH BASIN
PROPOSED	YARD INLET
PROPOSED	FIRE HYDRANT
PROPOSED	WATER VALVE
PROPOSED	SWALE/GRASS LINED CHANNEL
PROPOSED	RIP-RAP OUTLET/ENERGY DISSIPATER
PROPOSED	DIRECTION OF DRAINAGE FLOW
PROPOSED	ADDRESS
PROPOSED	WELL
PROPOSED	GARAGE FLOOR ELEVATION
PROPOSED	SPOT ELEVATION
PROPOSED	CENTERLINE OF PAVEMENT ELEVATION
EXISTING S	OIL TYPE SEPERATION LINE
EXISTING S	OIL TYPE
RIGHT OF V	WAY LINE

PROPOSED CONTOURS



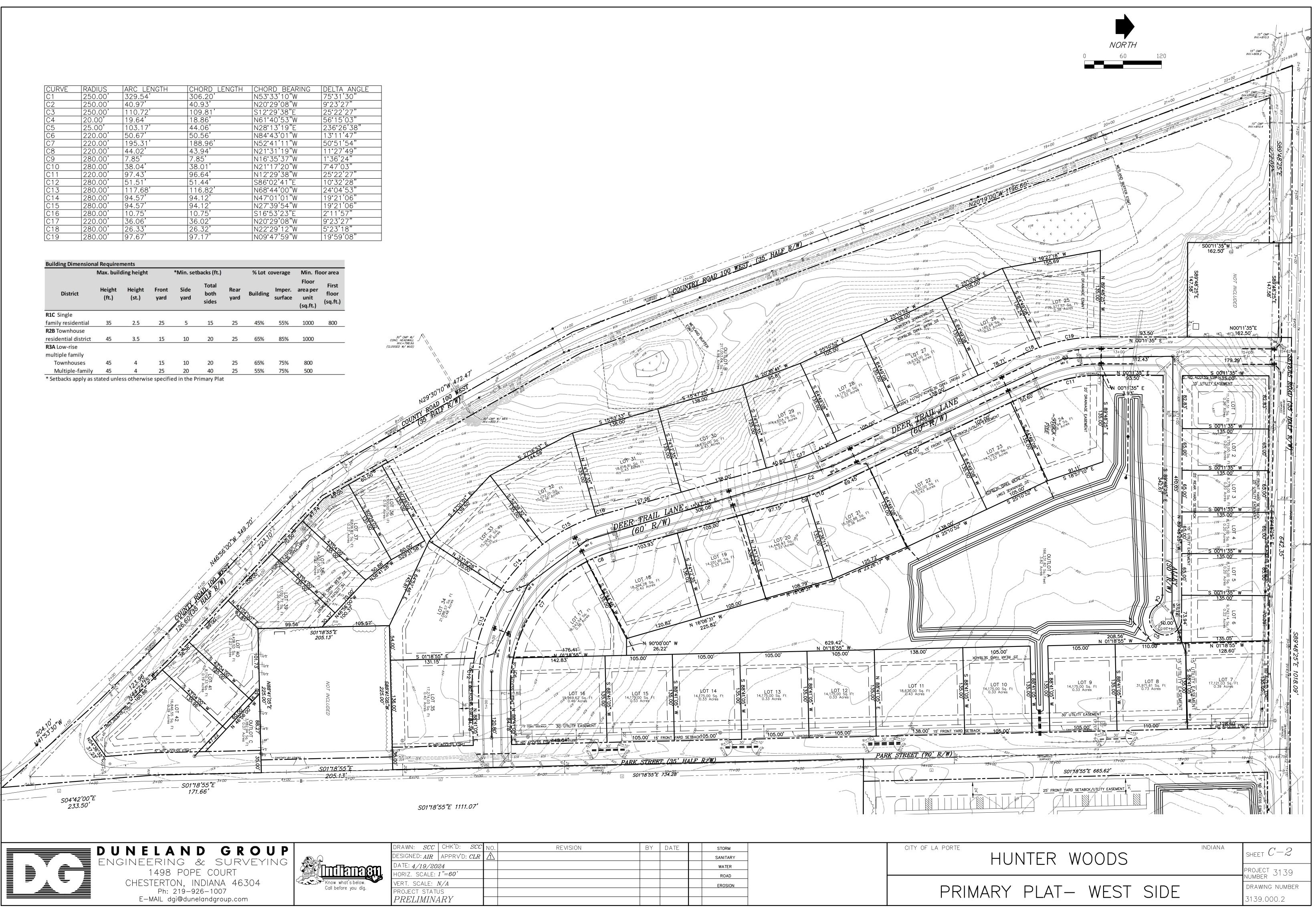
							-	
IR	CHK'D:	SCC	NO.	REVISION	BY	DATE		STORM
IR	APPRV'D	: CLR	$\triangle$					SANITARY
/20								WATER
LE:	1 "=N/A'							ROAD
	N/A							EROSION
ΤΑΤΙ	JS							
$IN_{2}$	4RY							

BOUNDARY EXHIBIT

ROJECT 3139 IUMBER DRAWING NUMBER 3139.000

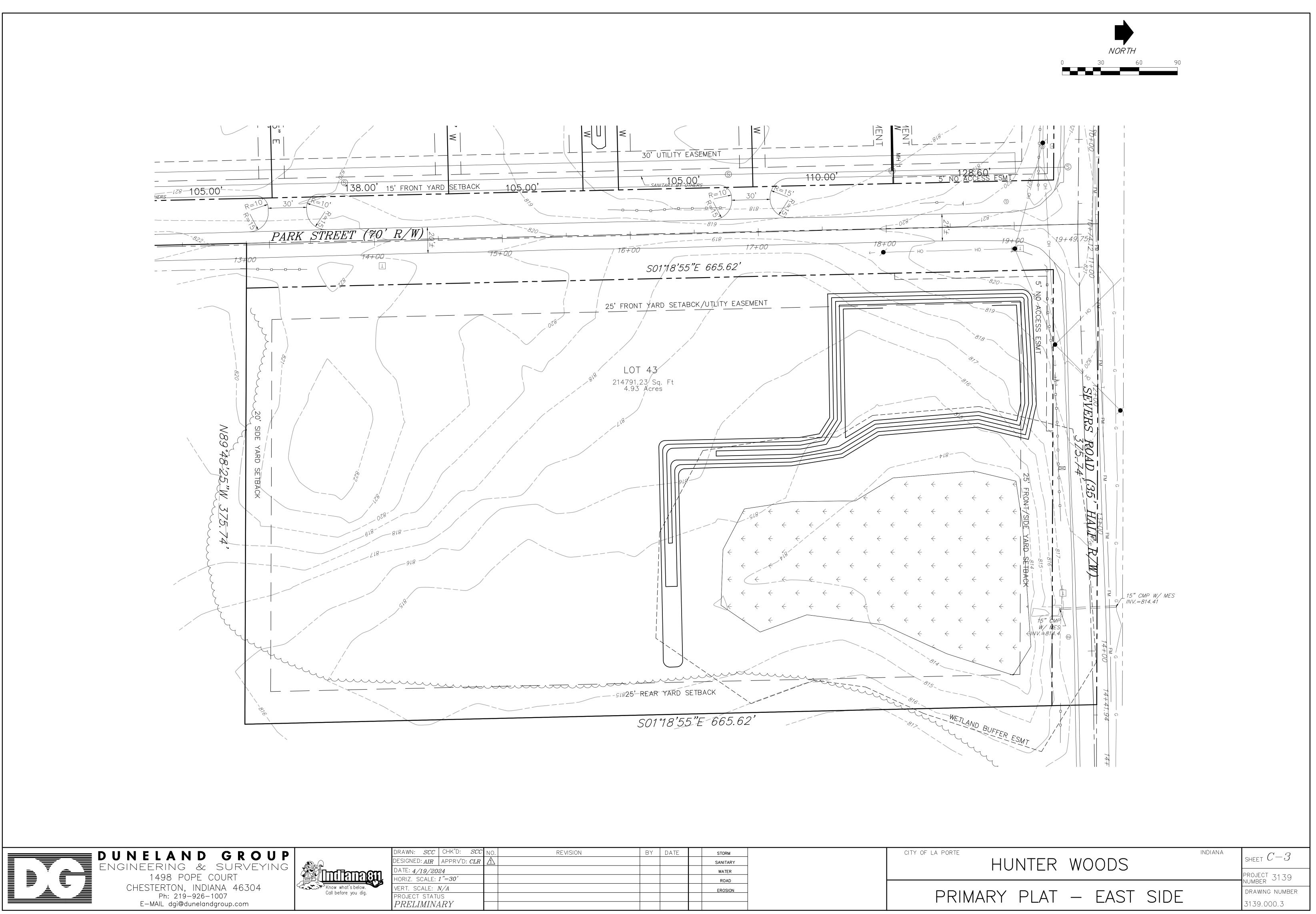
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	250.00'	329.54'	306.20'	N53°33'10"W	75°31'30"
C2	250.00'	40.97'	40.93'	N20°29'08"W	9°23'27"
С3	250.00'	110.72'	109.81'	S12°29'38"E	25°22'27"
C4	20.00'	19.64'	18.86'	N61°40'53"W	56°15'03"
C5	25.00'	103.17'	44.06'	N28°13'19"E	236°26'38"
C6	220.00'	50.67'	50.56'	N84°43'01"W	13°11'47"
C7	220.00'	195.31'	188.96'	N52°41'11"W	50°51'54"
C8	220.00'	44.02'	43.94'	N21°31'19"W	11°27'49"
C9	280.00'	7.85'	7.85'	N16°35'37"W	1°36'24"
C10	280.00'	38.04'	38.01'	N21°17'20"W	7°47'03"
C11	220.00'	97.43'	96.64'	N12°29'38"W	25°22'27"
C12	280.00'	51.51'	51.44'	S86°02'41"E	10°32'28"
C13	280.00'	117.68'	116.82'	N68°44'00"W	24°04'53"
C14	280.00'	94.57'	94.12'	N47°01'01"W	19°21'06"
C15	280.00'	94.57'	94.12'	N27°39'54"W	19°21'06"
C16	280.00'	10.75'	10.75'	S16°53'23"E	2°11'57"
C17	220.00'	36.06'	36.02'	N20°29'08"W	9°23'27"
C18	280.00'	26.33'	26.32'	N22°29'12"W	5°23'18"
C19	280.00'	97.67'	97.17'	N09°47'59"W	19°59'08"

	Max. build	ling height		*Min. set	backs (ft.)		% Lot c	overage	Min. flo	or area
District	Height (ft.)	Height (st.)	Front yard	Side yard	Total both sides	Rear yard	Building	Imper. surface	Floor area per unit (sq.ft.)	First floor (sq.ft.)
R1C Single										
family residential	35	2.5	25	5	15	25	45%	55%	1000	800
R2B Townhouse										
residential district	45	3.5	15	10	20	25	65%	85%	1000	
R3A Low-rise										
multiple family										
Townhouses	45	4	15	10	20	25	65%	75%	800	
Multiple-family	45	4	25	20	40	25	55%	75%	500	

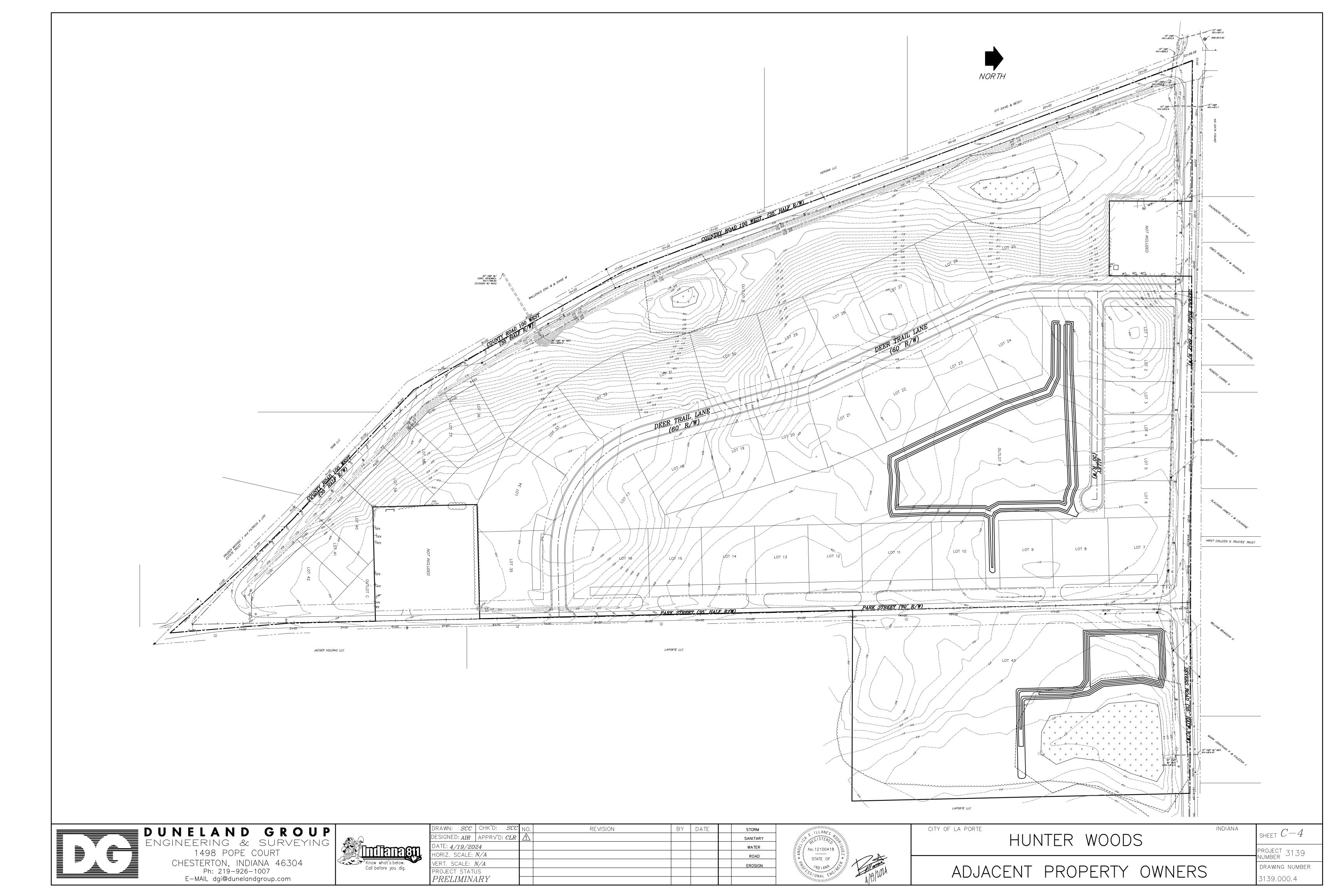


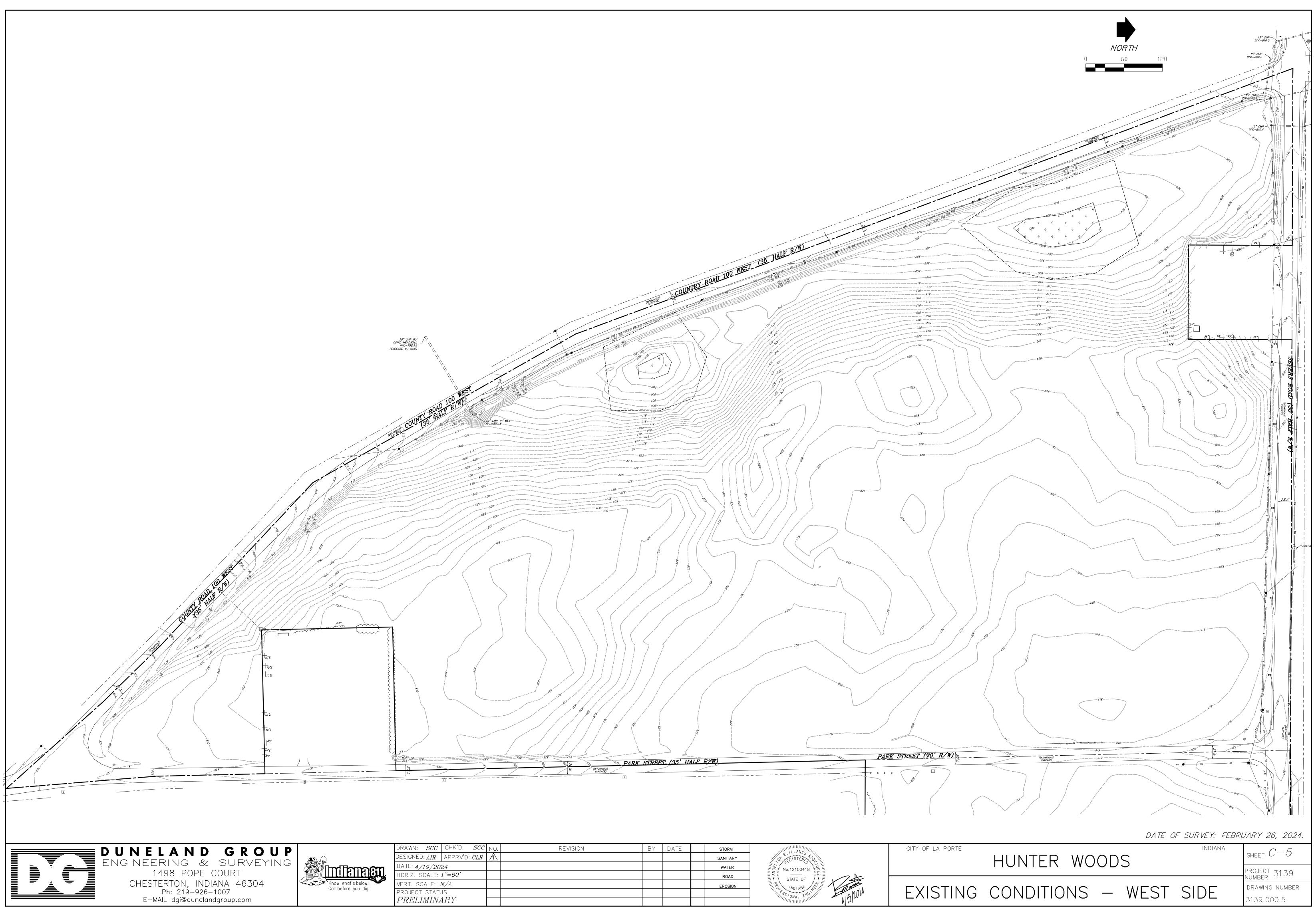


C CHK'D: SCC	NO.	REVISION	BY	DATE	STORM
<i>IR</i> APPRV'D: <i>CLR</i>	$\triangle$				SANITARY
/2024					WATER
LE: 1"=60'					ROAD
E: <i>N/A</i>					EROSION
TATUS					
INARY					

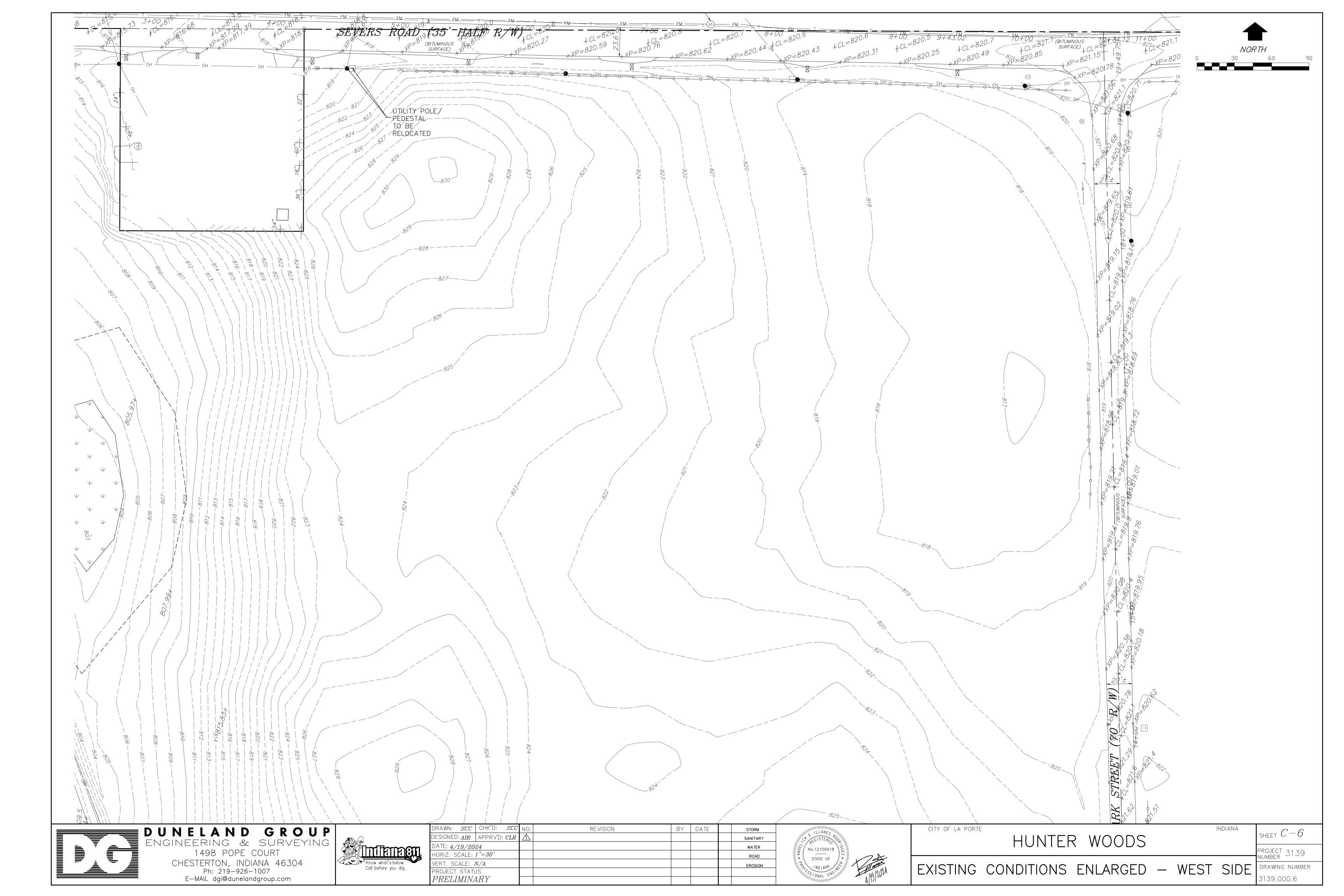


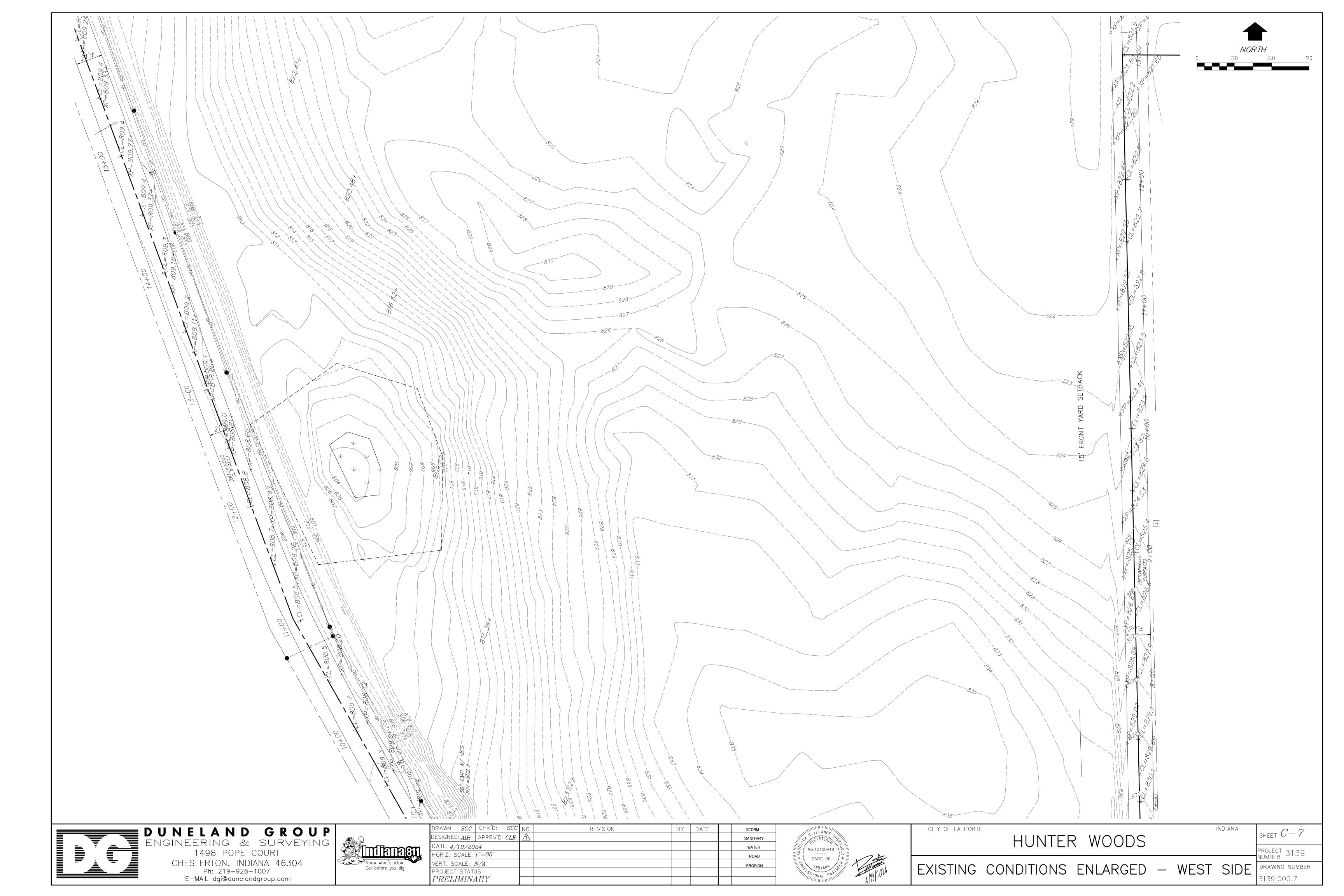
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	APPRV'D	): CLR	$\triangle$				SANITARY	
202	24						WATER	
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: N							EROSION	
ATU								
$\mathbb{V}A$	RY							

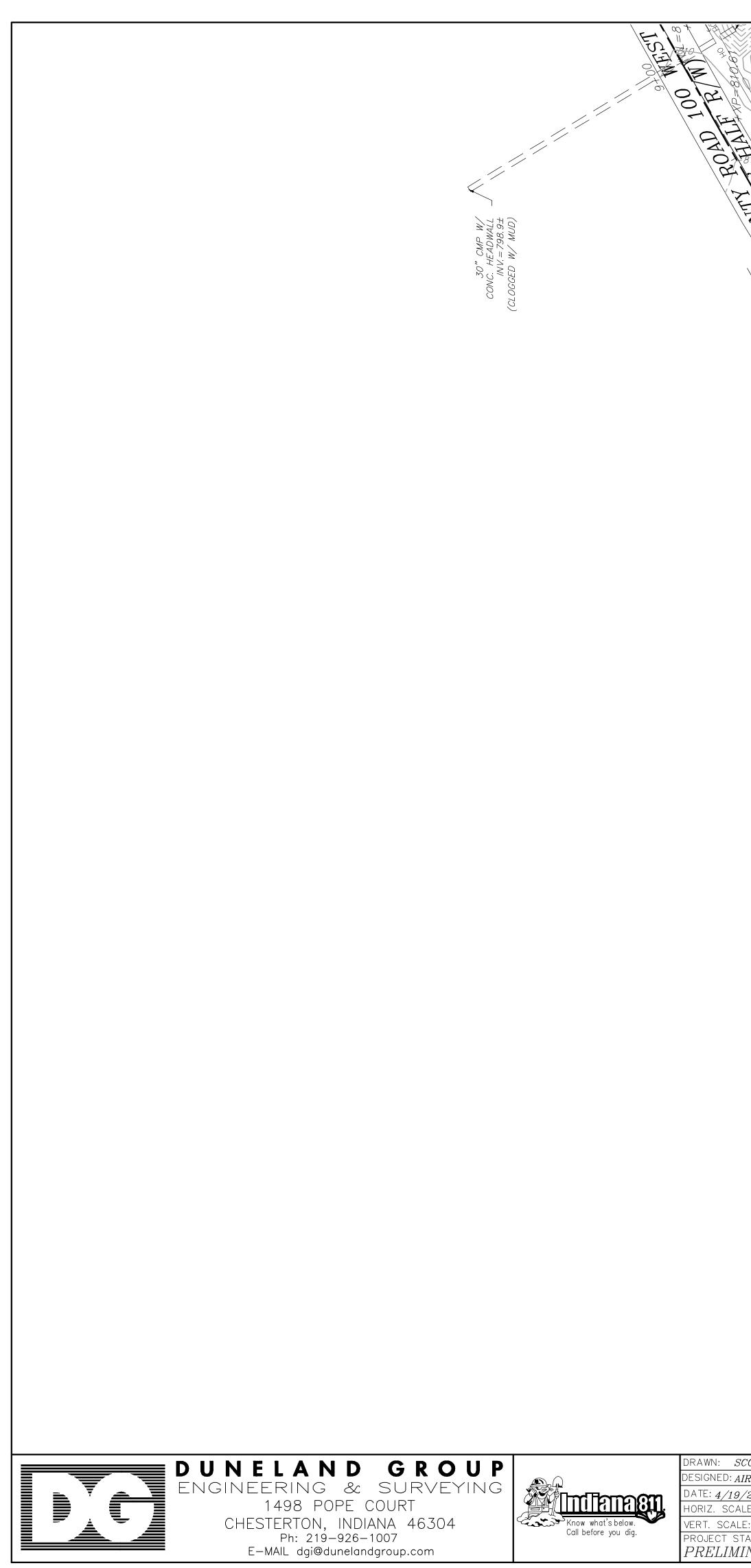




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IR APPRV'D: C	CLR $1$	7			SANITARY	Store GISTER SOUTH	
/2024					WATER	₩ 0.12100418	
LE: 1"=60'					ROAD	No.12100418	
E: <i>N/A</i>					EROSION	ROM INNA	
TATUS						SSIONAL ENGINEERING	
INARY							

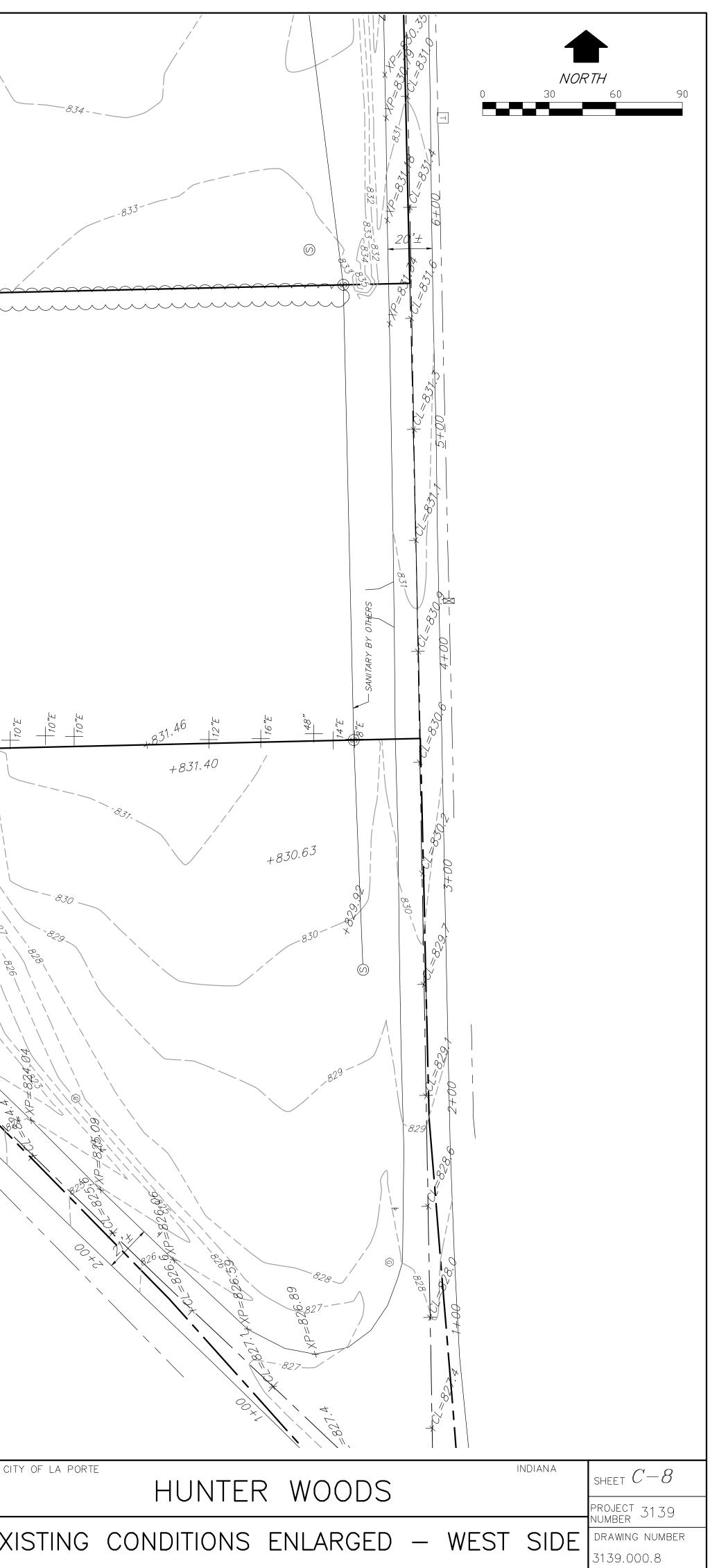


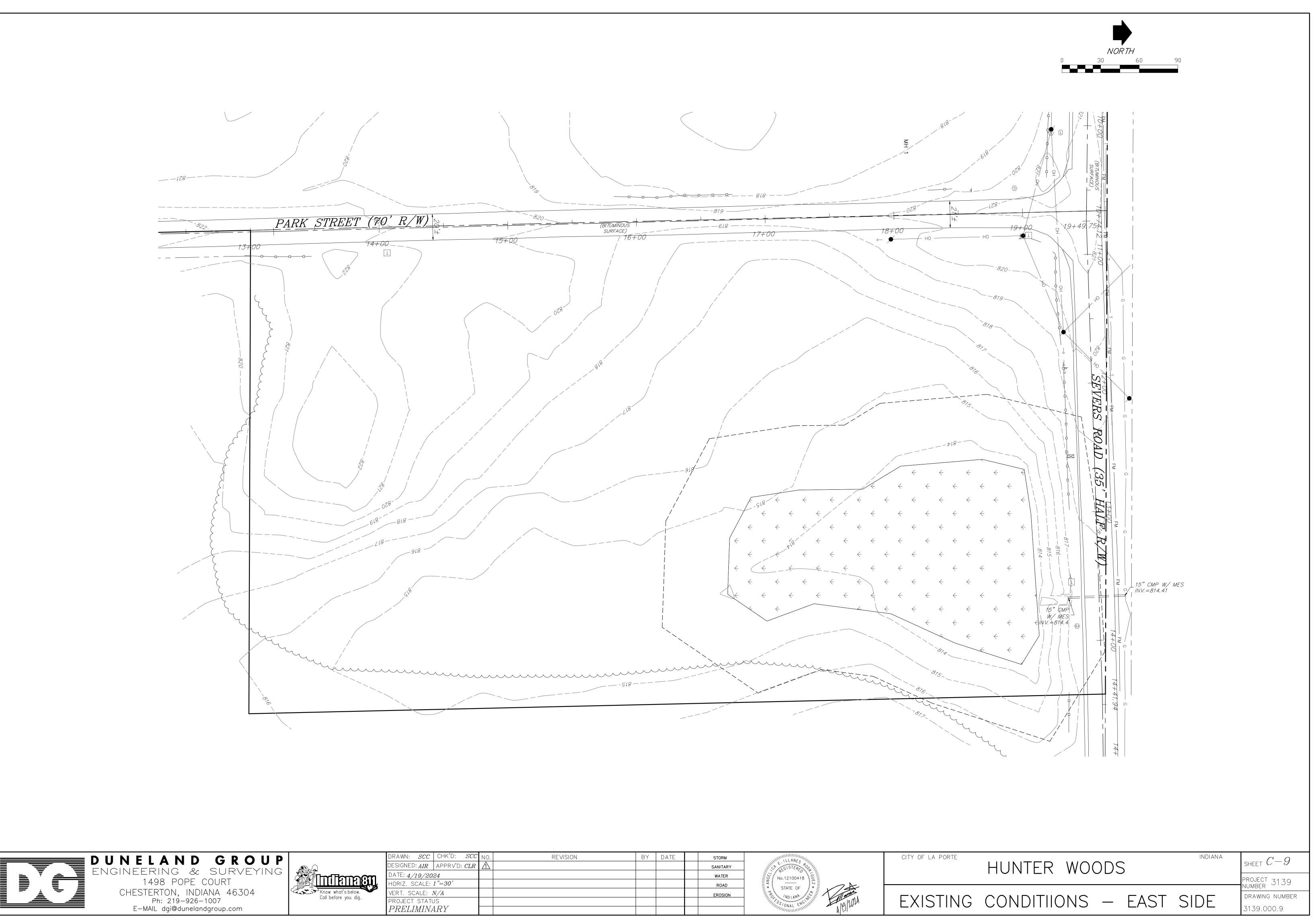




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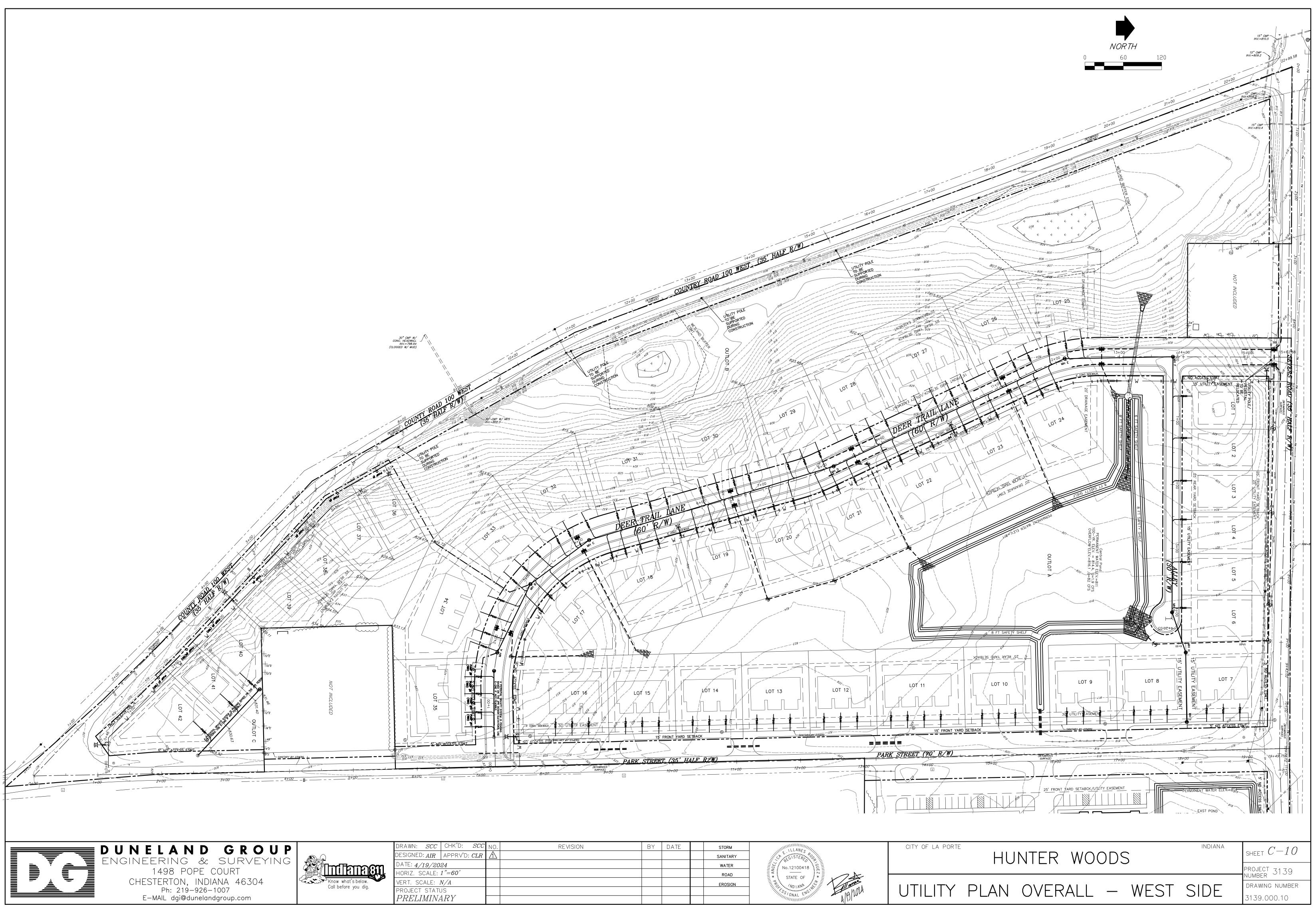
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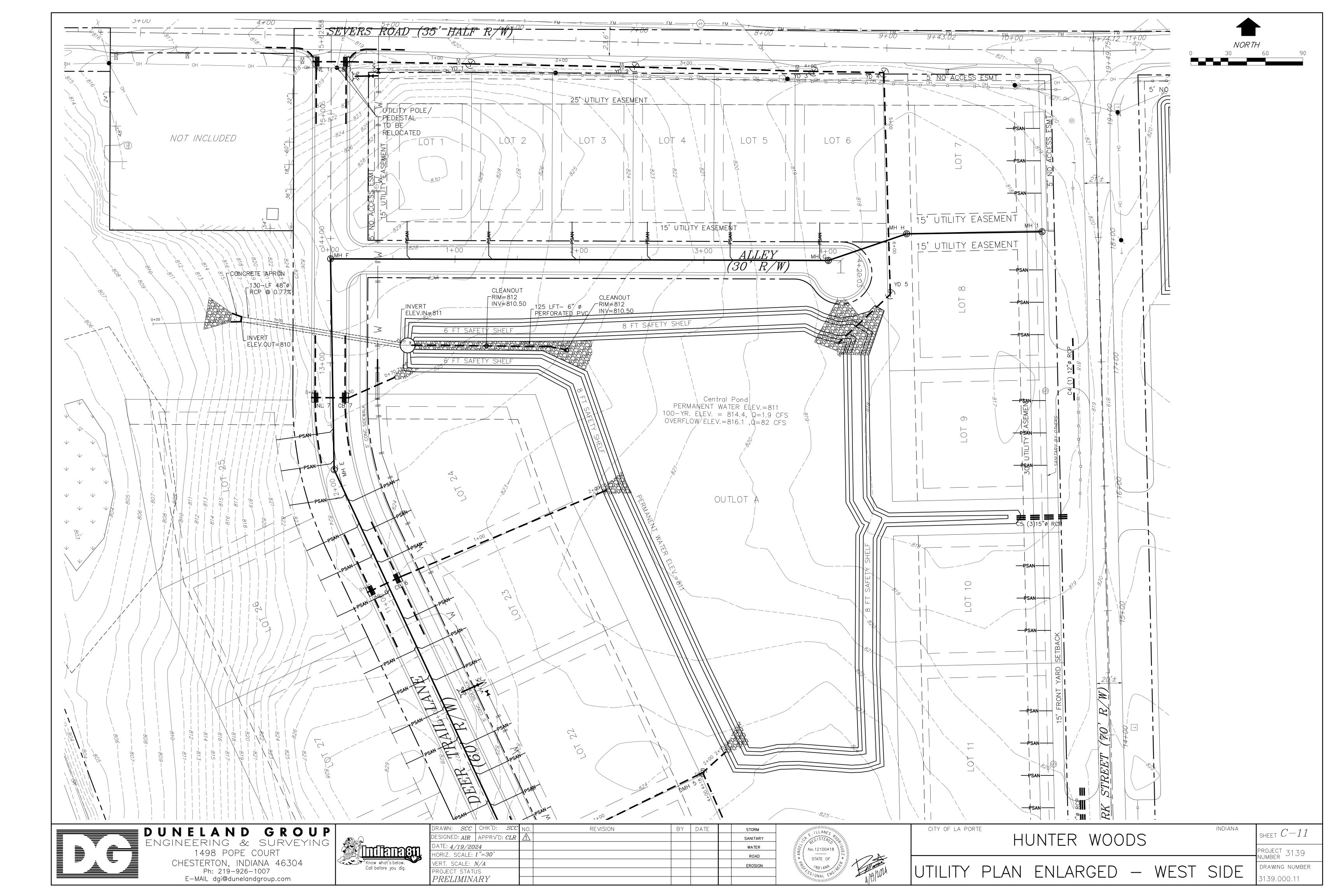




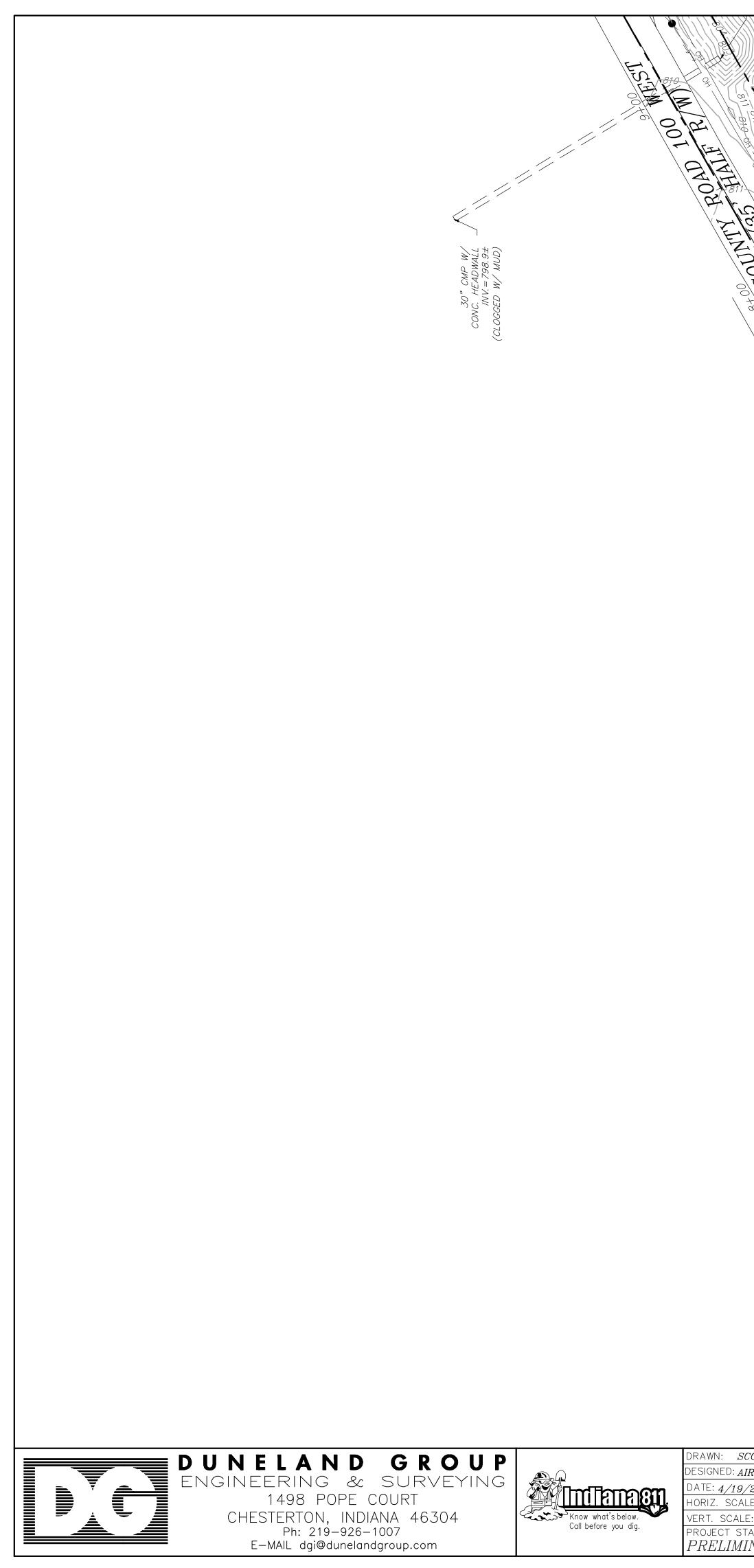
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0/202						WATER	No.12100418	
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/2024					WATER	No.12100418	
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INARY						A B W	•

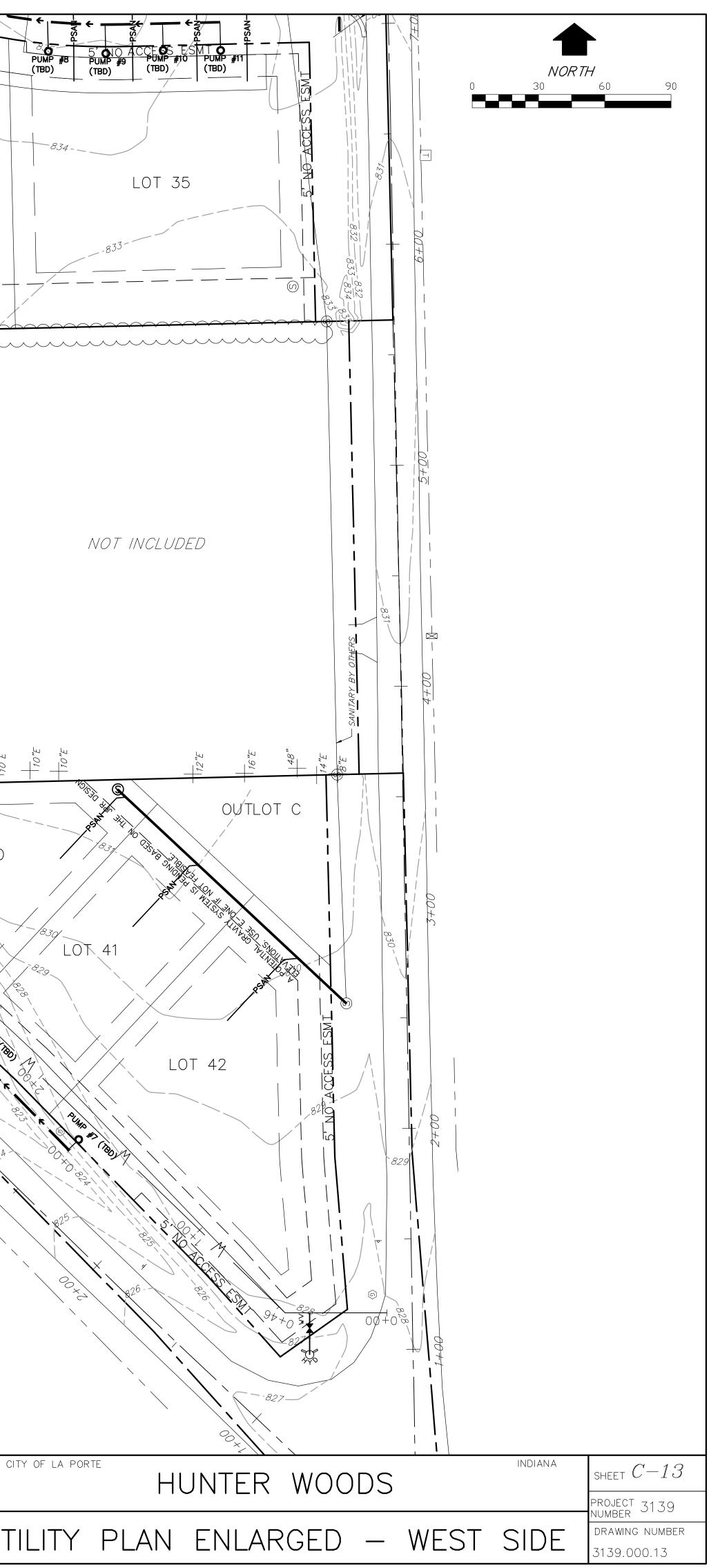


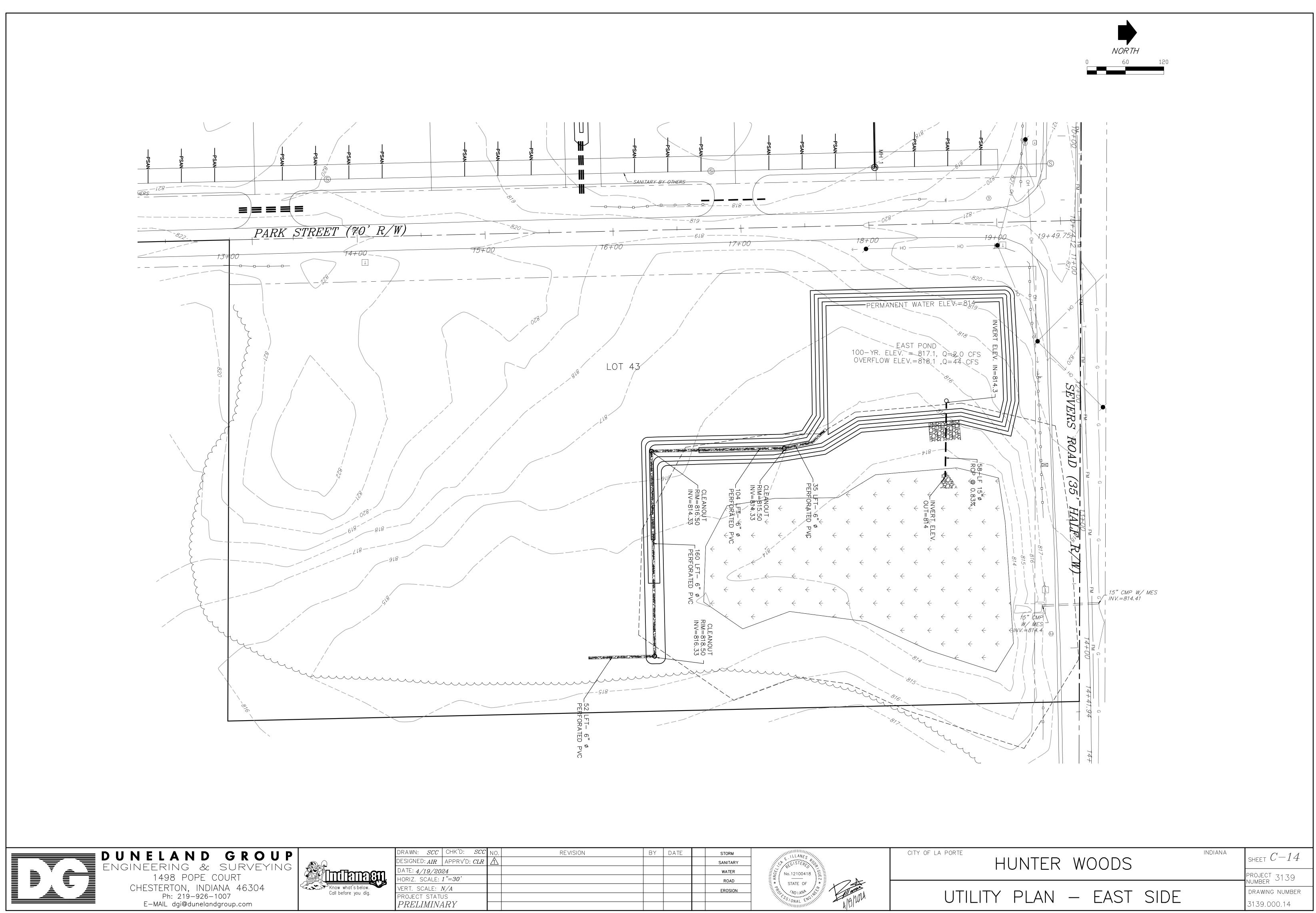




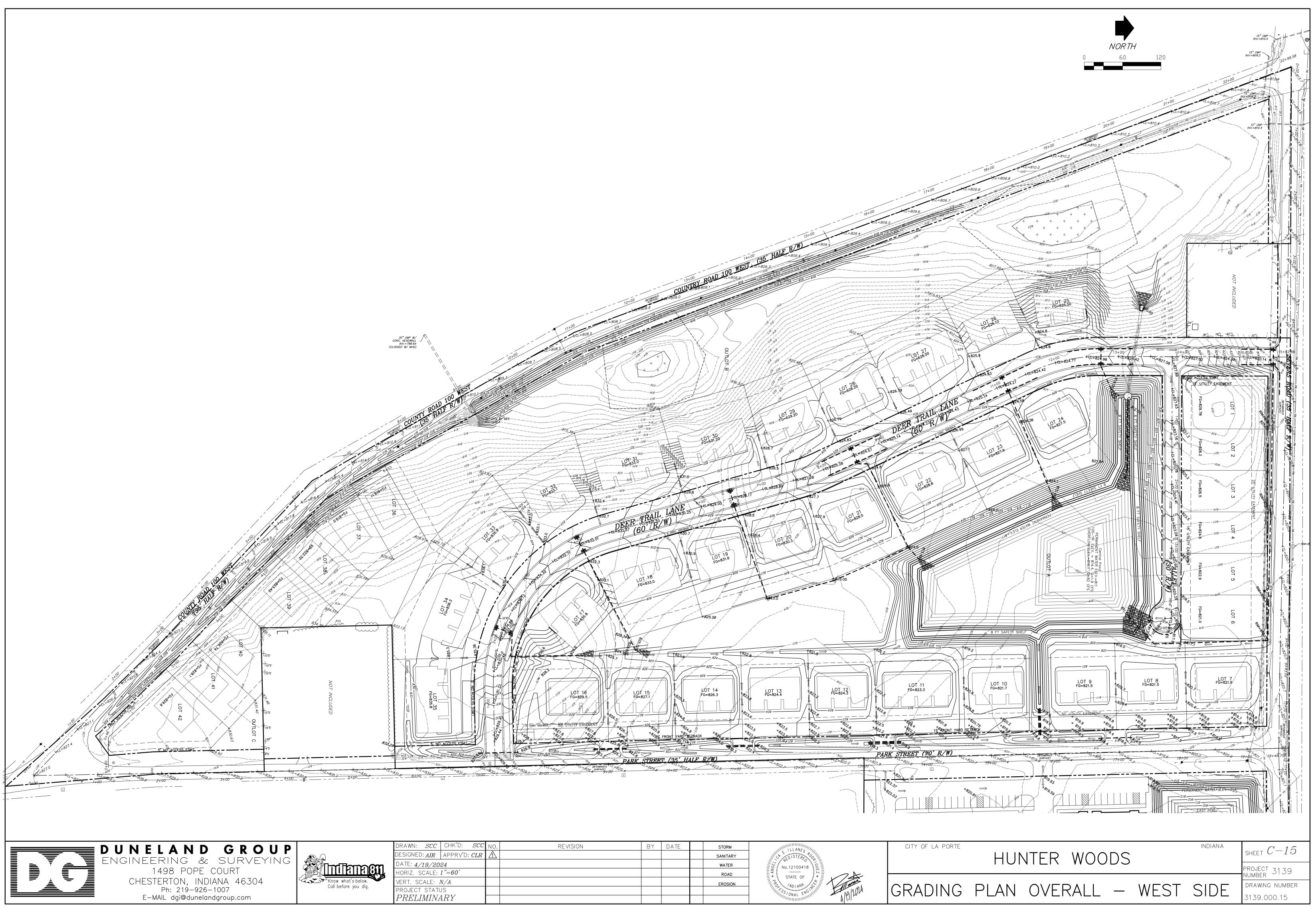
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AIR APPRV'D: CLR	$\bigcirc$				SANITARY	STORES STER	
9/2024					WATER	No.12100418	
ALE: 1"=30'					ROAD	TATE OF	
LE: <i>N/A</i>					EROSION		
STATUS						NDIANA WE NOT AND	
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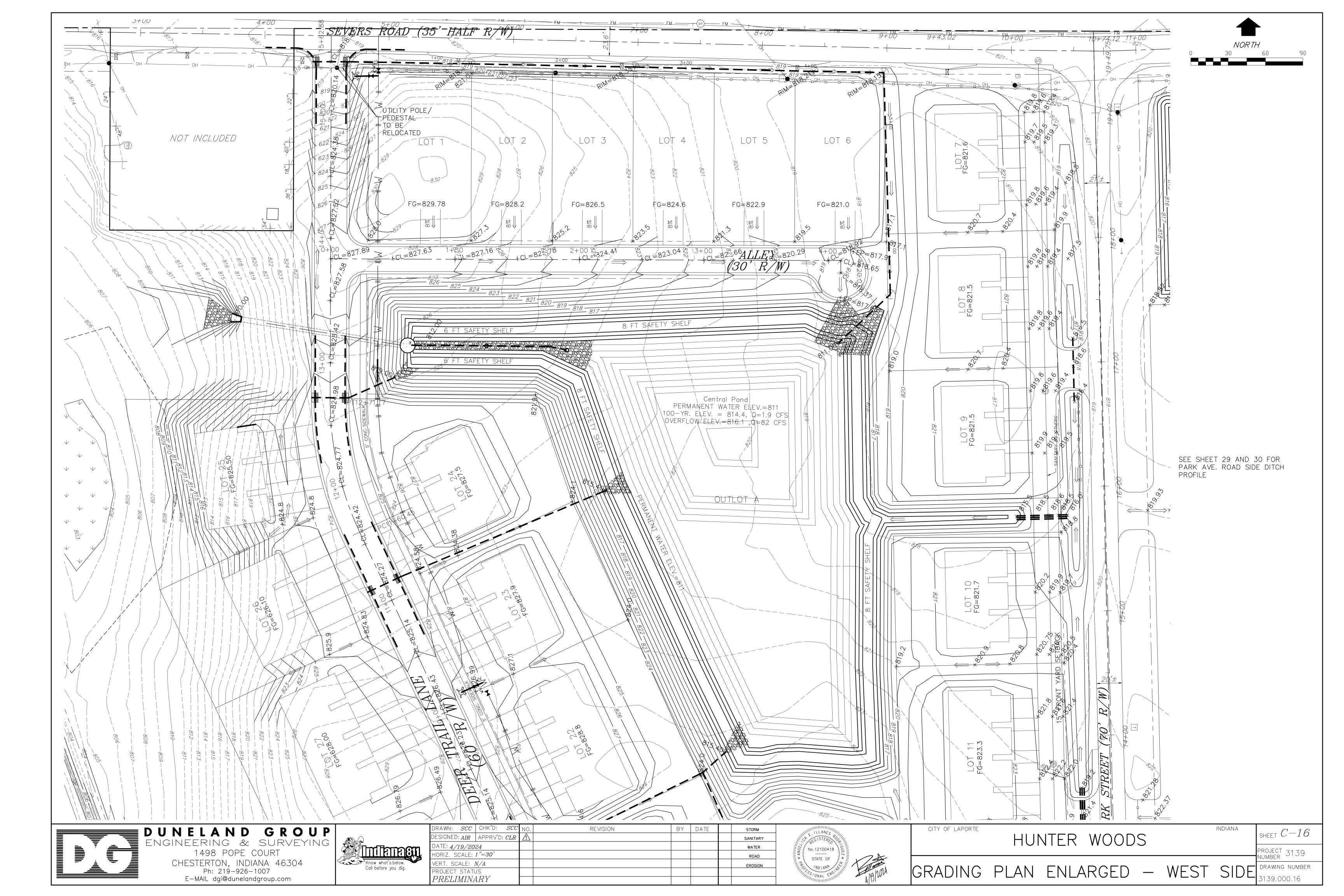


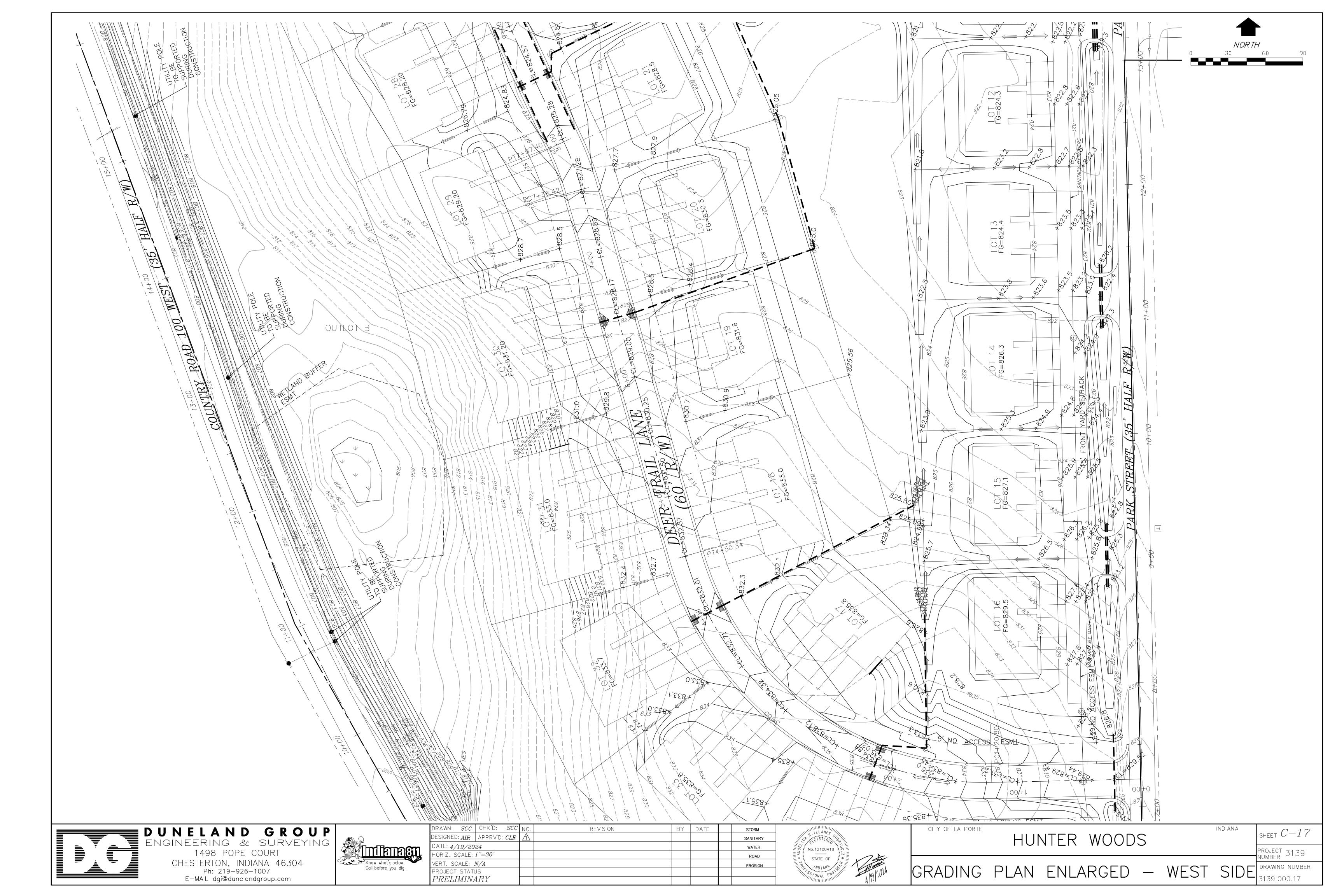


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4 <i>IR</i>	APPRV'D: CL	.R /	$\overline{\mathbb{N}}$					SANITARY	STERNER STERNER	
9/202	24							WATER	No.12100418	
ALE: J	1 "=30'							ROAD	STATE OF	
le: <i>1</i>	N/A							EROSION	JIAIL OI CALL	
STATL									MDIANA STREET	
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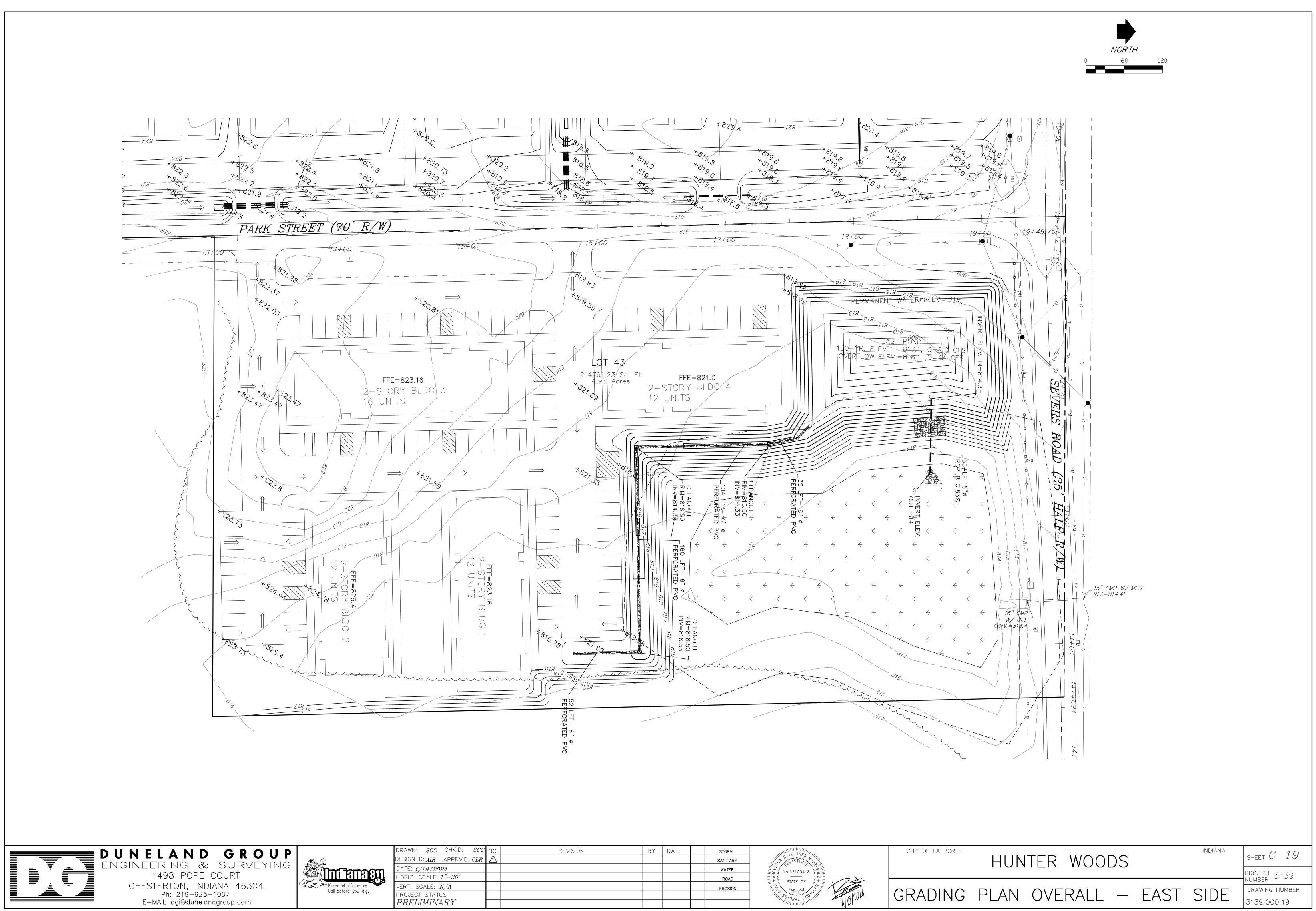
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APPRV'D: CLR	$\triangle$				SANITARY	Store Contraction of the second secon	
2024					WATER		
E: 1"=60'					ROAD	TATE OF	
: N/A					EROSION	AND LANK SEE	
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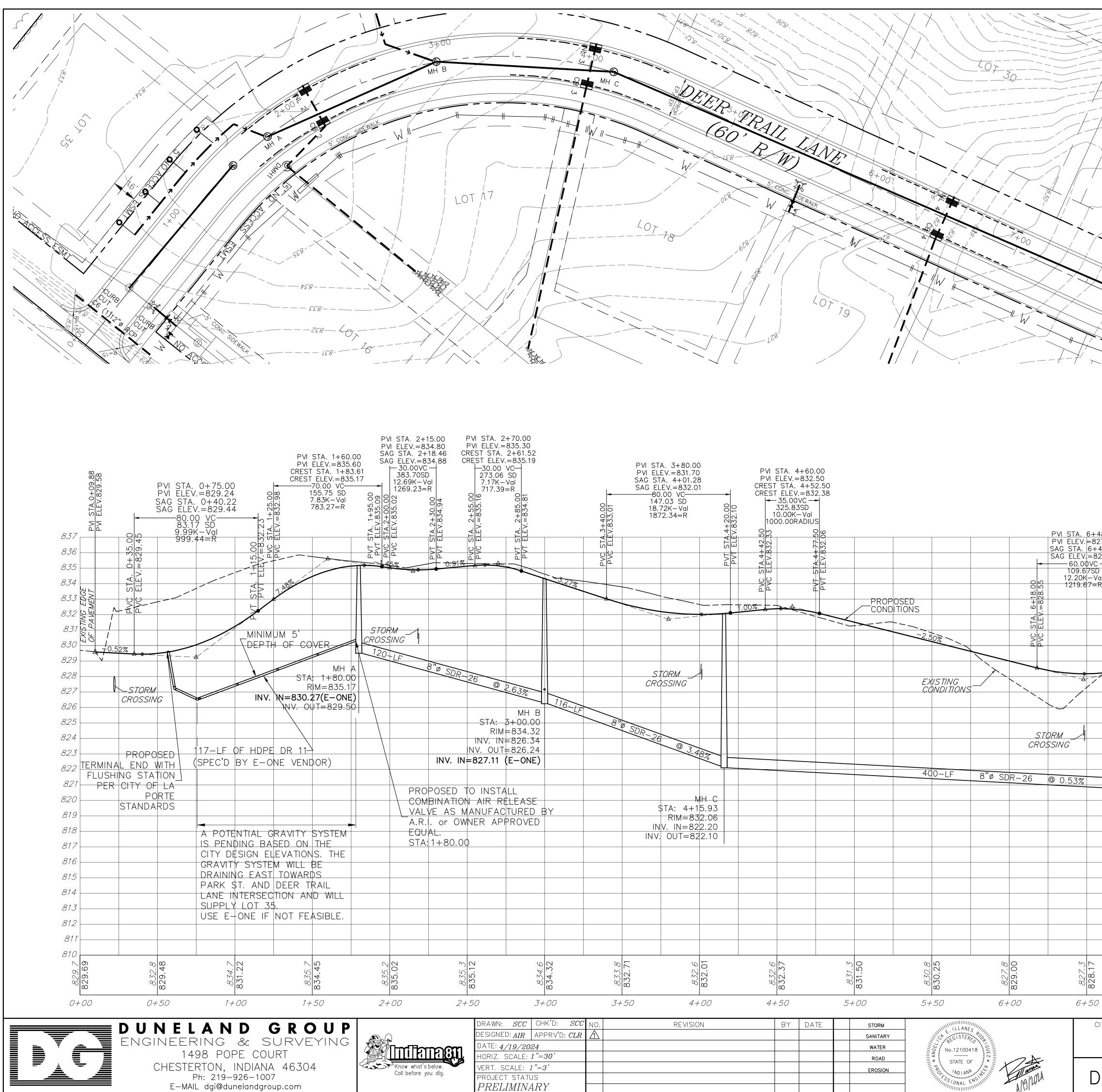




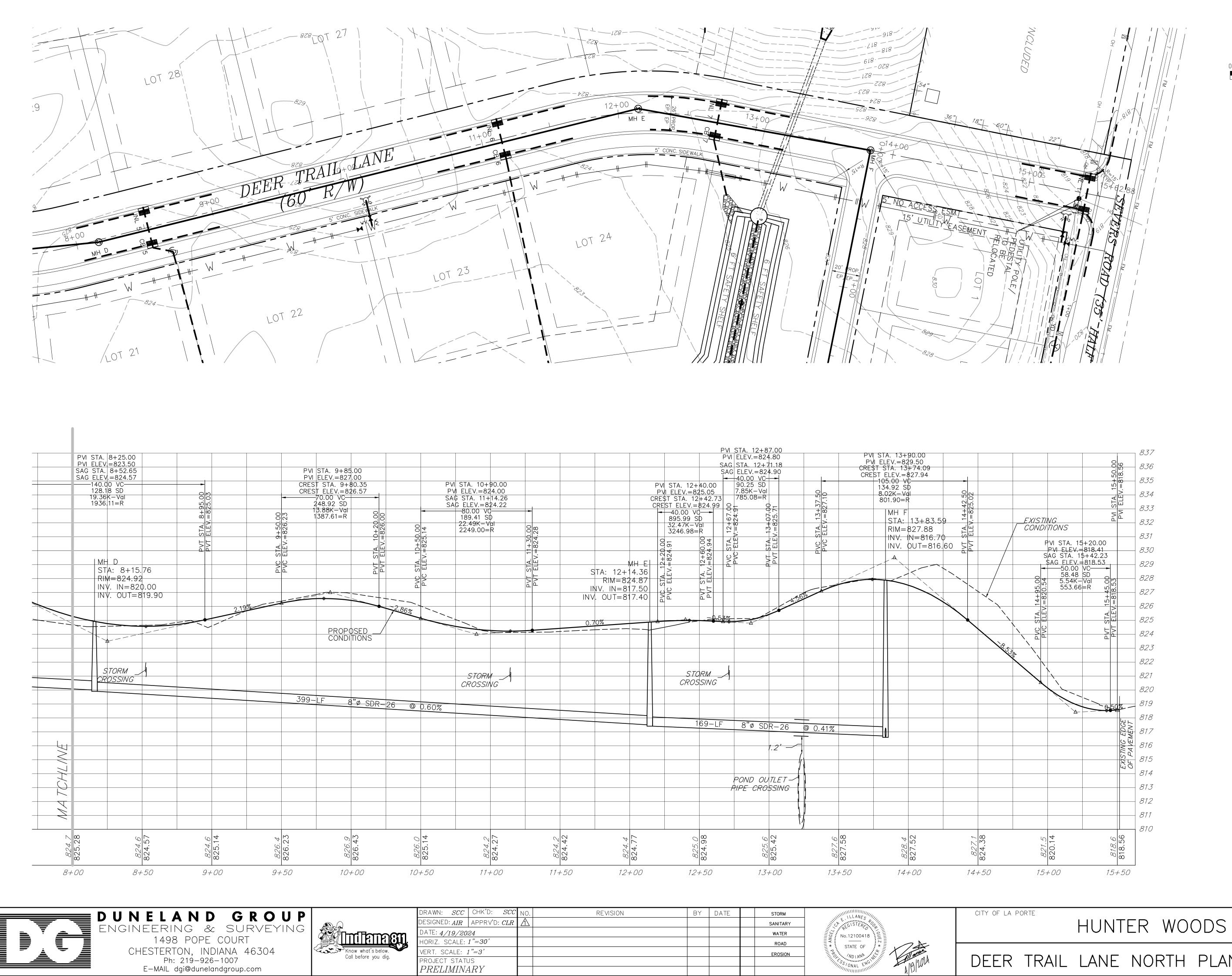
SCC	CHK'D:	SCC	NO.	REVISION	BY	DATE	STORM		CIT
4IR	APPRV'D:	CLR	$\triangle$				SANITARY		
9/202	24						WATER	No.12100418	
ALE: .	1 "=30'						ROAD	TATE OF	
le: <i>1</i>	N/A						EROSION	JAN AND AND SUST	
STATU								MDIANA OKCUL	K;R
(INA	1RY							- A B IN	



SCC	CHK'D:	SCC	NO.	REVISION	BY	DATE	STORM		CITY
IR	APPRV'D	: CLR	$\triangle$				SANITARY	CINCE CISTER OF THE	
/20	24						WATER	E S No. 12100418	
LE:	1"=30'						ROAD	No.12100418	
_E: <i>I</i>	N/A						EROSION		
ΤΑΤΙ								MDIANA CONCEPTION A BARA	IGR
INA	4RY								



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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	PVI STA. 8+25.00         PVI ELEV.=823.50         SAG STA. 8+52.65         NULL         INS. 11=R         INS. 11=R         INV. IN=820.00         INV. IN=820.00         INV. OUT=819.9C         STORM         STORM	
Image: Second state sta	NDIANA SHEET C	
EER TRAIL LANE S	OUTH PLAN/ PROFILE DRAWING 3139.000	NUMBER



			F	VI_STA12+87.00 2VI ELEV.=824.80	PV	STA. 13+90.00	
I STA. 10+90.00 I ELEV.=824.00 G STA. 11+14.26 G ELEV.=824.22 80.00 VC 189.41 SD 22.49K-Val 2249.00=R M + - - - - - - - - - - - - -		MH E	STA. 12+40.00 I STA. 12+40.00 I ELEV.=825.05 ST STA. 12+42.73 ST ELEV.=824.99 40.00 VC 895.99 SD 32.47K-Val 3246.98=R 55 0.56 0.56 0.55	AG STA. 12+71.18 AG ELEV.=824.90 40.00 VC - 90.25 SD 7.85K-Val 785.08=R 785.08=R 0 10 10 10 10 10 10 10 10 10	PVC ELE V. = 827.10 PVC ELE V. = 827.10 PVC ELE V. = 827.10	STA.       13+90.00         I ELEV.=829.50         ST STA.       13+74.09         ST ELEV.=827.94         105.00       VC         134.92       SD         8.02K-Val       801.90=R         MH F       STA:         STA:       13+83.5         RIM=827.88       INV.         INV.       OUT=816.70	STA.
STORM			STORM				
			169-LF	8"ø SDR-26	@ 0.41%		
				POND OUTLET			
				PIPE CROSSING			
824.2 824.27 824.27	<i>824.2</i> 824.42	<i>824.4</i> 824.77	<i>825.0</i> 824.98	<i>825.6</i> 825.42	827.58	828.4 827.52	827.1 824.38
11+00	11+50	12+00	12+50	13+00	13+50	14+00	14+5
$\frac{5CC}{AIR}  CHK'D:  SCC  NO.$		REVISION	BY DAT	E STORM SANITARY WATER			CIT

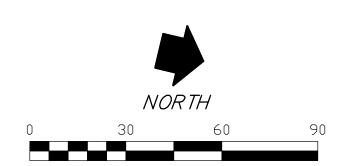
No.12100418 A 19/2014 EROSION

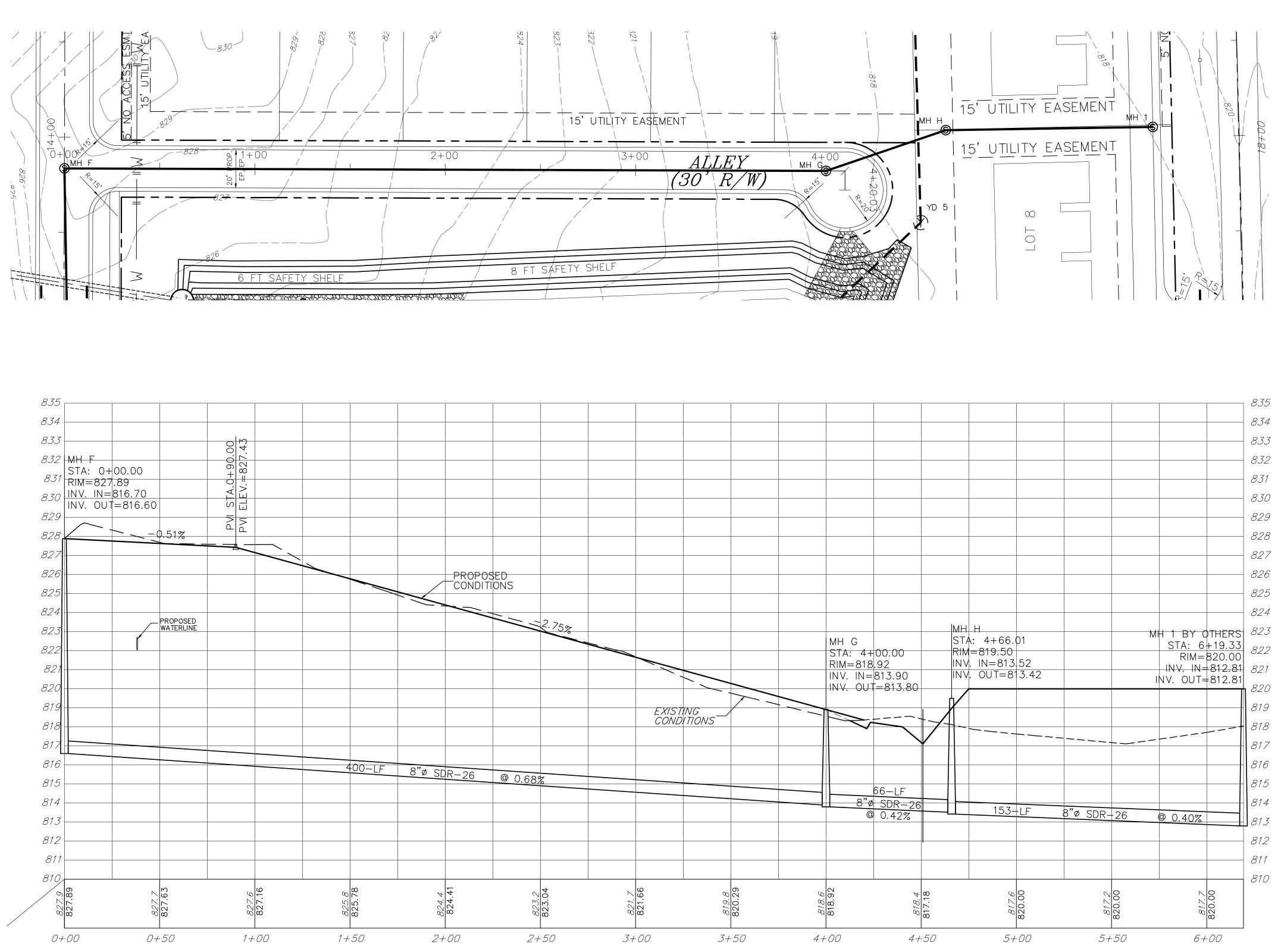


sheet C-21ROJECT 3139 IUMBER DRAWING NUMBER

3139.000.21

INDIANA





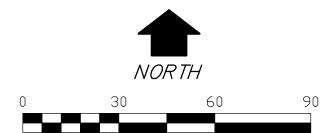
835								
834								
833					4.			
832	MH F	00.00		0.06				
831	STA: 0- RIM=82	1.89		+ 0.	₩ 			
830	INV. IN=	816.70 T=816.60		STA.0+90.00	ELEV. = 82			
829					P N			
<sup>828</sup> 1		<u> </u>	.51%					
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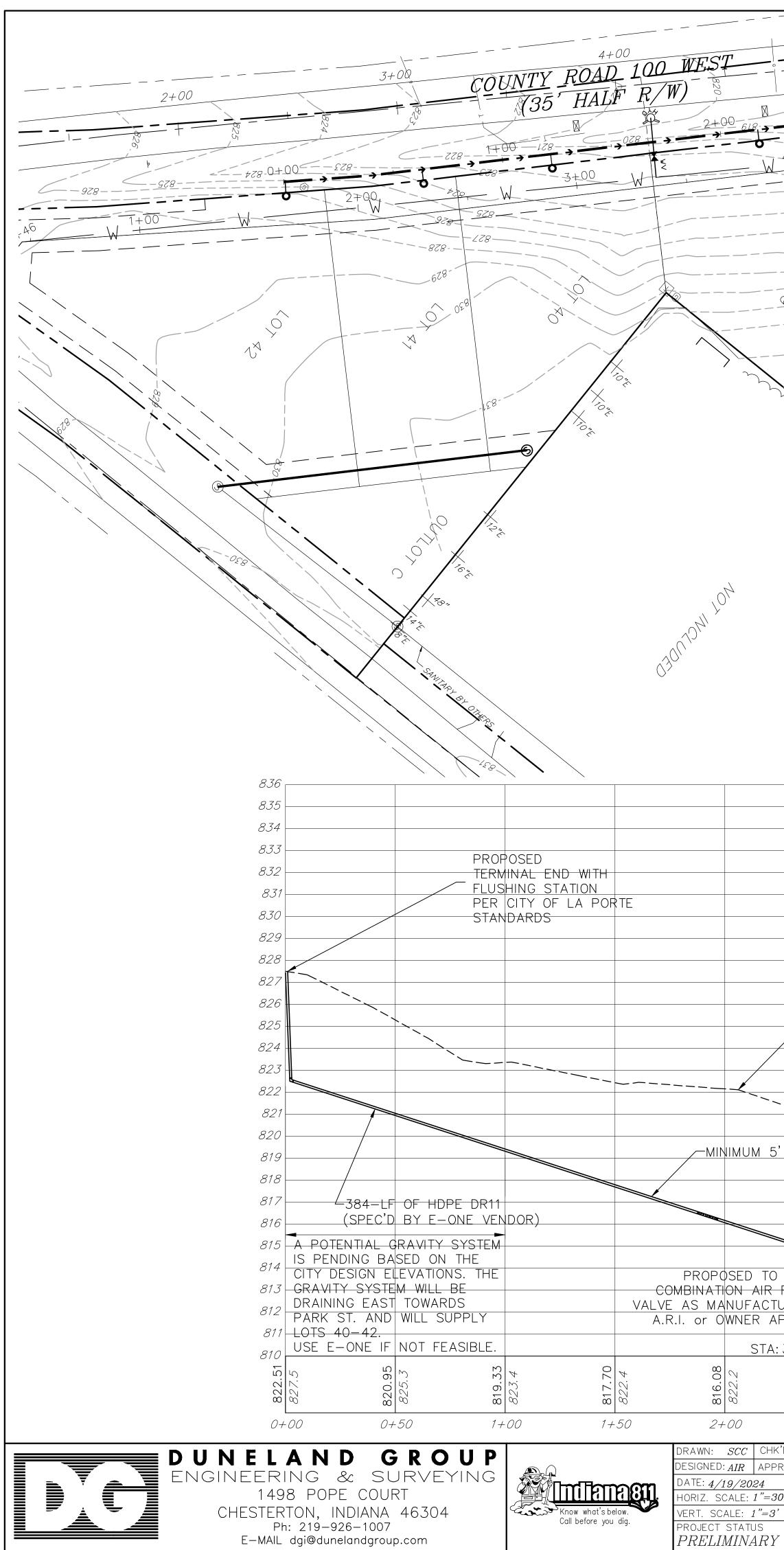




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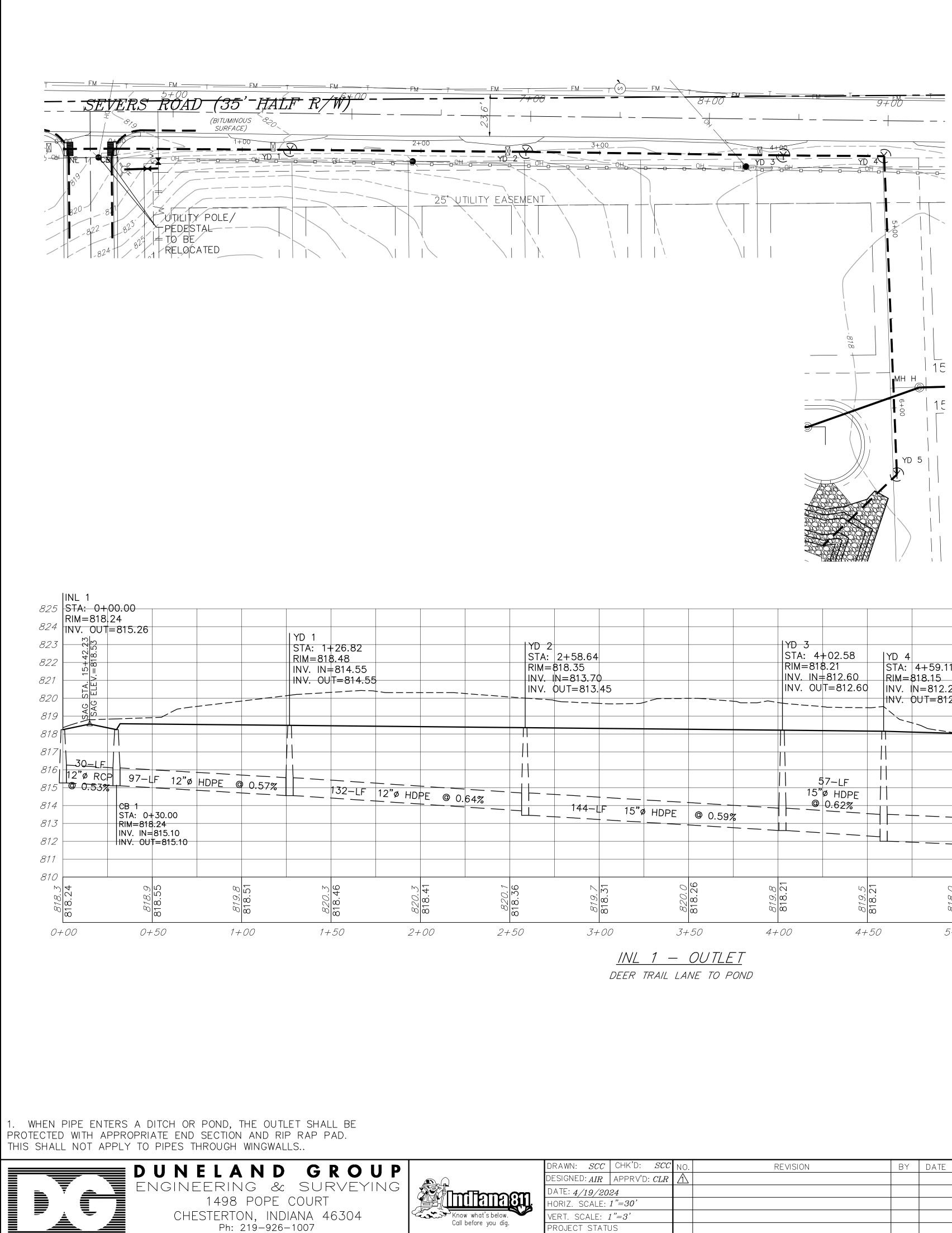
SCC CHK'D: SCC N AIR APPRV'D: CLR Z	 REVISION	BY	DATE	STORM	LLANES POPULA	CITY OF LA PORTE			sheet <i>C-22</i>
9/2024 ALE: 1"=30'				WATER ROAD	No.12100418 STATE OF *		HUNTER	WOODS	PROJECT 3139 NUMBER
ALE: 1"=3' Status MINARY				EROSION	STATE OF REAL PROVIDENT AND LAND AND AND AND AND AND AND AND AND AND	ALLEY S	SANITARY	PLAN/ PROFILE	DRAWING NUMBER 3139.000.22





5+00/	<u>6+00</u>	g18	7+00 7+00 7+00		
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7					LOT 33 EE8
		LOT	34		
		<sup>7</sup> 0,			838
					00
/					* <u>****</u>
					PROPOSED TO INS COMBINATION AIR VALVE AS MANUF
					A.R.I. or OWNER / EQUAL. STA: 4+98.65
-EXISTING GROUND					
MUM 5' DEPTH OF COVER					
		`\\`			
SED TO INSTALL N AIR RELEASE UFACTURED BY NER APPROVED			-lf of hdpe d ec'd by e-one	R11 VENDOR)	PROPO COMBIN VALVE A.R.I.
EQUAL. STA: 3+84.36 550.0 850.	820.2 811.20 818.6	810.17	810.27 817.0	810.35	EQUAL STA: 4- 855.7 8825.7 8825.7
	-00 3+50	018 4+00	4+50 4+50	5+00	5+50
CCC       CHK'D:       SCC       NO.         IR       APPRV'D:       CLR       A         /2024	REVISION	BY DATE	STORM SANITARY WATER	No.12100418 STATE OF NDIANA STATE OF NDIANA NOI ANA NOI ANA NO	CITY
E: 1"=3" TATUS TINARY			ROAD EROSION	STATE OF *	CF

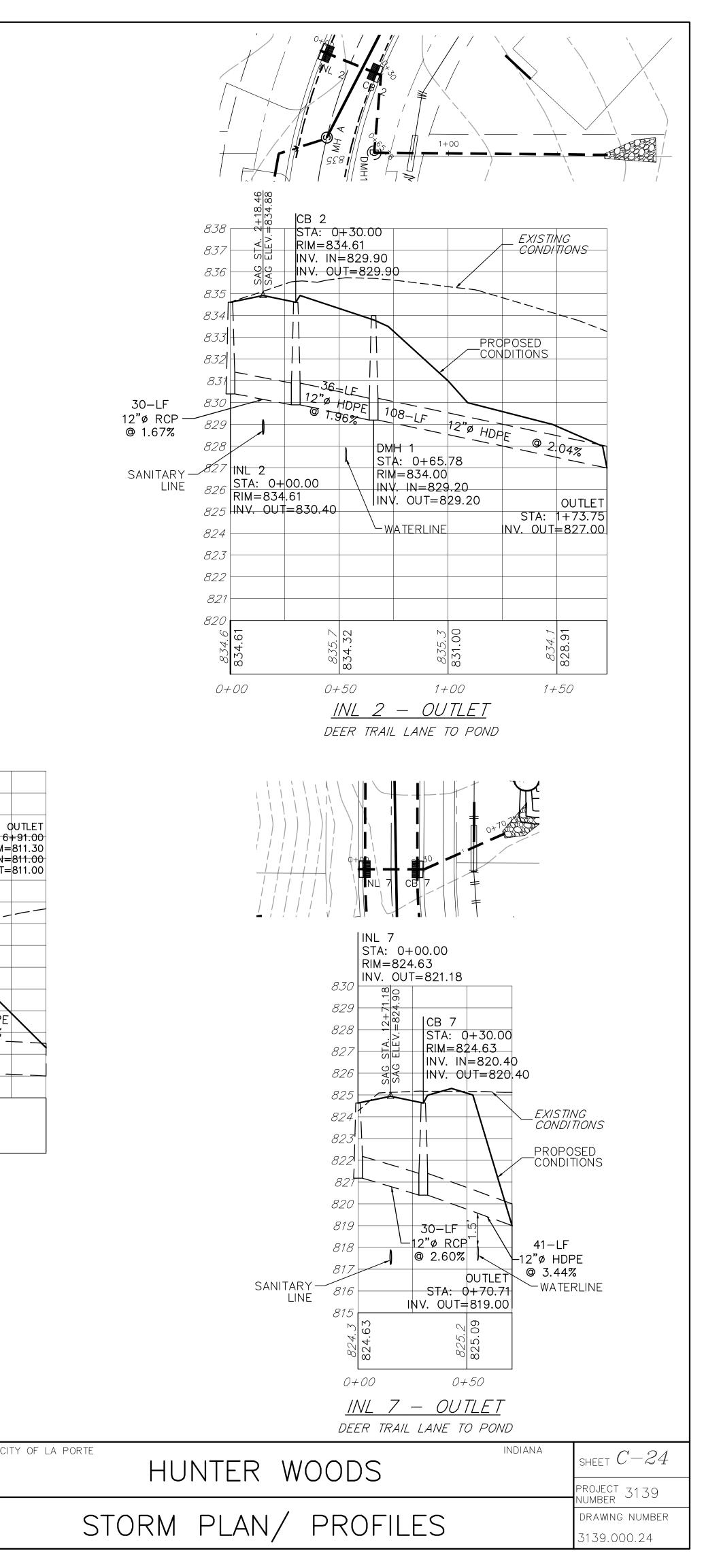
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ELEASE TURED BY					833 832
PROVED					<i>831</i>
					829
					828 827
				870	SDR-26 826 825
			ST	MH B A: 3+00.00	824
			INV.	RIM=834.32 IN=826.34 DUT=826.24	823 822
			INV. IN=827.		821 820
					819
					818 817
		<u>-311-LF</u> (SPEC'D	F HDPE DR11 BY E-ONE VEND	OR)	<i>816</i> <i>815</i>
D TO INST					
fi <del>on air f</del> 5 Manufa owner af	CTURED BY				813 812
3.65					<i>811</i>
815.77 827.4	818.50 831.1	821.23 834.0	823.96 835.0	826.69 <i>835.2</i>	
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- la porte		ITER WO	$) \cup \cup \cup$	INDIANA	sheet $C-2C$

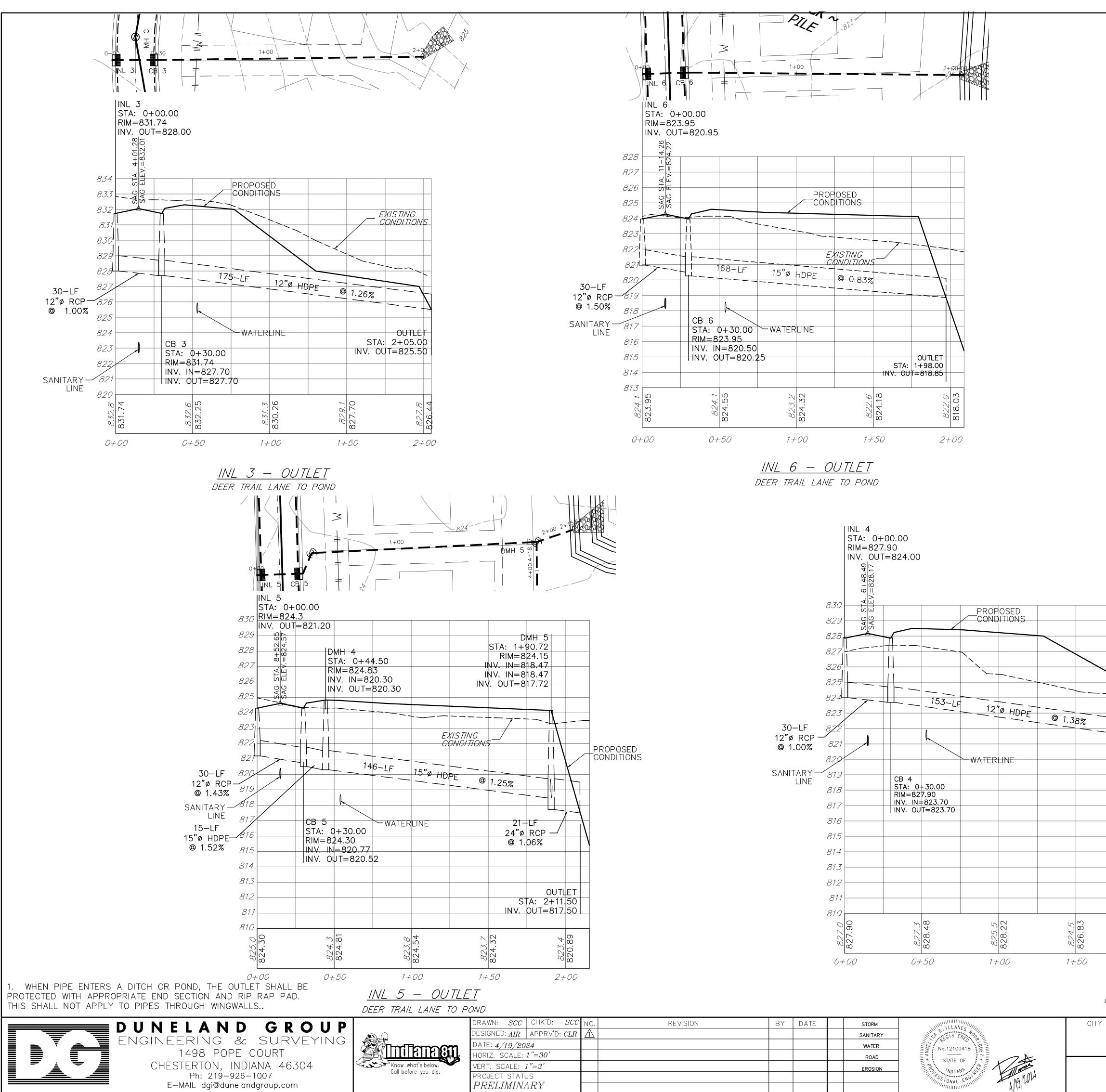


E-MAIL dgi@dunelandgroup.com

4 70 3.45 — —					RIM = INV.	4+59.11 818.15 IN=812.25 0∪T=812.	5 00		IN	TA: 6+37 RIM=817 V. IN=811	.63 .24	( STA: 6- RIM= INV. IN= INV. OUT=	)               
					<u> </u>				INV	. OUT=811	.24		
			15'	57–LF Ø HDPE 0.62%	    			SA			\ \\	54-LF	
-LF 	15"ø HDPE	© 0.59%					 178-LF 	 18"ø HDP 	0.26' E © 0.43% 			3"ø HDPE <u>0.45</u> %	
818.31	820.0	818.26	<i>819.8</i> <b>818.21</b>	<i>819.5</i> <b>818.21</b>		818.0	817.93	<i>817.8</i> 817.59	817.7	817.25	818.0	815.89	
+00	34	+50 4	4+00	4+50	2	5+	00	5+50	67	-00	6+	-50	

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DRAWN: SCC	CHK'D: SCC	NO.	REVISION	BY	DATE		STORM		CIT
DESIGNED: AIR	APPRV'D: <i>CLR</i>	$\triangle$					SANITARY	C C ISTER OS	
DATE: 4/19/2	2024						WATER	E S No.12100418	
HORIZ. SCALE	: 1"=30'						ROAD	No.12100418	
VERT. SCALE:	1"=3'						EROSION	MDIANA WY	
PROJECT STA								SONAL ENGLISHING AND	
PRELIMIN	VARY								





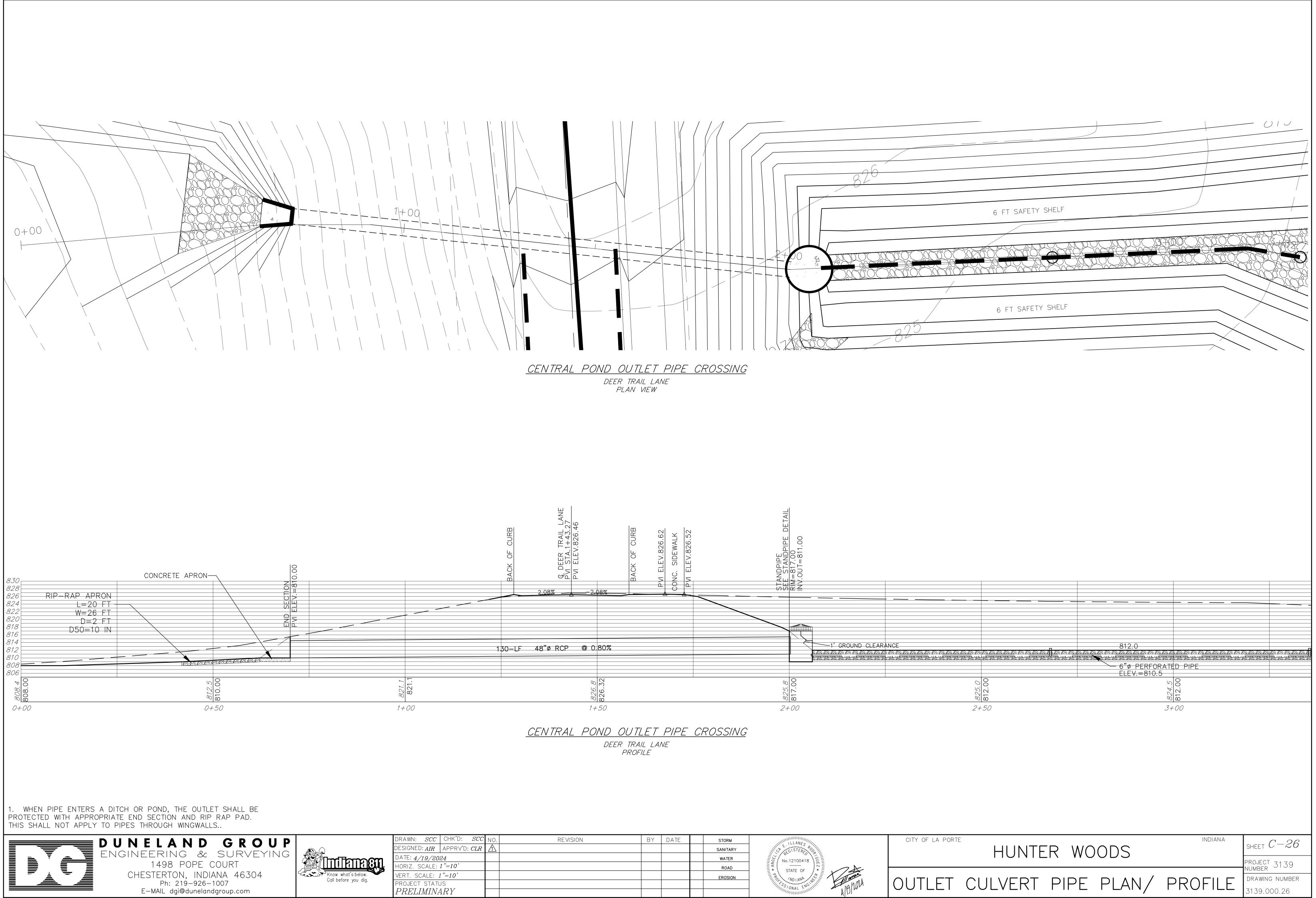
Н	-628 LOT 20 VI8 S8 S8	2+91.64-00 DMH 3		S28 DHH 5 4+00 4+18.	
DMH 2 STA: 1+82.71 RIM=825.50 INV. IN=821.60 INV. OUT=821.60 INV. IN=821.60 INV. OUT=821.60 INV. OUT=821.60 IN		DMH 3 STA: 2+91.0 RIM=825.50 INV. IN=819 INV. OUT=81 INV. OUT=81 I	85 9.60  15"Ø HDPE	© 0.89%	
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OF LA PORTE	HUNTER RM PLAN			INDIANA	Sheet $C-25$ PROJECT 3139 NUMBER DRAWING NUMBER 3139.000.25

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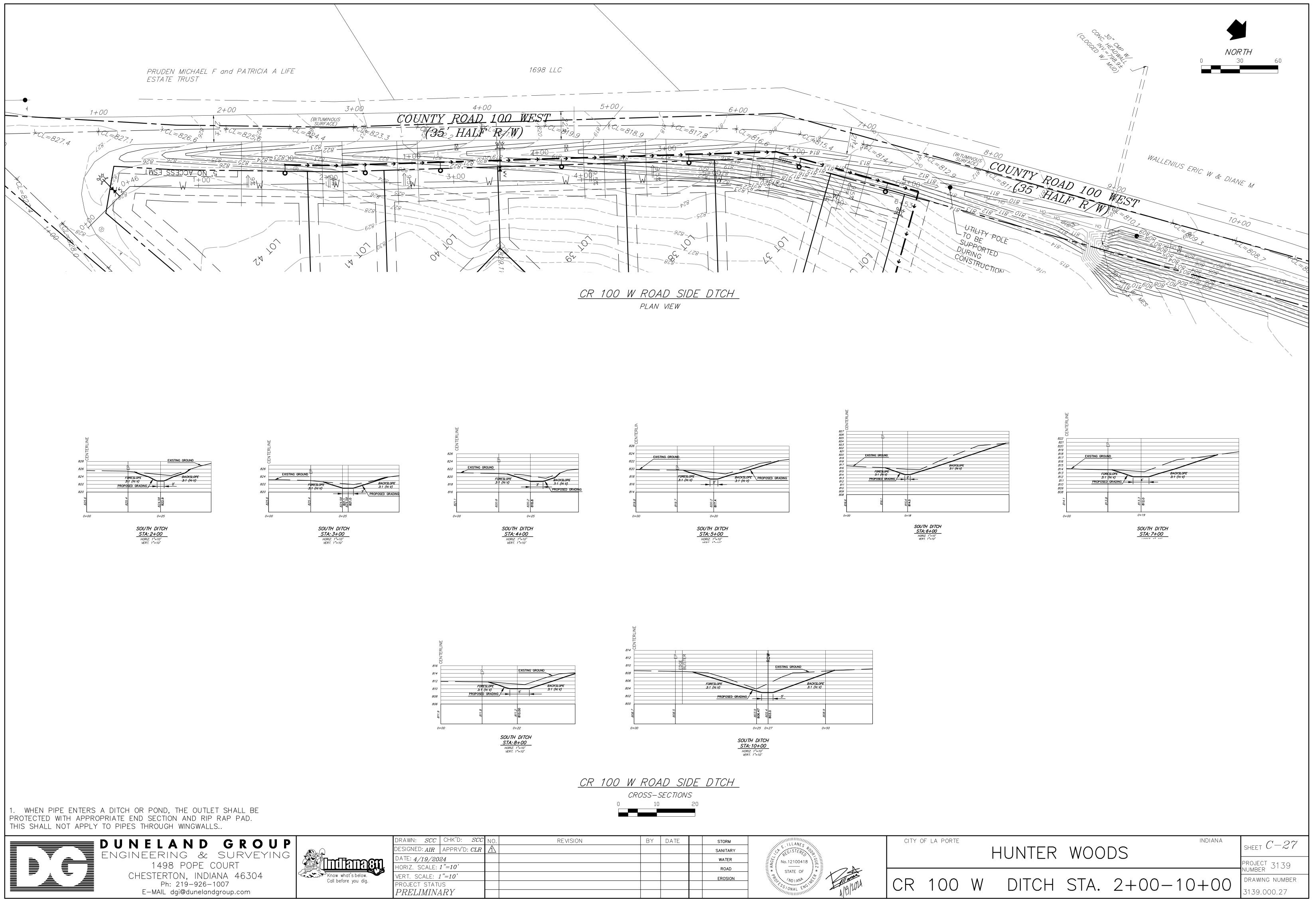
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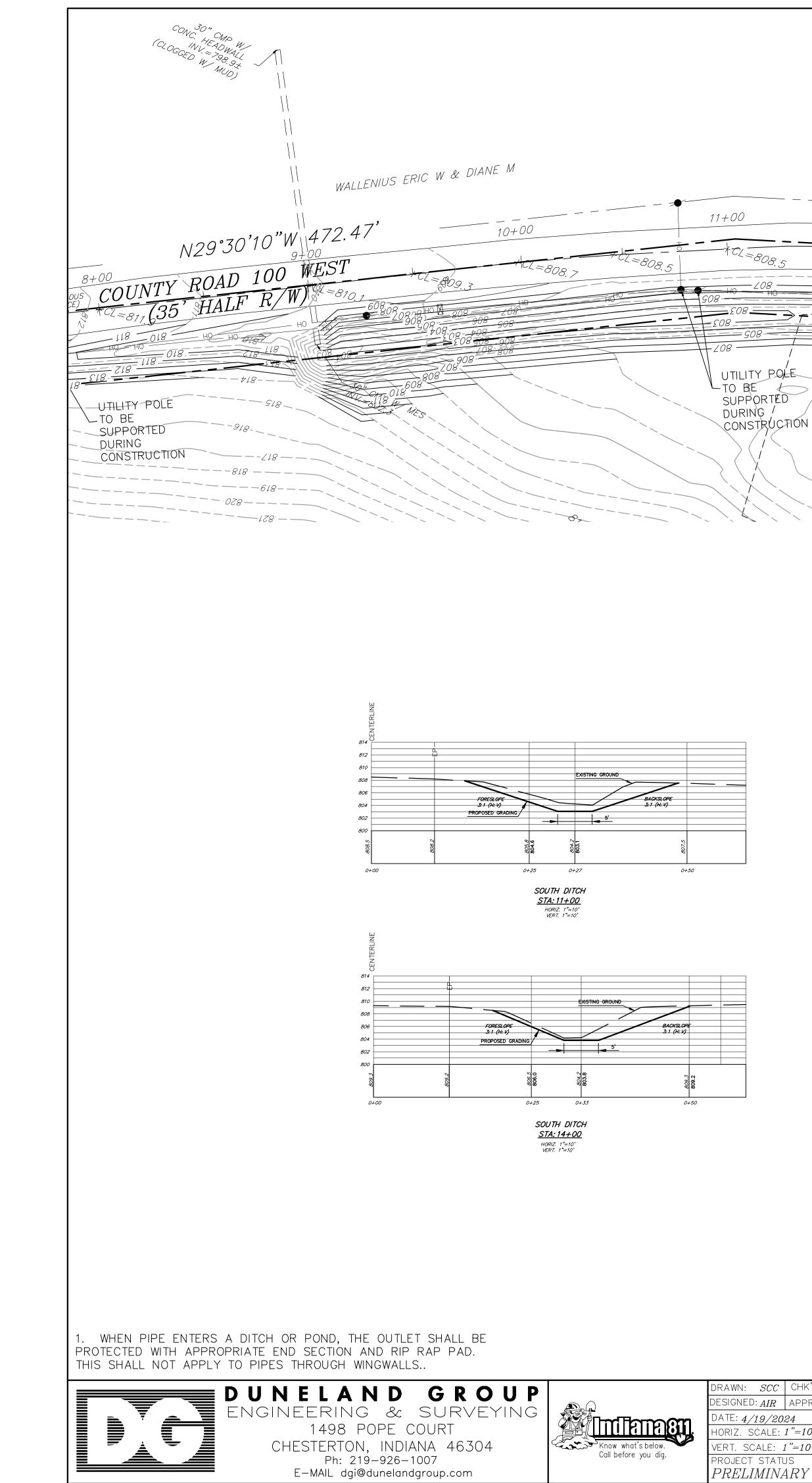
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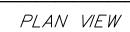
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CC CHK'D:	SCC	NO.	REVISION	ΒY	DATE	STORM		CITY
<i>IR</i> APPRV'D:	CLR	$\triangle$				SANITARY		
/2024						WATER	No.12100418	
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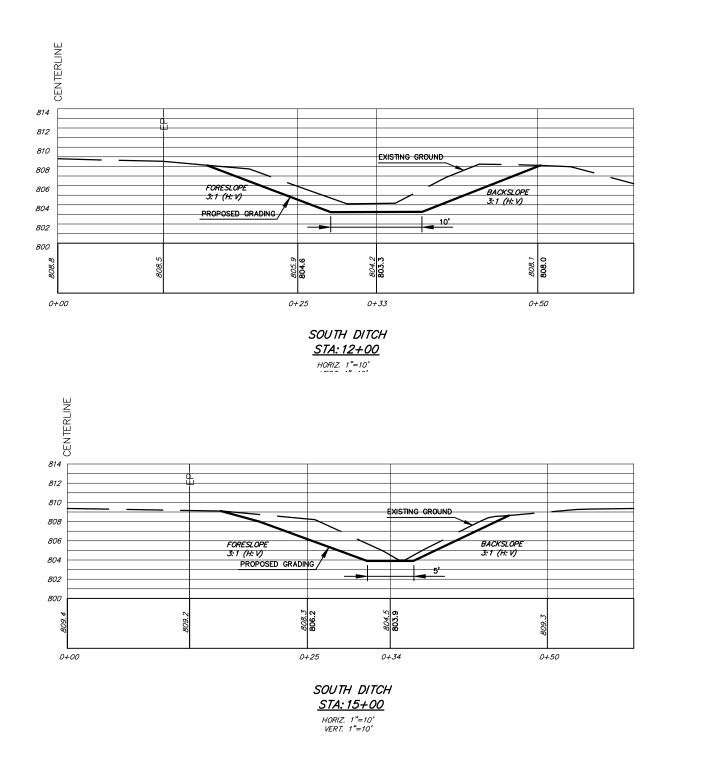


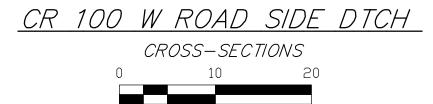
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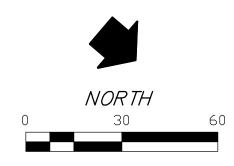
12+00 13+00 (BITUMINOUS SURFACE) <u>COUNTRY ROAD 100 WEST (35' HALF R/W)</u> 14+00 UTILITY POLE TO BE SUPPORTED DURING CONSTRUCTION CR 100 W ROAD SIDE DTCH



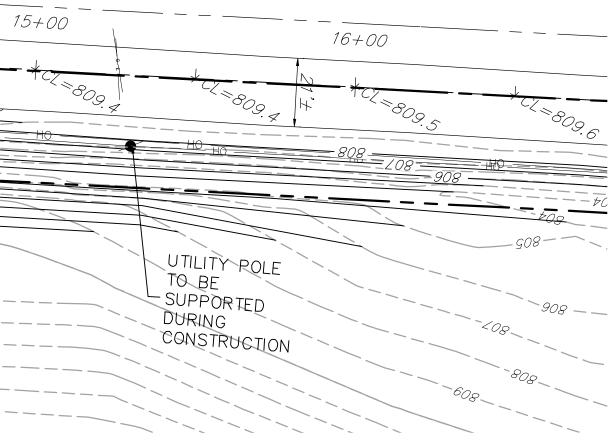




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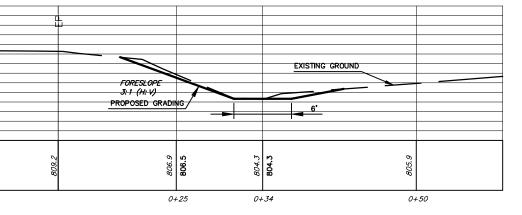
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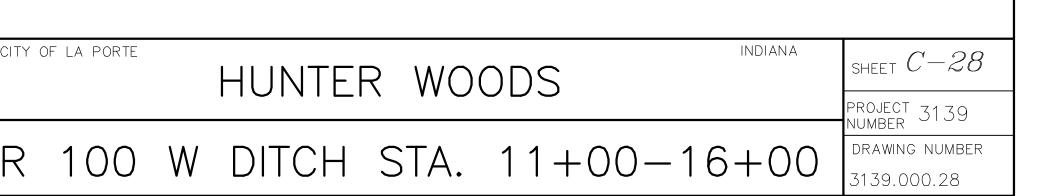
U	L			
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	FORESLOPE 3:1 (H: V) PROPOSED GRADING		BACKSLOPE 3:1 (H:V)	
			8'	
808.9	806.J	804.5 <i>804.4</i>	<b>8</b> 03.5 808.9	808.0
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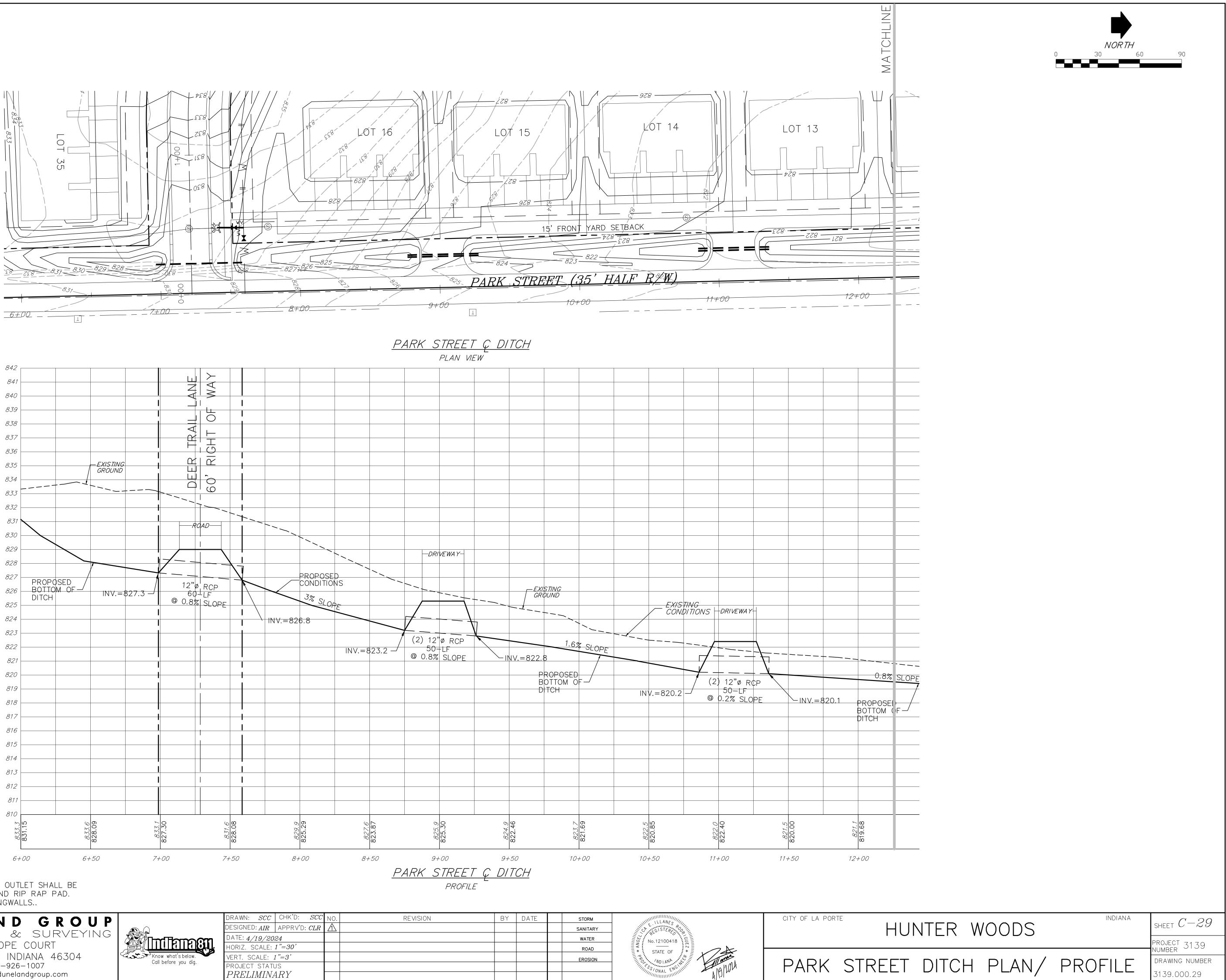


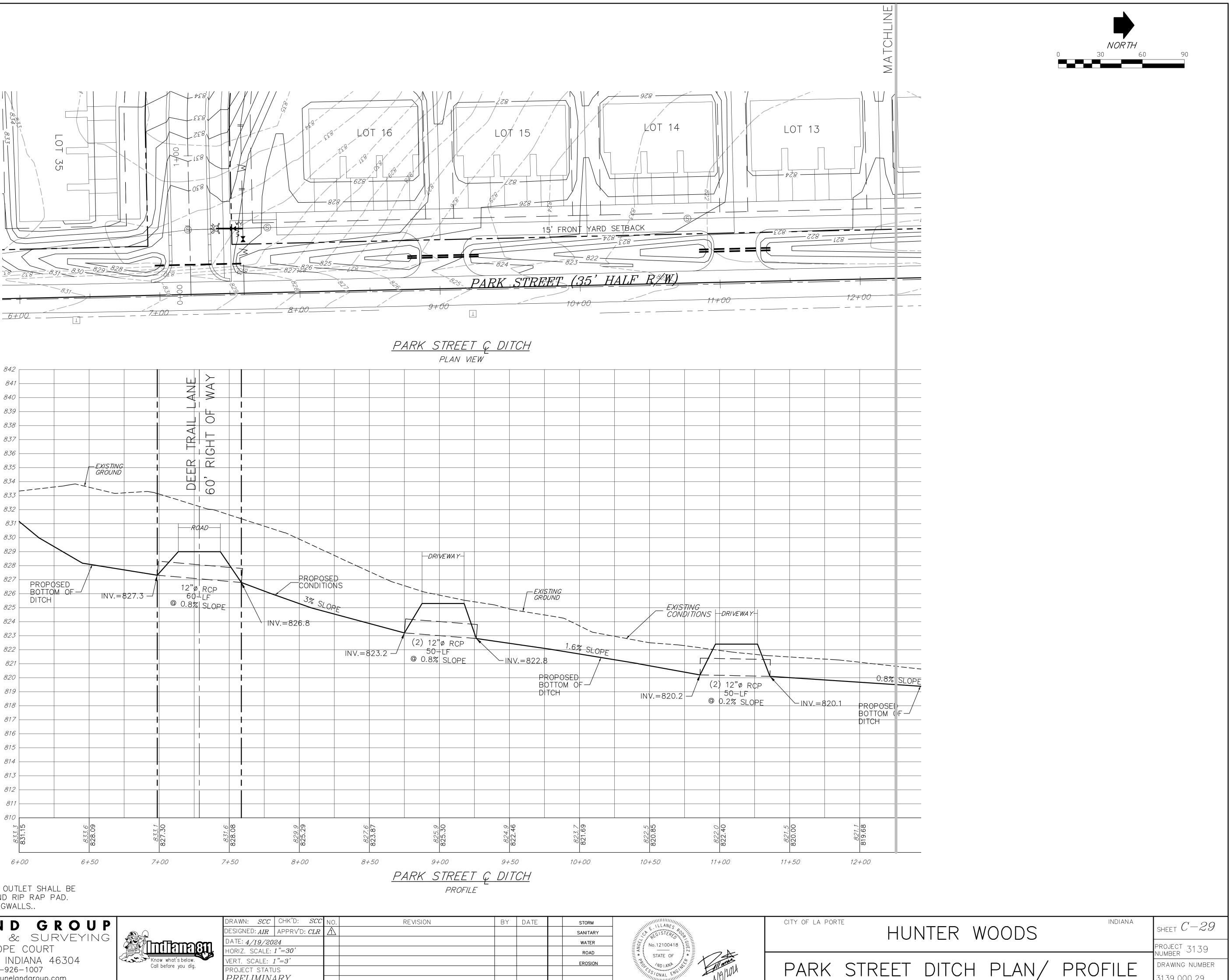
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SOUTH DITCH <u>STA: 16+00</u> HORIZ. 1"=10'



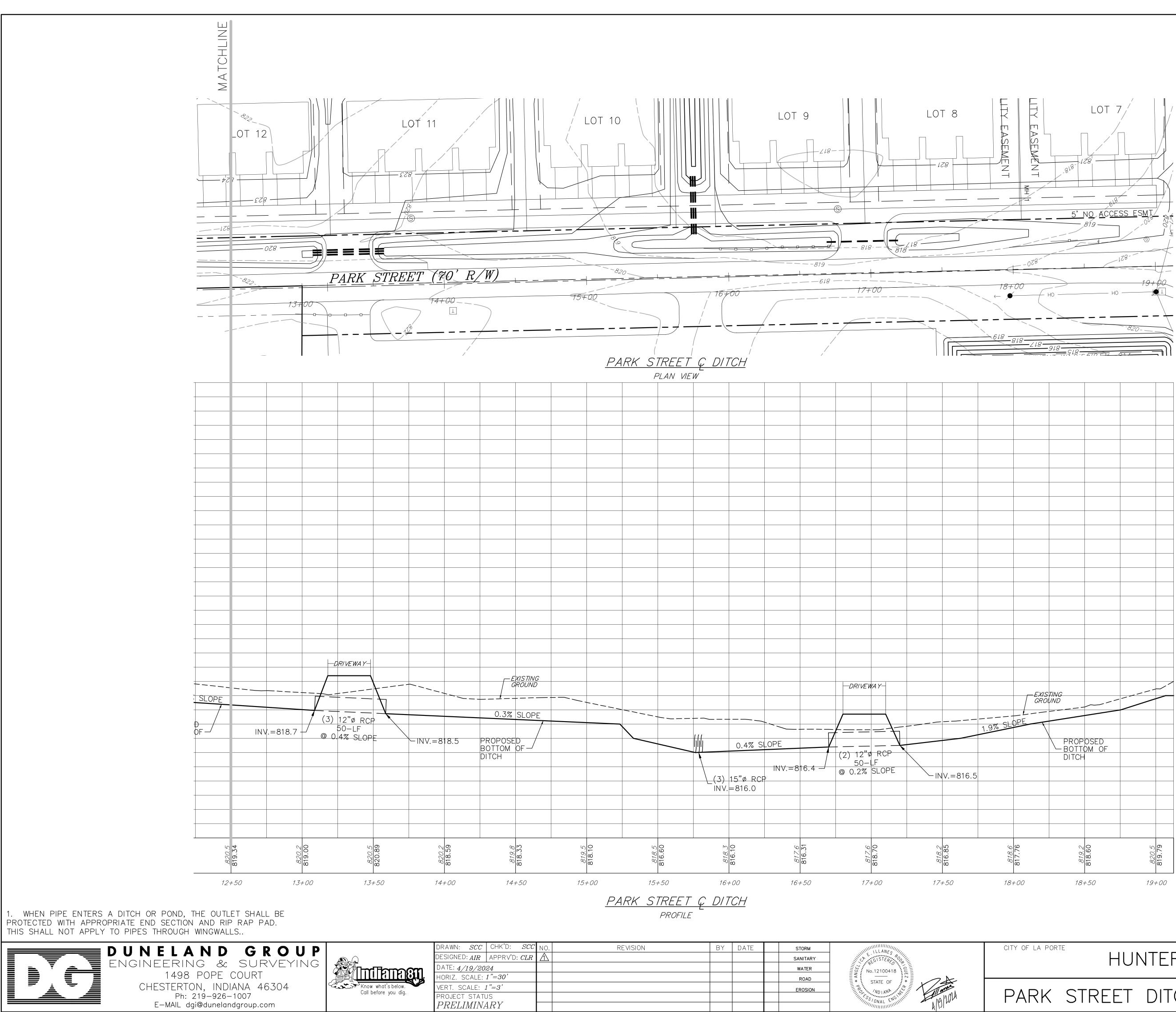




1. WHEN PIPE ENTERS A DITCH OR POND, THE OUTLET SHALL BE PROTECTED WITH APPROPRIATE END SECTION AND RIP RAP PAD. THIS SHALL NOT APPLY TO PIPES THROUGH WINGWALLS ..







Call before you dig.

PROJECT STATUS PRELIMINARY

# PARK STREET DITCH PLAN/ PROFILE

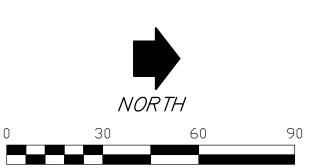
EROSION

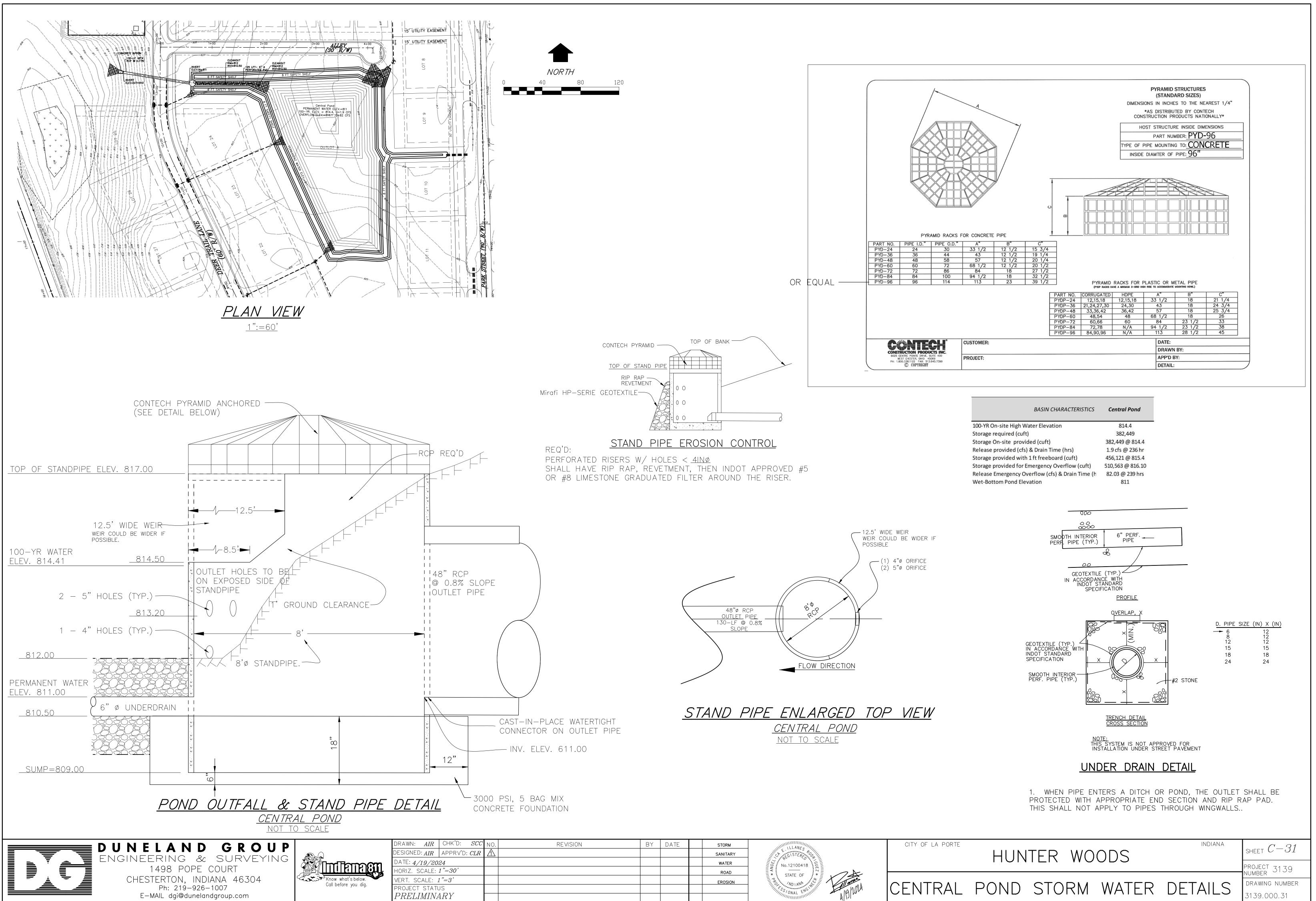
HUNTER WOODS

INDIANA

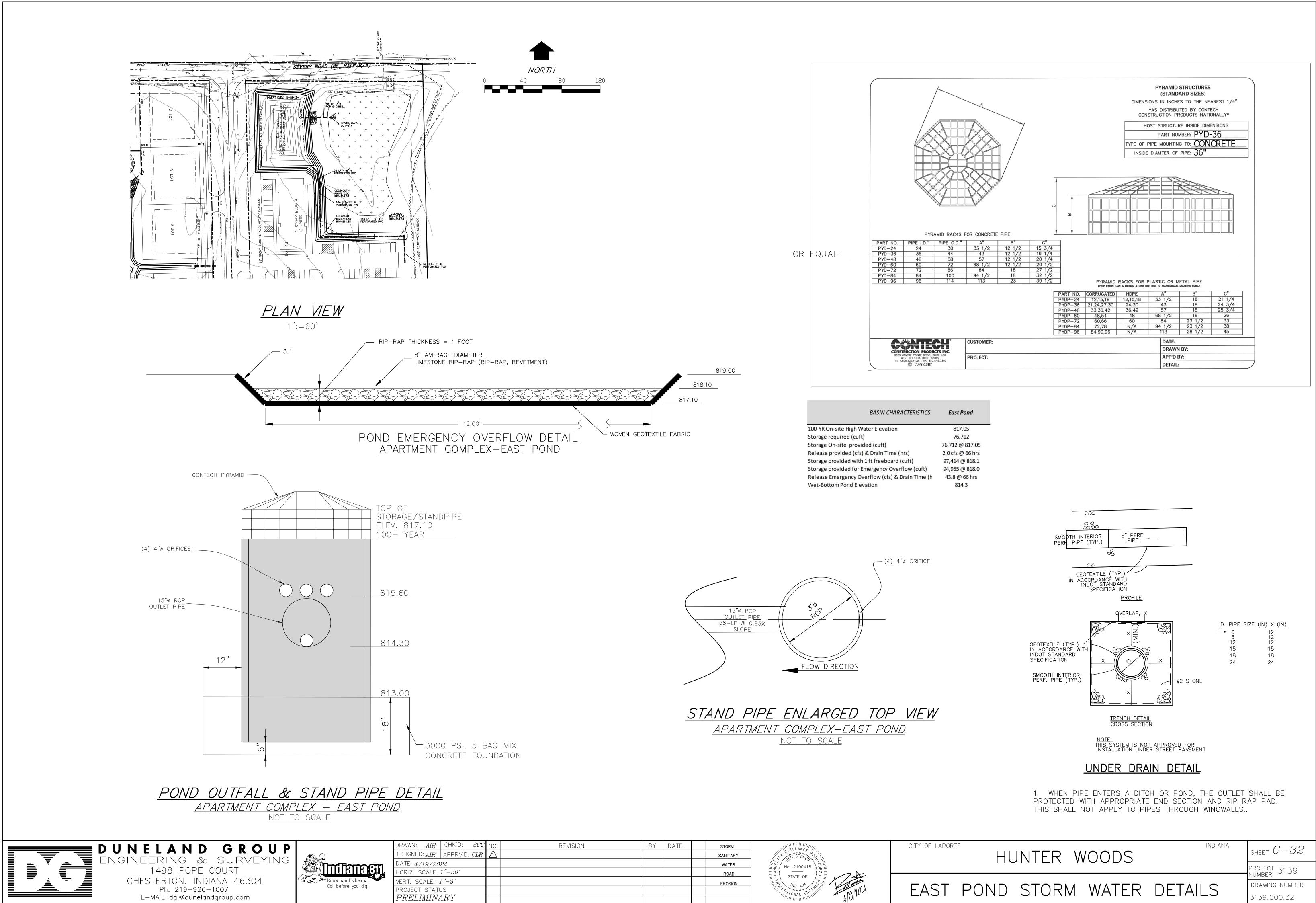
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		PROJECT 3139 NUMBER
AST POND S	TORM WATER DETAIL	_S DRAWING NUMBER 3139.000.32

Charles I D	Casting	Inlat Churchung	Rim	Invert E	levation	
Structure I.D.	Casting	Inlet Structure	Elevation	IN	OUT	Underdrain Elevation
DMH 1	Neenah Type R-1580	TYPE MH	834.00	829.20	829.20	No
DMH 2	Neenah Type R-1580	TYPE MH	825.50	821.60	821.60	No
DMH 3	Neenah Type R-1580	TYPE MH	825.50	819.85	819.60	No
DMH 4	Neenah Type R-1580	TYPE MH	824.83	820.30	820.30	No
DMH 5	Neenah Type R-1580	TYPE MH	824.15	818.47 818.47	817.72	No
CB 1	Neenah Type R-3501-L1A	Catch Basin	818.24	815.10	815.10	Yes
CB 2	Neenah Type R-3501-L1A	Catch Basin	834.61	829.90	829.90	Yes
CB 3	Neenah Type R-3501-L1A	Catch Basin	831.74	827.70	827.70	Yes
CB 4	Neenah Type R-3501-L1A	Catch Basin	827.90	823.70	823.70	Yes
CB 5	Neenah Type R-3501-L1A	Catch Basin	824.30	820.77	820.52	Yes
CB 6	Neenah Type R-3501-L1A	Catch Basin	823.95	820.50	820.25	Yes
CB 7	Neenah Type R-3501-L1A	Catch Basin	824.63	820.40	820.40	Yes
INL 1	Neenah Type R-3501-L1A	Gutter Inlet	818.24	-	815.26	Yes
INL 2	Neenah Type R-3501-L1A	Gutter Inlet	834.61	-	830.40	Yes
INL 3	Neenah Type R-3501-L1A	Gutter Inlet	831.74	-	828.00	Yes
INL 4	Neenah Type R-3501-L1A	Gutter Inlet	827.90	-	824.00	Yes
INL 5	Neenah Type R-3501-L1A	Gutter Inlet	824.30	-	821.20	Yes
INL 6	Neenah Type R-3501-L1A	Gutter Inlet	823.95	-	820.95	Yes
INL 7	Neenah Type R-3501-L1A	Gutter Inlet	824.63	-	821.18	Yes
YD 1	Neenah Type R-2561	Beehive Inlet	818.48	814.55	814.55	No
YD 2	Neenah Type R-2561	Beehive Inlet	818.35	813.70	813.45	No
YD3	Neenah Type R-2561	Beehive Inlet	818.21	812.60	812.60	No
YD 4	Neenah Type R-2561	Beehive Inlet	818.15	812.25	812.00	No
YD 5	Neenah Type R-2561	Beehive Inlet	817.63	811.24	811.24	No
OUTLET 1	For 18"Ø HDPE Pipe	End section		2	811.00	
OUTLET 2	For 12"Ø HDPE Pipe	End section		÷.	827.00	
OUTLET 3	For 12"Ø HDPE Pipe	End section		1	825.50	1 1
OUTLET 4	For 24"Ø RCP Pipe	End section	( <b>1</b> )	-	817.50	11 <b>2</b> /
OUTLET 5	For 15"Ø HDPE Pipe	End section	940	-	818.85	-
OUTLET 6	For 12"Ø HDPE Pipe	End section	-	-	819.00	-

NOTE: CONTRACTOR SHALL VERIFY SIZES PRIOR TO ORDERING.

Casting shall have 2-inch-high-letters indicating "Storm Sewer"

#### R-1580 Manhole Frame, Solid Lid

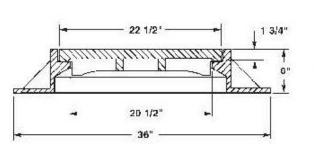
#### Heavy Duty

NORMAL PROPERTY

Available Grate: R-2080

Non-Rocking feature available, see p. 12. Also available with 38" diameter frame flange.

(see Catch Basin Inlets. R-2000 Series table)





#### R-3501-L1A Inlet for Roll Type Curb

GRATE TYPE

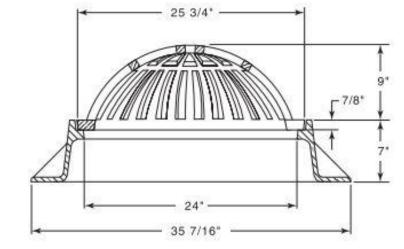
R-3501-L1A

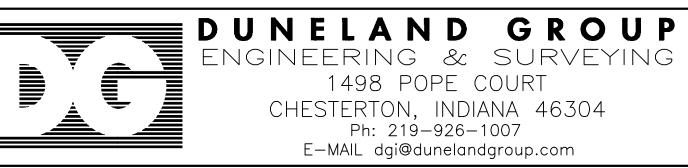
Heavy Duty CATALOG NUMBER

## R-2561 **Inlet Frame, Beehive Grate**

	GRATE	SQ. FT. OPEN	PERIMETER LINEAL FEET
R-2561	Beehive	2.0	6.7

Available Lid: R-1733

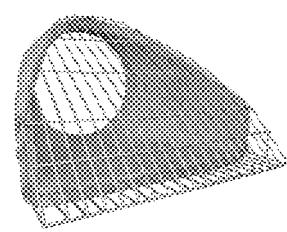


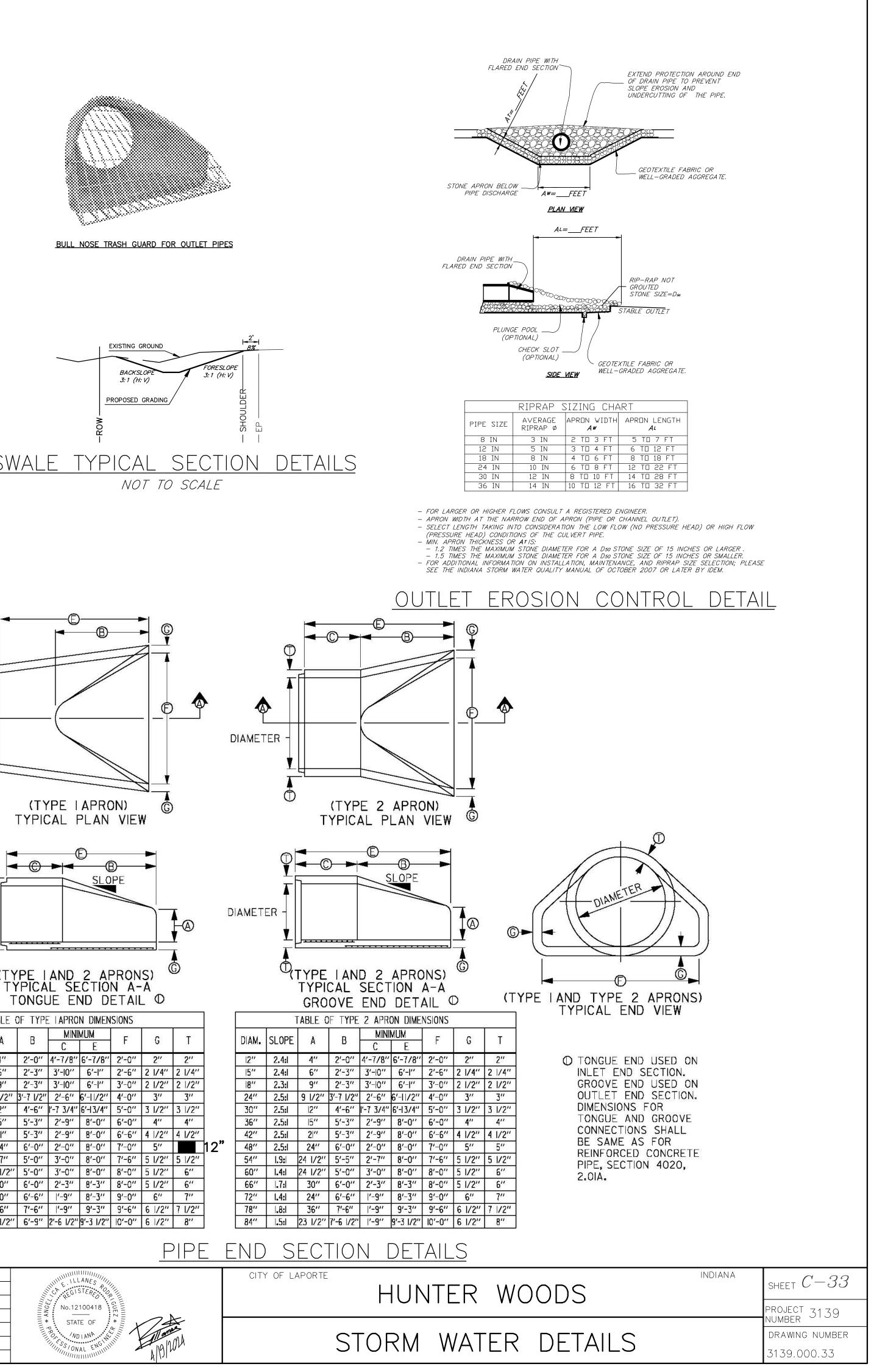


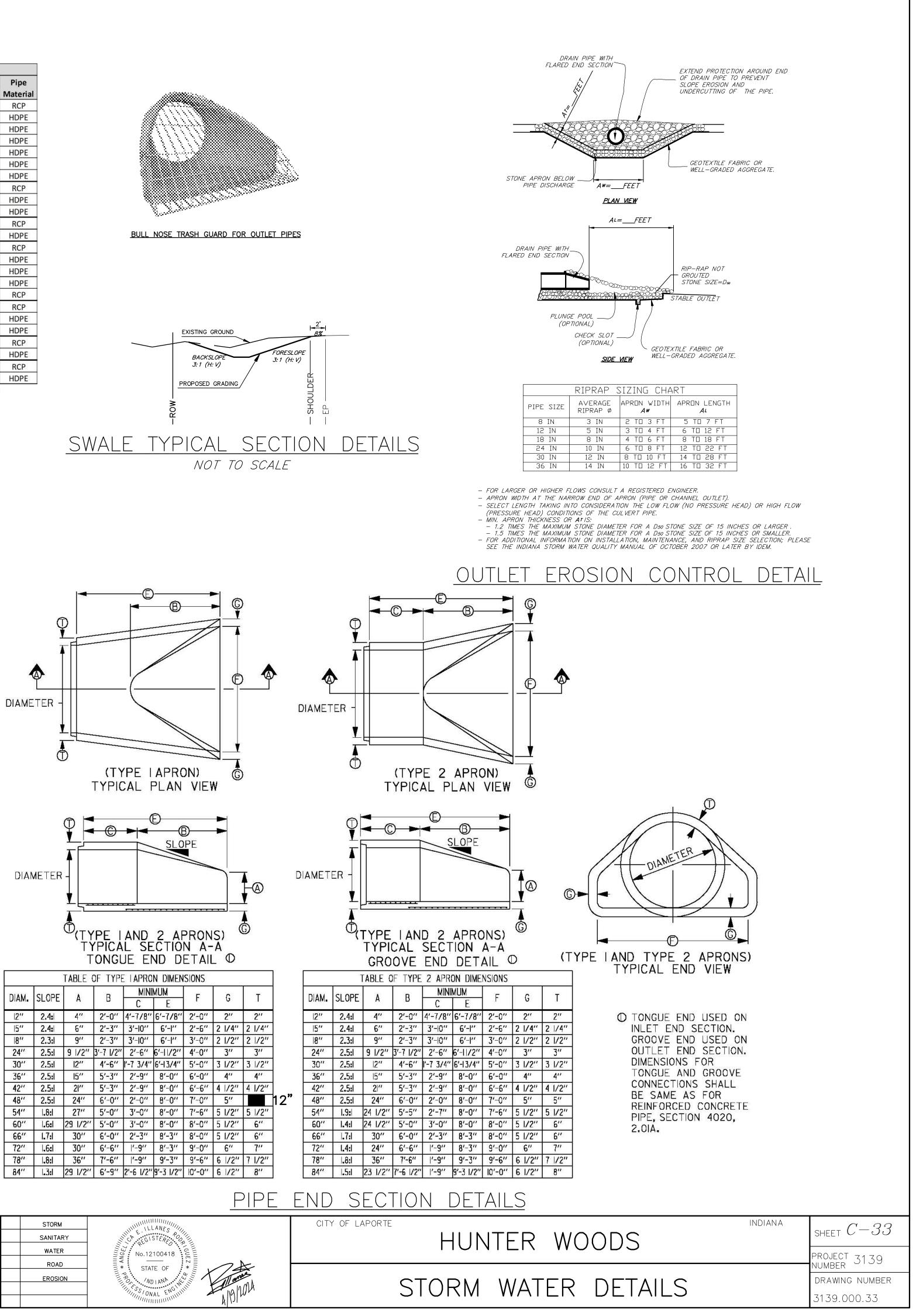


DRAWN: *AIR* CHK'D: *SCC* DESIGNED: AIR APPRV'D: CLR )ATE: 4/19/2024 ORIZ. SCALE: 1"=30' VERT. SCALE: 1"=3' PROJECT STATUS PRELIMINARY

PIPE DATA TABLE Diameter Line Slope of Invert Elevation Casting Elevation Pipe										
Structure I.D.	(in)	Length	Invert	1000	Lower			Pipe		
		-		Upper		Upper	Lower	Materia		
INL1-CB1	12	30	0.53	815.26	815.10	818.24	818.24	RCP		
CB 1 - YD 1	12	97	0.57	815.1	814.55	818.24	818.48	HDPE		
YD 1 - YD 2	12	132	0.64	814.55	813.7	818.48	818.35	HDPE		
YD 2- YD 3	15	144	0.59	813.45	812.6	818.35	818.21	HDPE		
YD 3- YD 4	15	57	0.62	812.6	812.25	818.21	818.15	HDPE		
YD 4 - YD 5	18	178	0.43	812	811.24	818.15	817.63	HDPE		
YD 5 - OUTLET	18	54	0.45	811.24	811	817.63	-	HDPE		
INL 2- CB 2	12	30	1.67	830.4	829.9	834.61	834.61	RCP		
CB2 - DMH 1	12	36	1.96	829.9	829.2	834.61	834	HDPE		
DMH 1 - OUTLET	12	108	2.04	829.2	827	834	-	HDPE		
INL 3 - CB 3	12	30	1	828	827.7	831.74	831.74	RCP		
CB 3 - OUTLET	12	175	1.26	827.7	825.5	831.74	-	HDPE		
INL 4 - CB 4	12	30	1	824	823.7	827.9	827.9	RCP		
CB 4 - DMH 2	12	153	1.38	823.7	821.6	827.9	825.5	HDPE		
DMH 2 - DMH 3	12	108	1.62	821.6	819.85	825.5	825.5	HDPE		
DMH 3 - DMH 5	15	128	0.89	819.6	818.47	825.5	824.15	HDPE		
DMH 5 - OUTLET	24	21	1.06	817.72	817.5	824.15		RCP		
INL 5 - CB 5	12	30	1.43	821.2	820.77	824.3	824.3	RCP		
CB 5 - DMH 4	15	15	1.52	820.52	820.3	824.3	824.83	HDPE		
DMH 4 - DMH 5	15	146	1.25	820.3	818.47	824.83	824.15	HDPE		
INL 6 - CB 6	12	30	1.5	820.95	820.5	823.95	823.95	RCP		
CB 6 - OUTLET	15	168	0.83	820.25	818.85	823.95		HDPE		
INL 7 - CB 7	12	30	2.6	821.18	820.4	824.63	824.63	RCP		
CB 7 - OUTLET	12	41	3.44	820.4	819	824.63	-	HDPE		





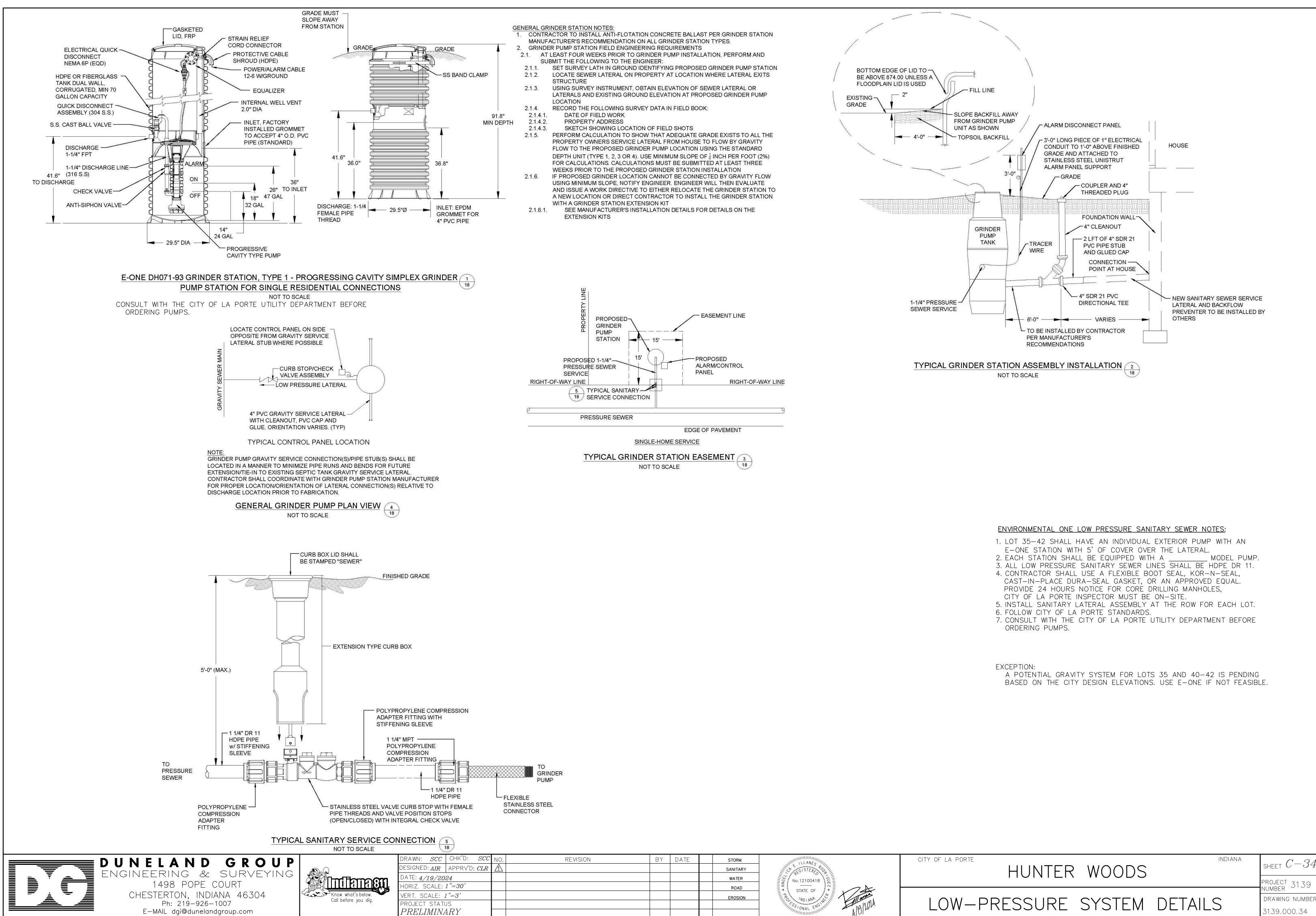


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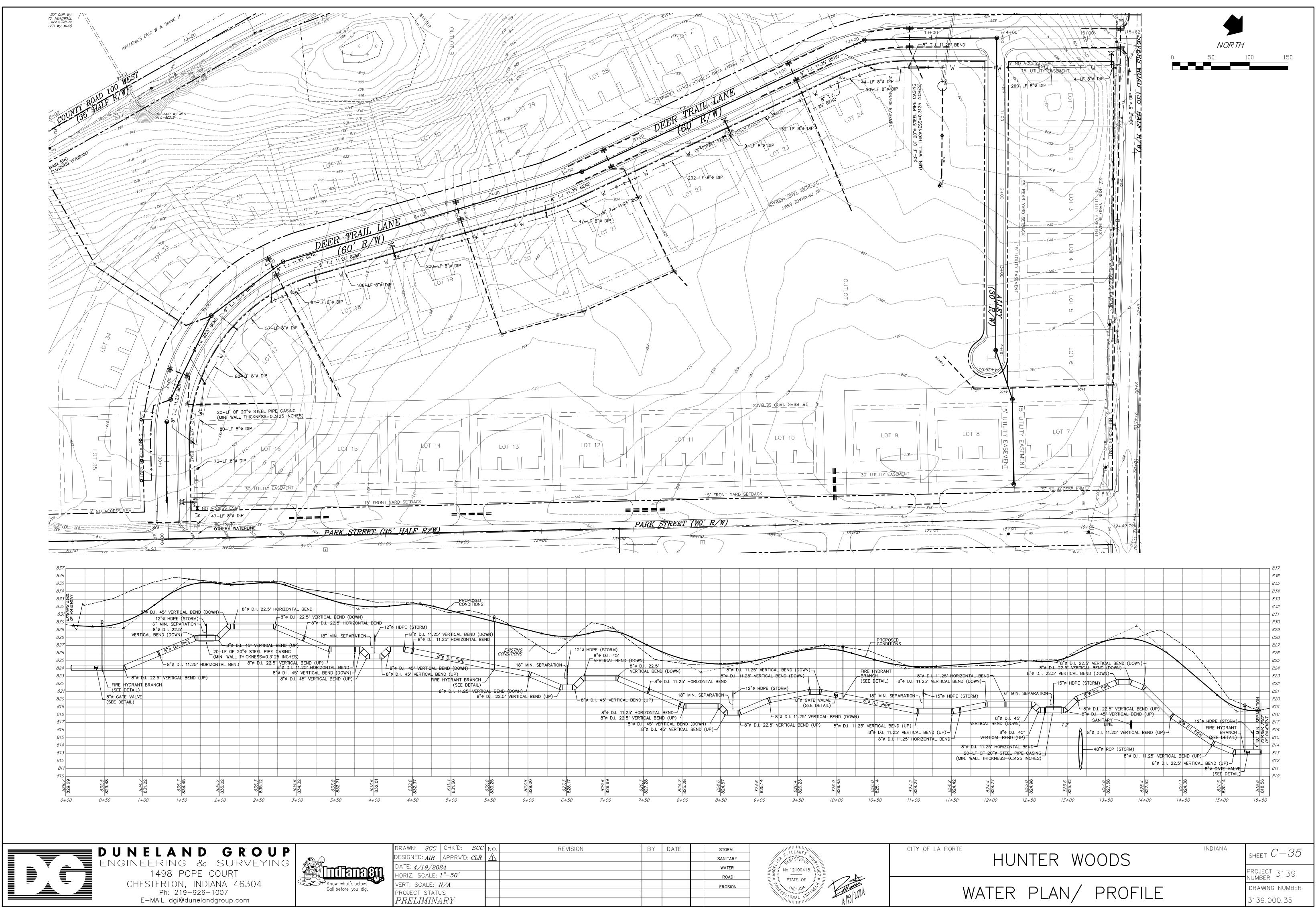
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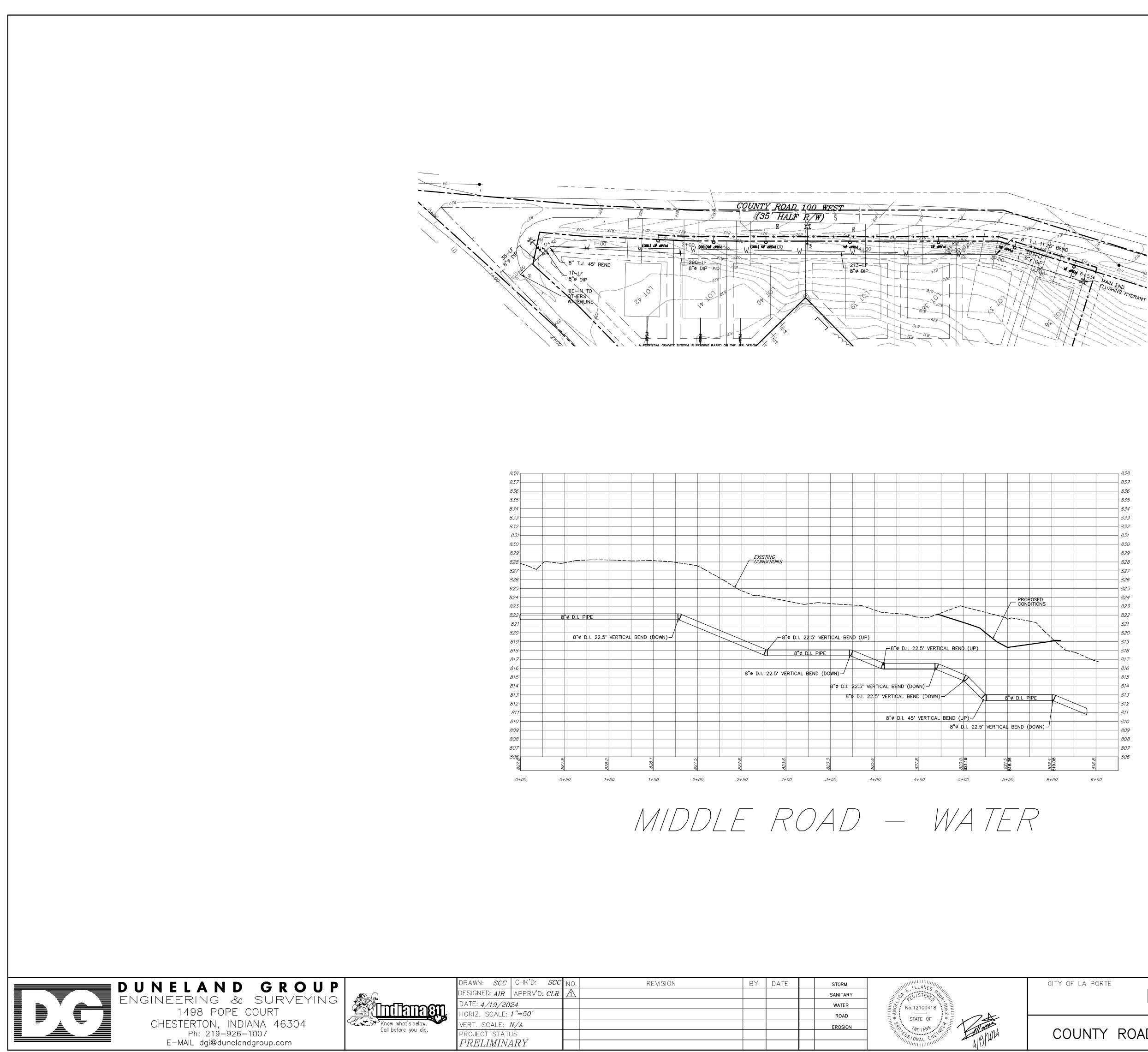


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SCC CHK'D: SCC	NO.	REVISION	BY	DATE	STORM		CITY
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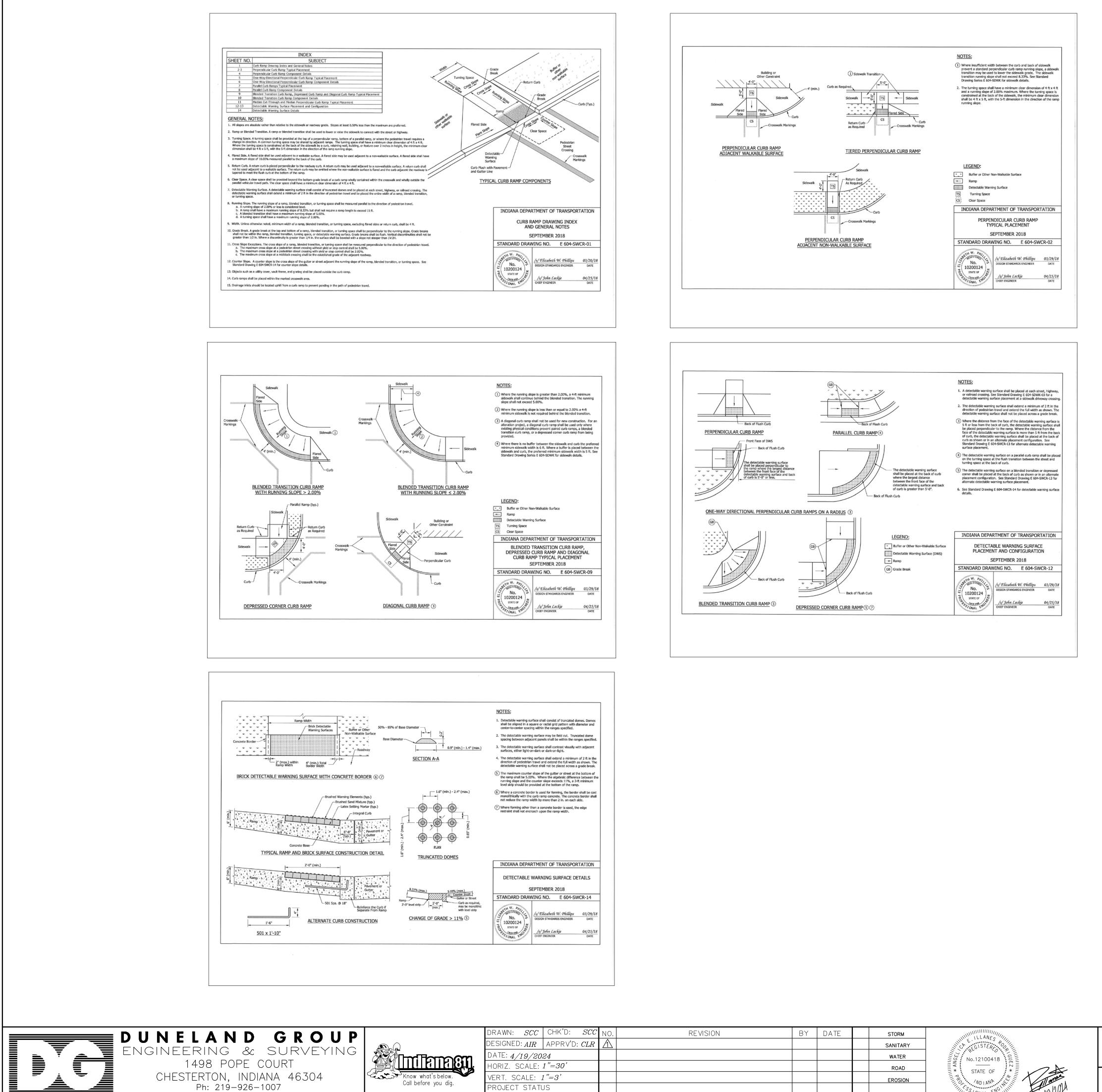
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INDIANA INDIANA	sheet <i>C</i> -36
	PROJECT 3139 NUMBER
COUNTY ROAD 100 WEST WATER PLAN/ PROFILE	DRAWING NUMBER
JOONTH ROAD TOO WEST WATER TEANY TROTTEE	3139.000.36



E-MAIL dgi@dunelandgroup.com

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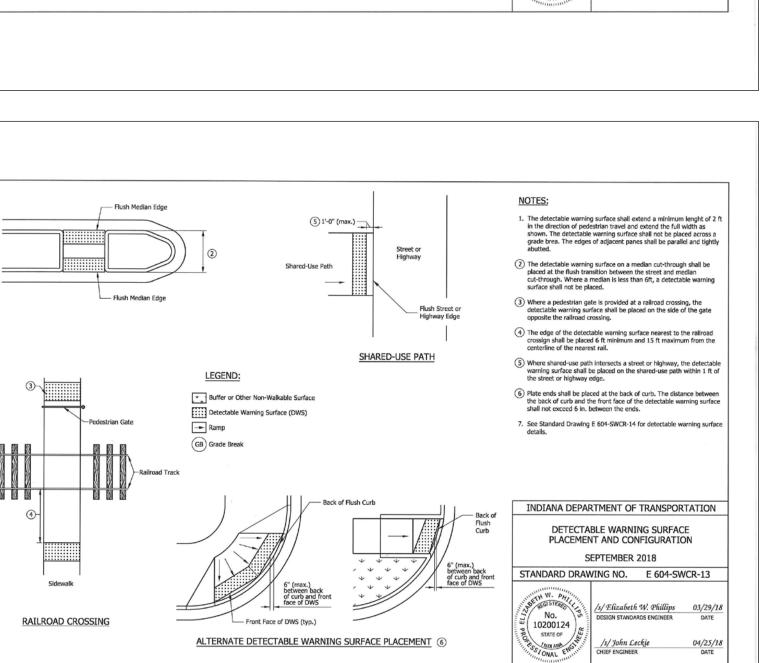
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		FER WC			PROJECT 3139 NUMBER
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					3139.000.37

MANUFACTURED BY NEENAH OR APPROVED EQUAL.

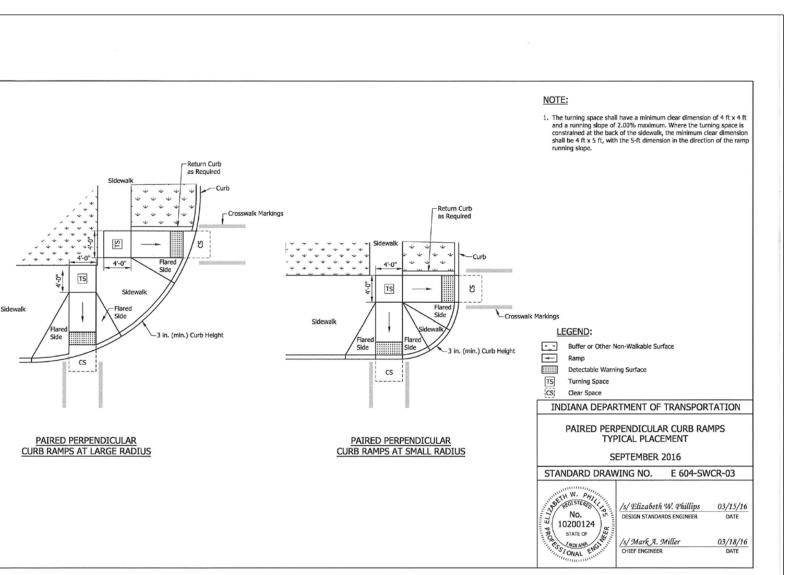
/s/ John Leckie CHIEF ENGINEER

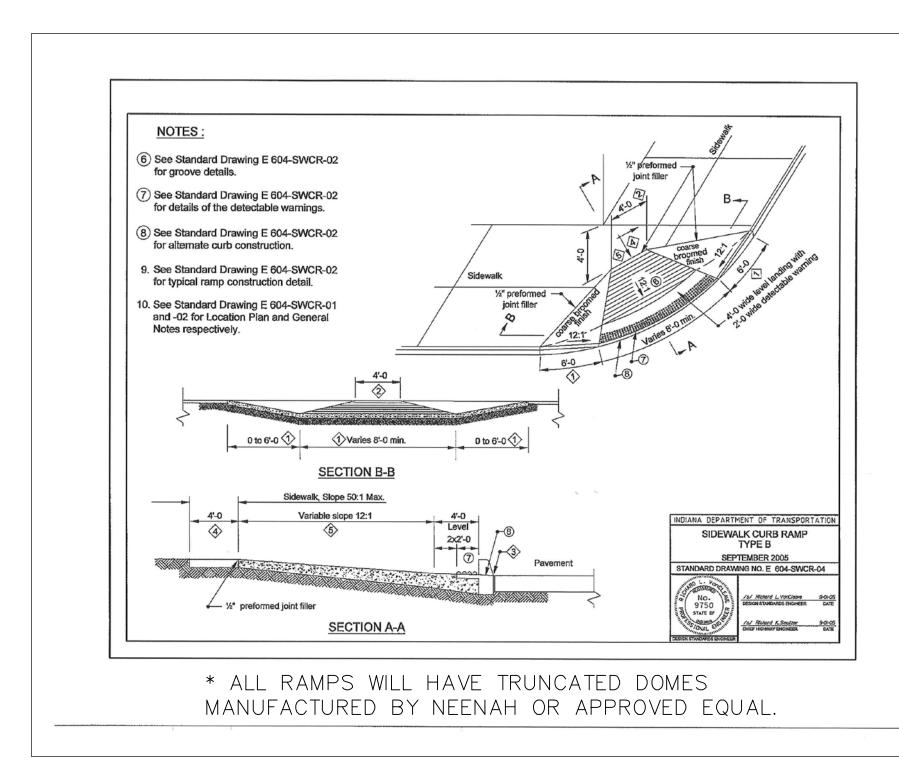
04/25/18





ALTERNATE DETECTABLE WARNING SURFACE PLACEMENT (6)



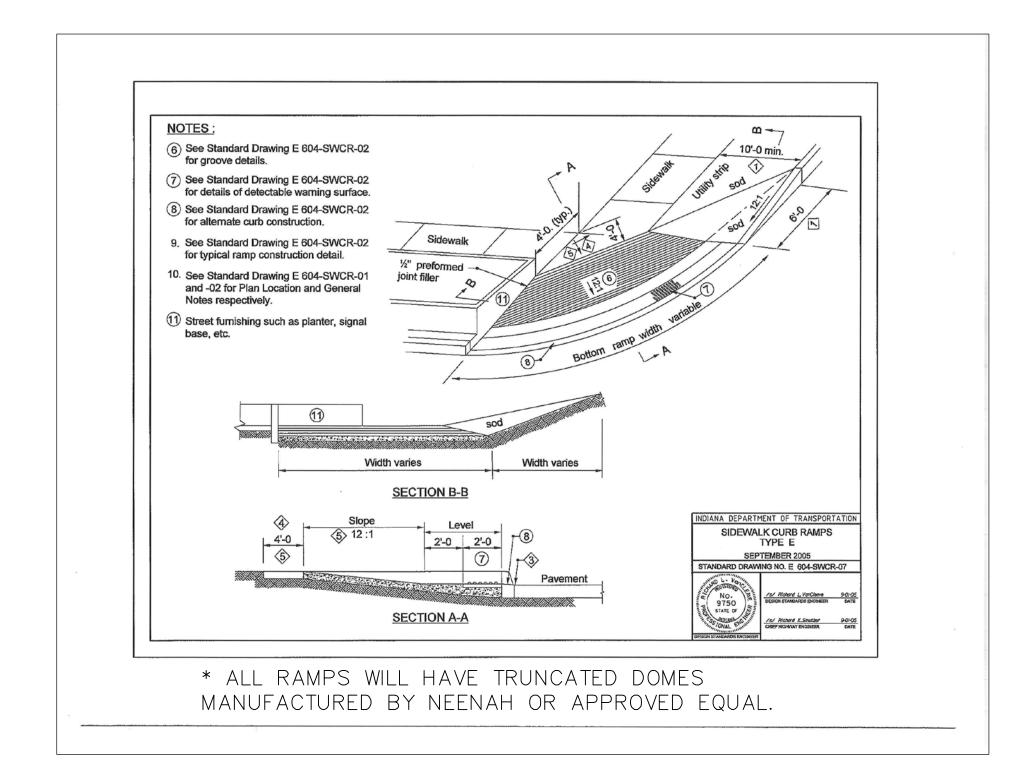




DUNELAND GROUP ENGINEERING & SURVEYING 1498 POPE COURT CHESTERTON, INDIANA 46304 Ph: 219-926-1007 E-MAIL dgi@dunelandgroup.com

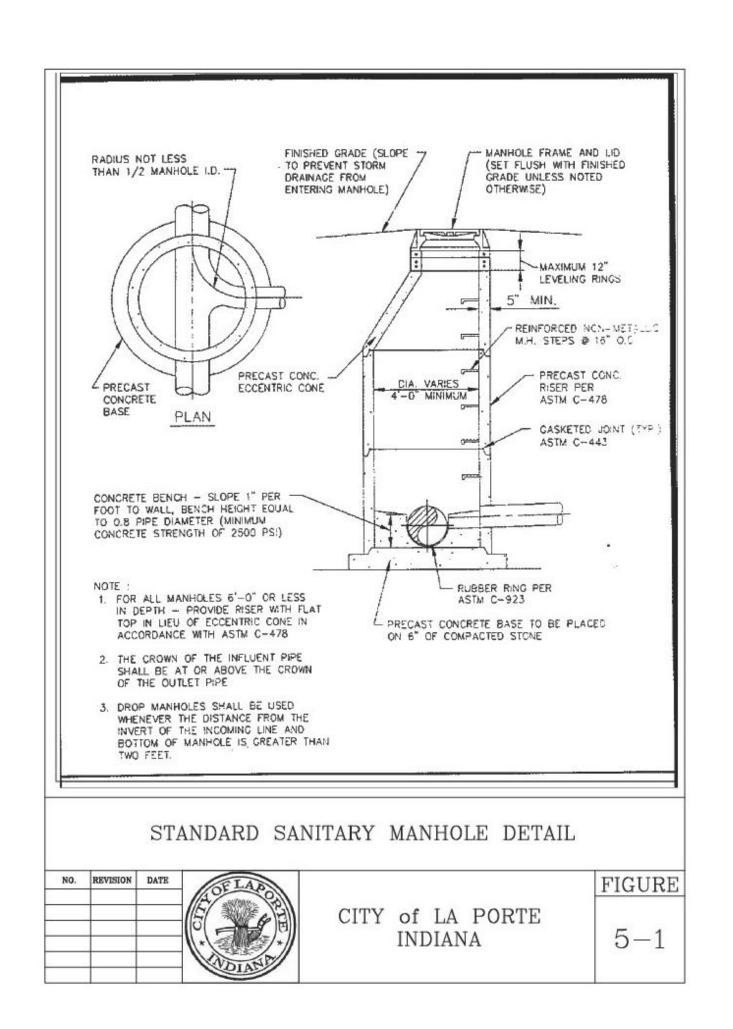


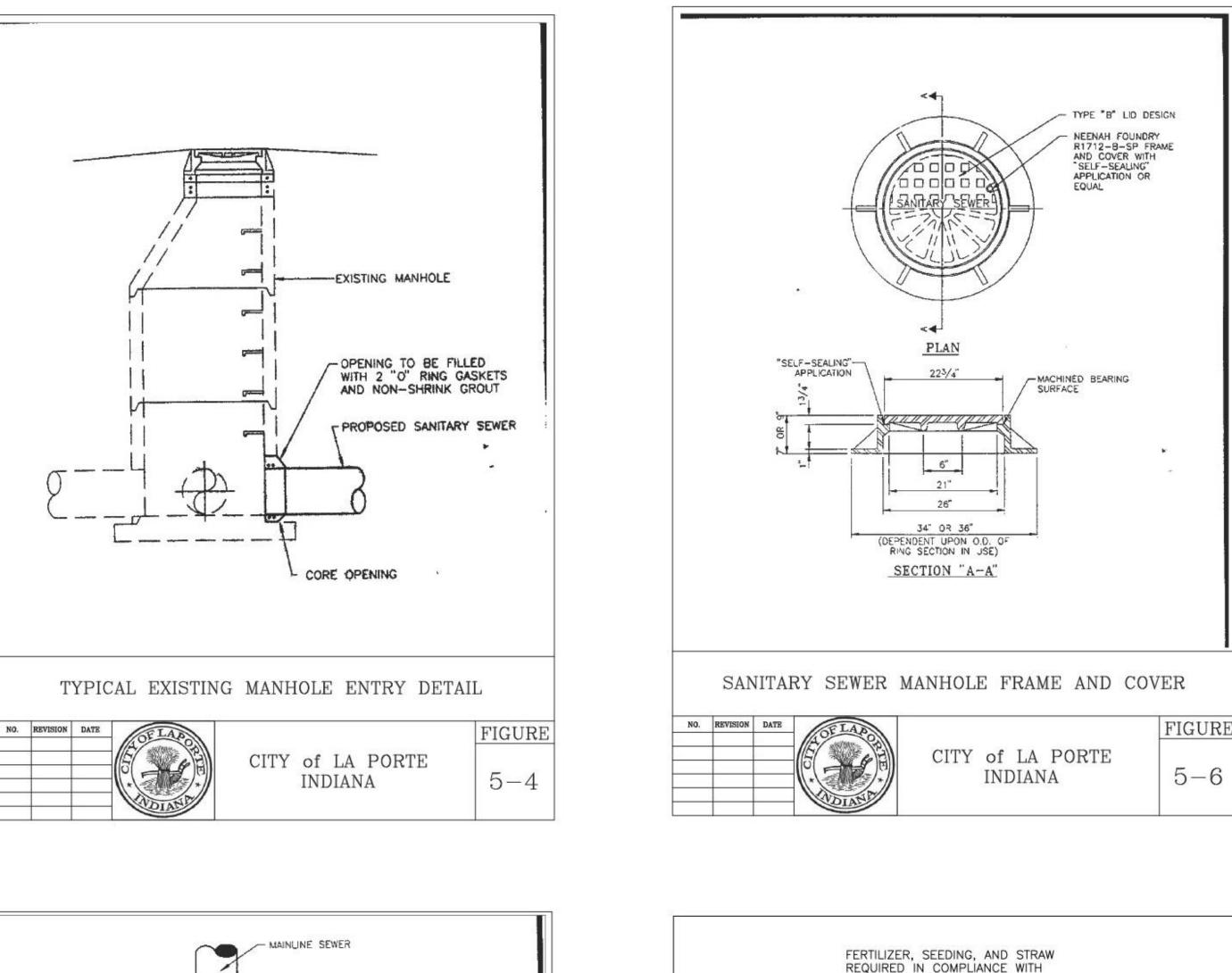
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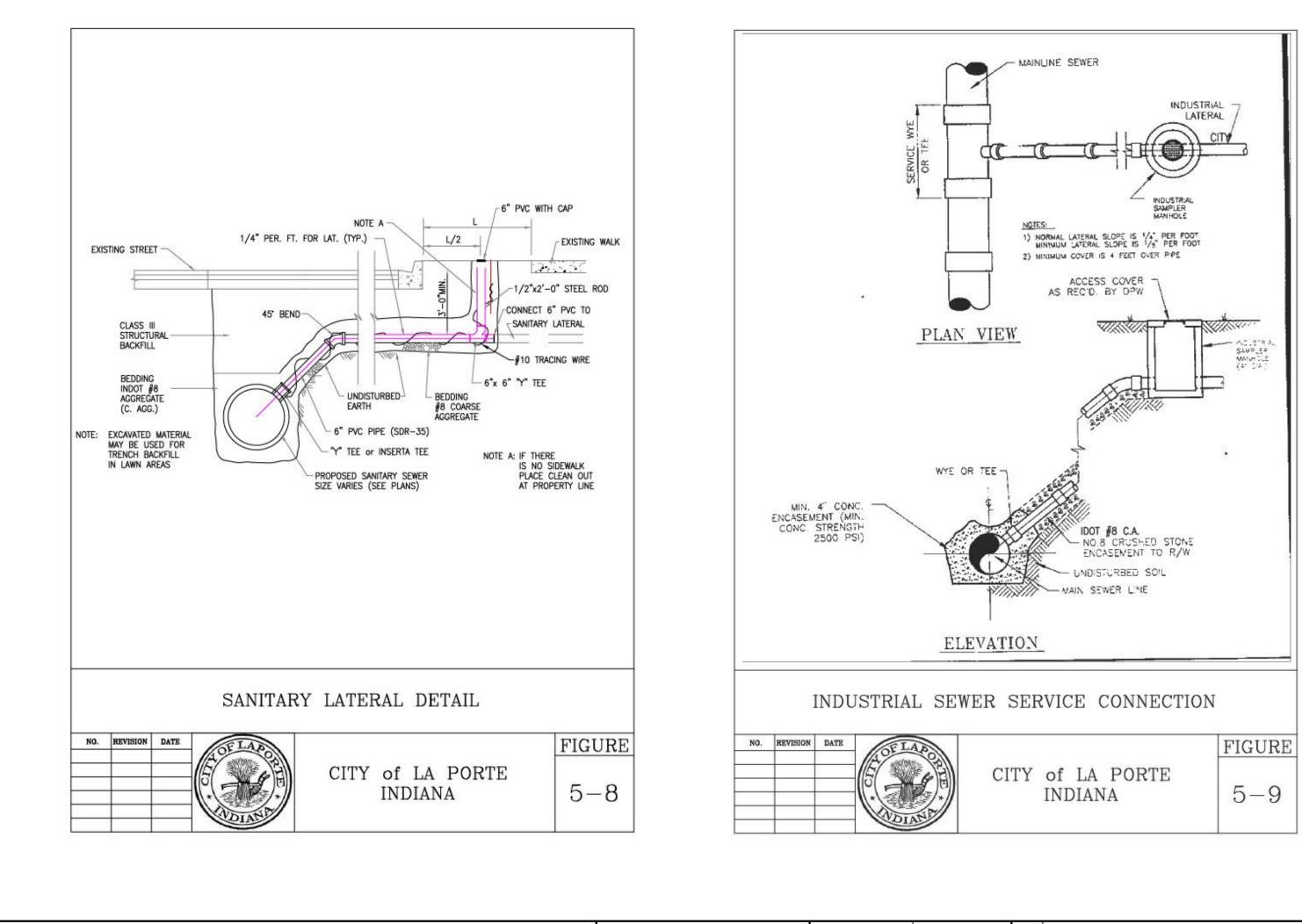


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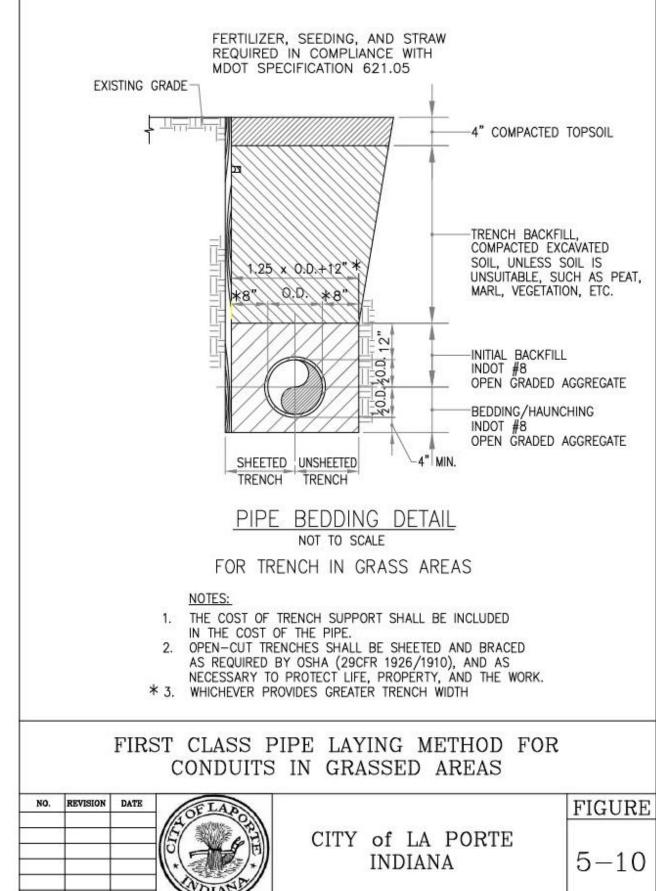
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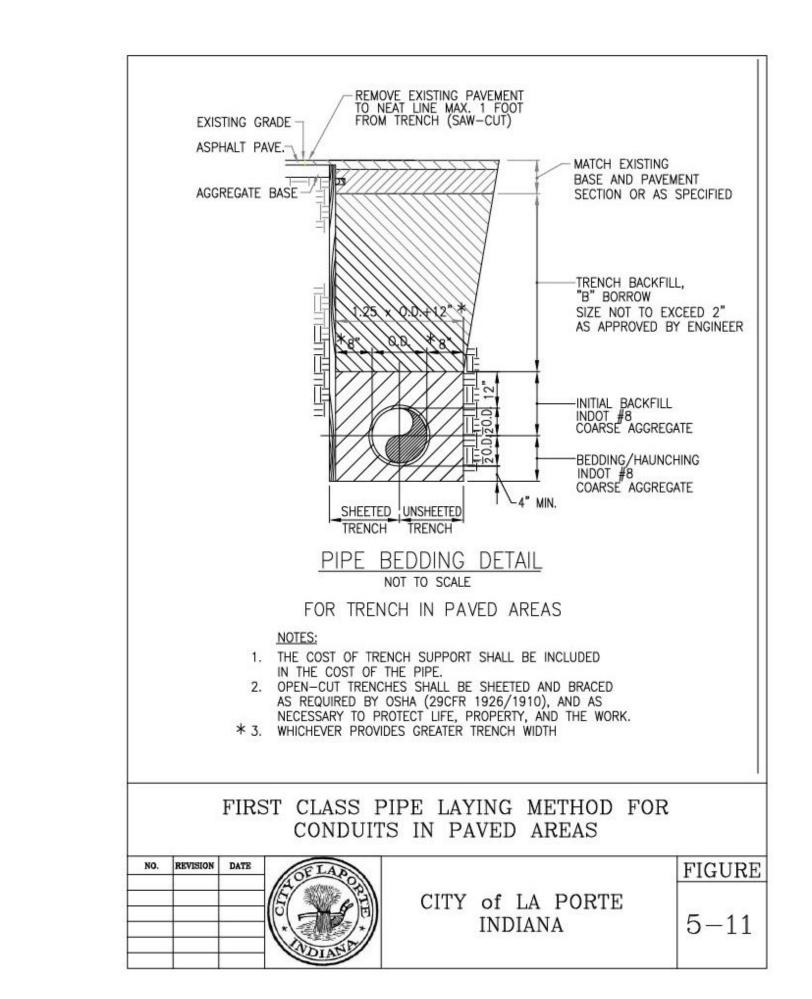


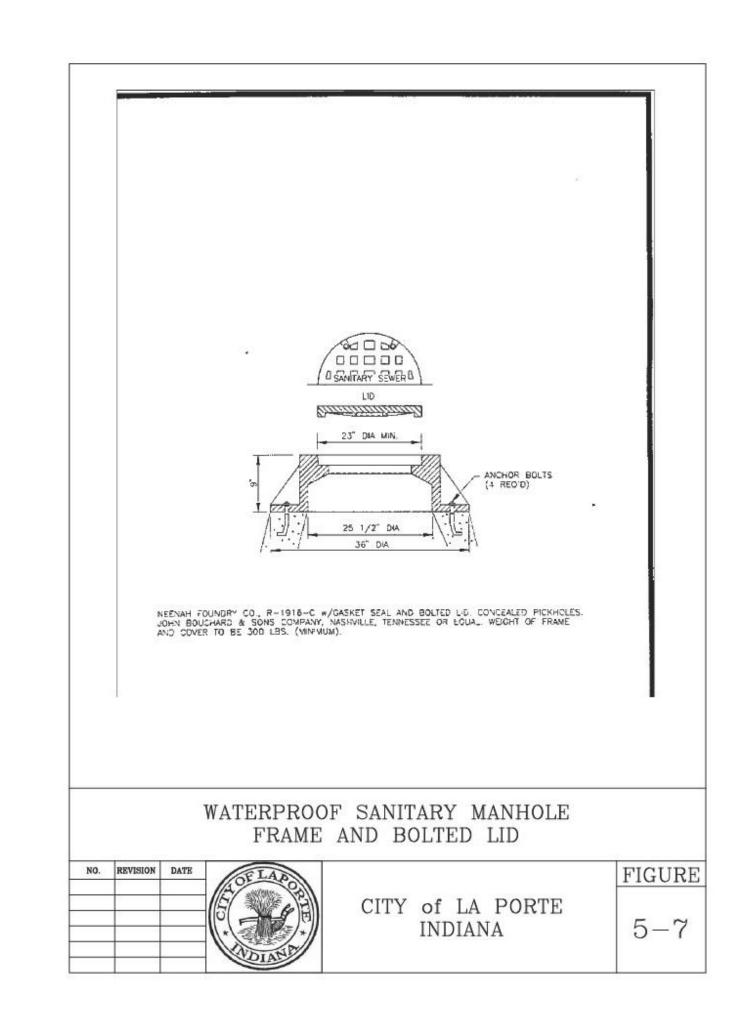


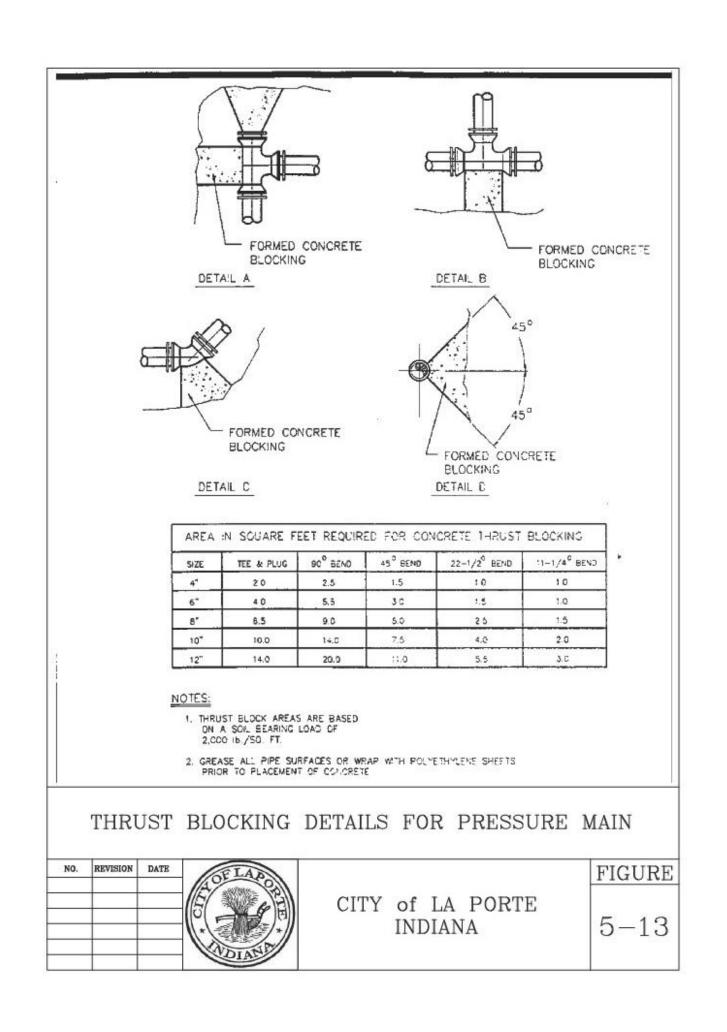


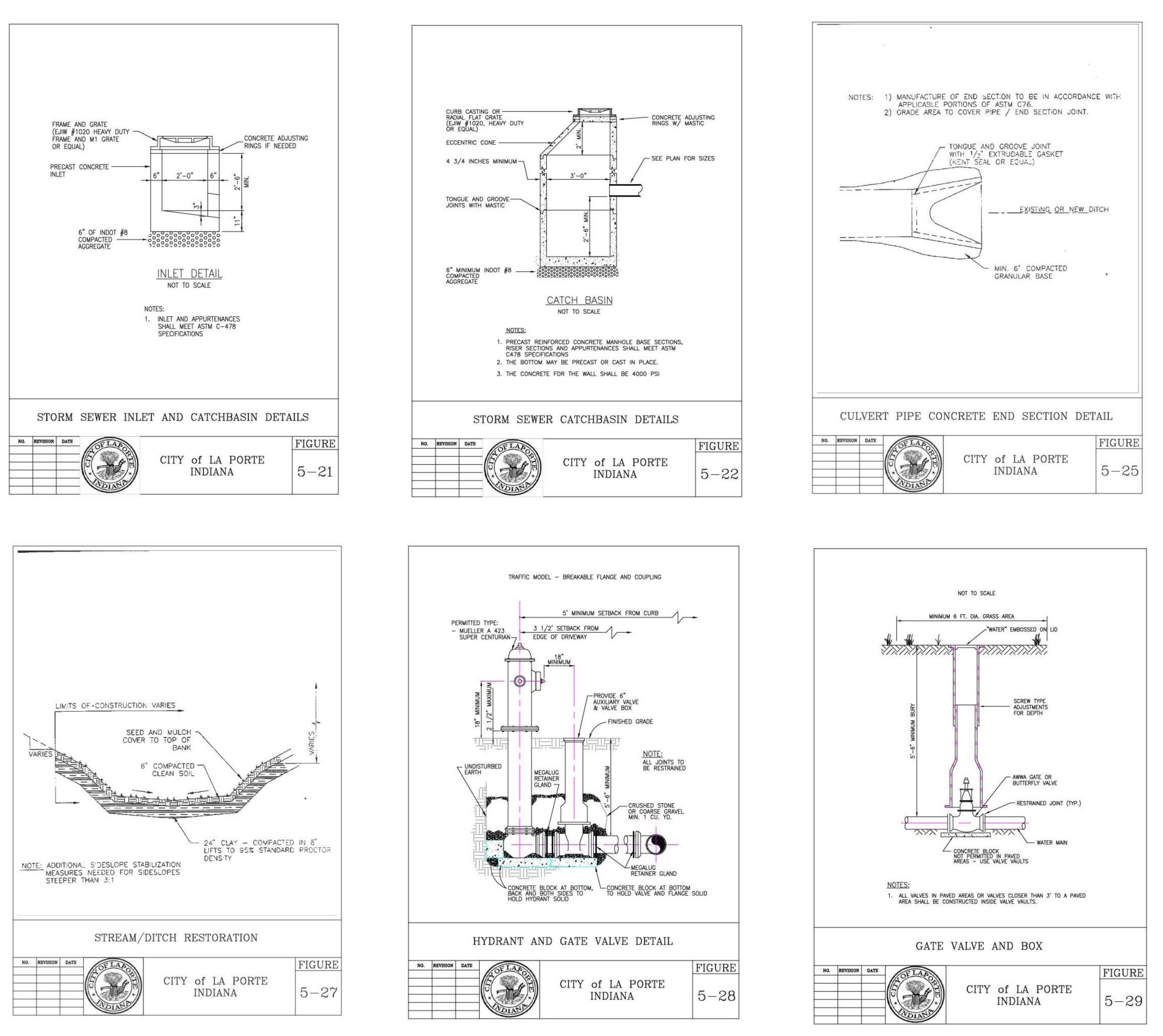
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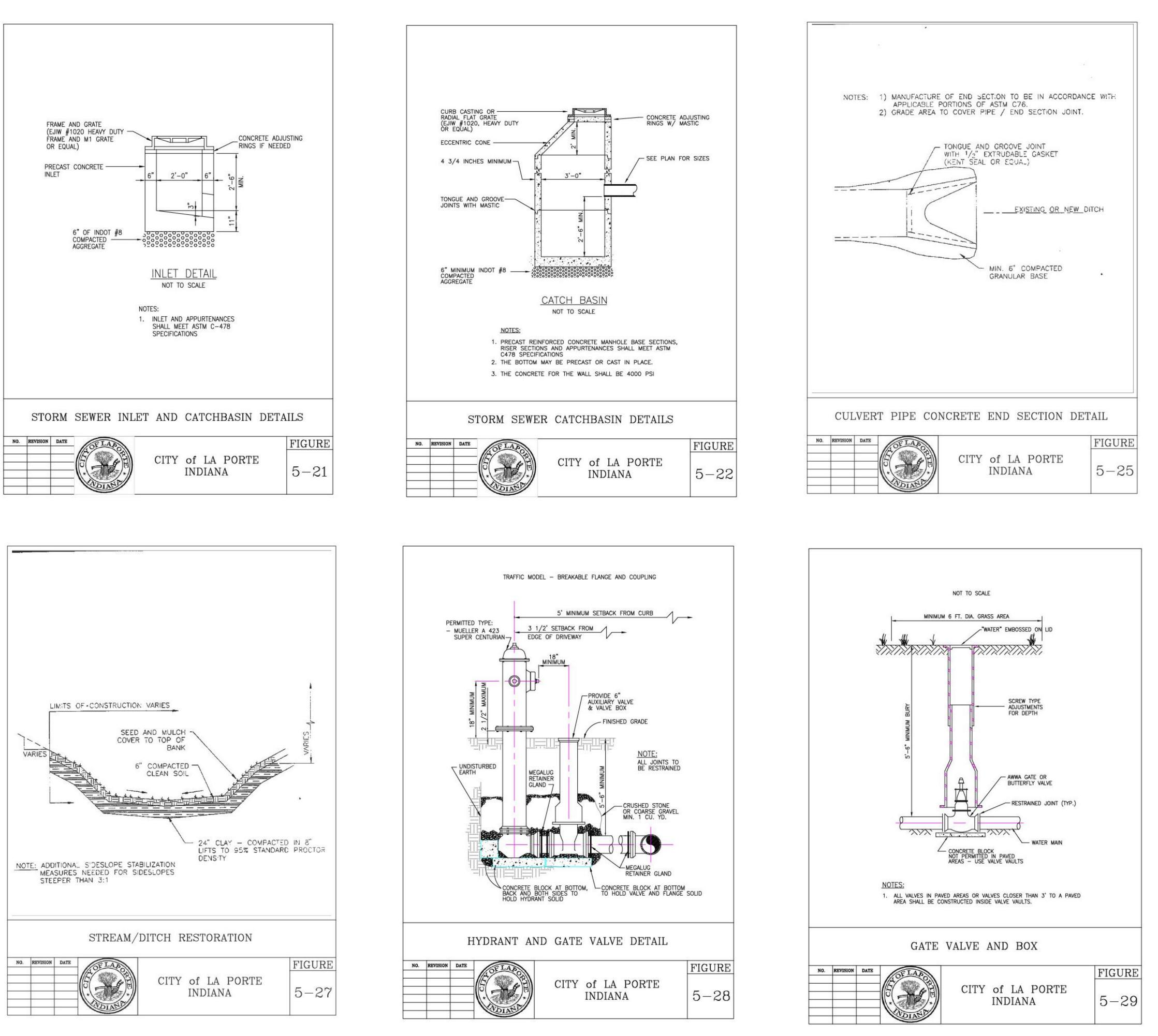


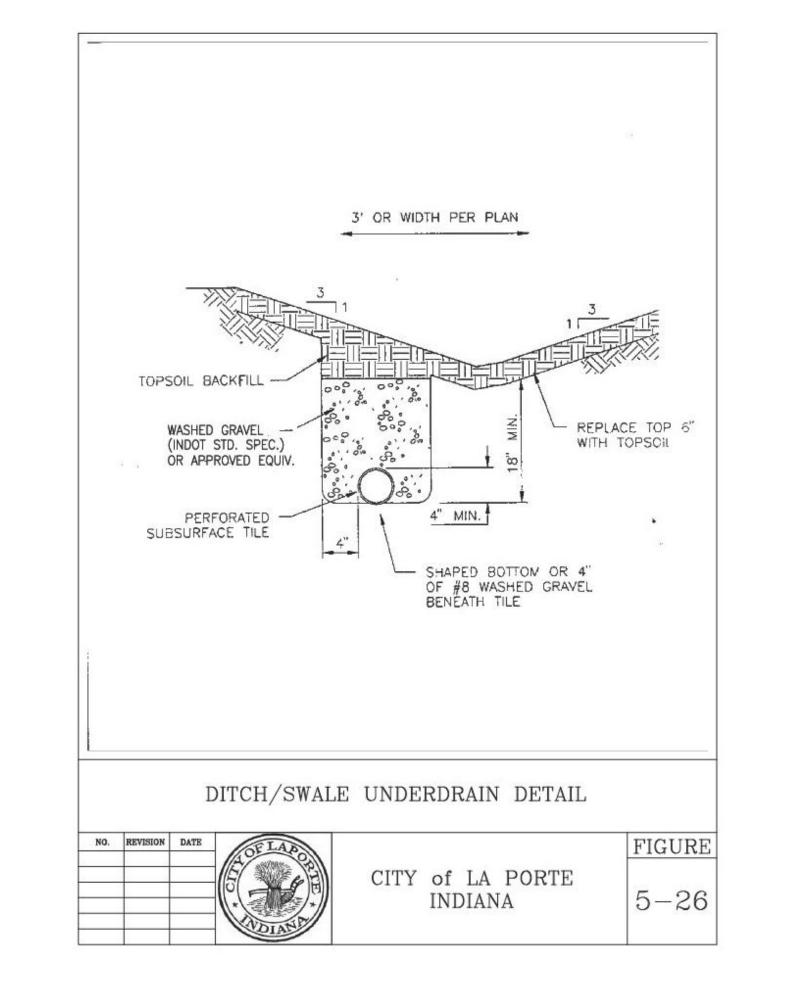


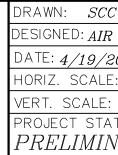


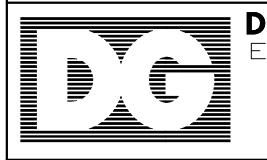










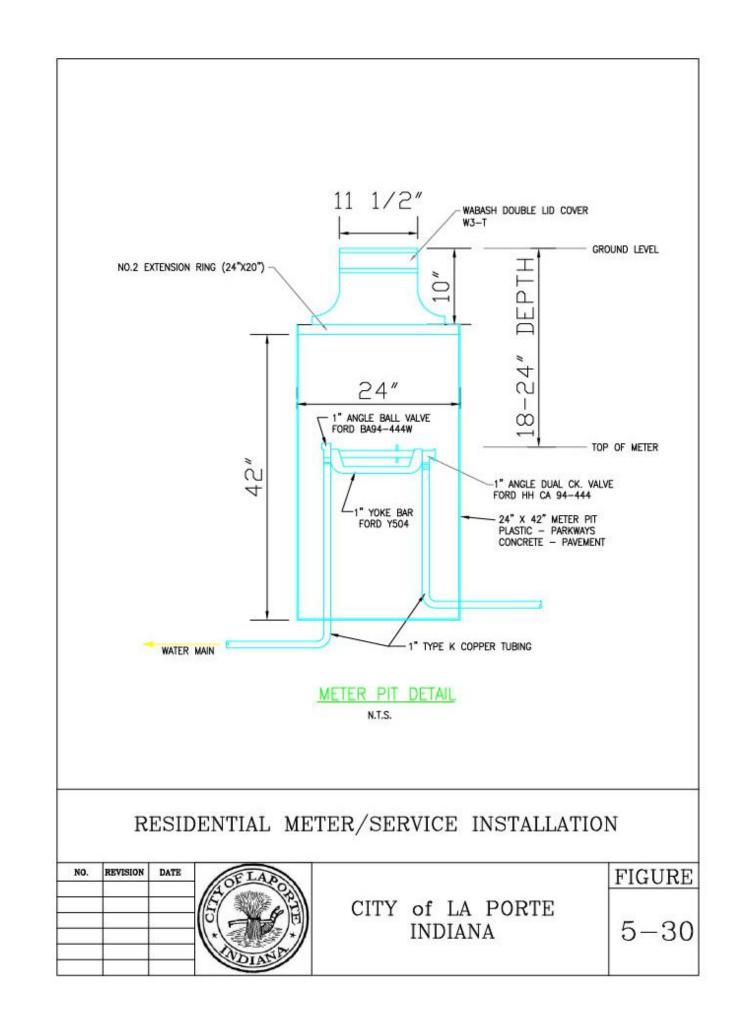


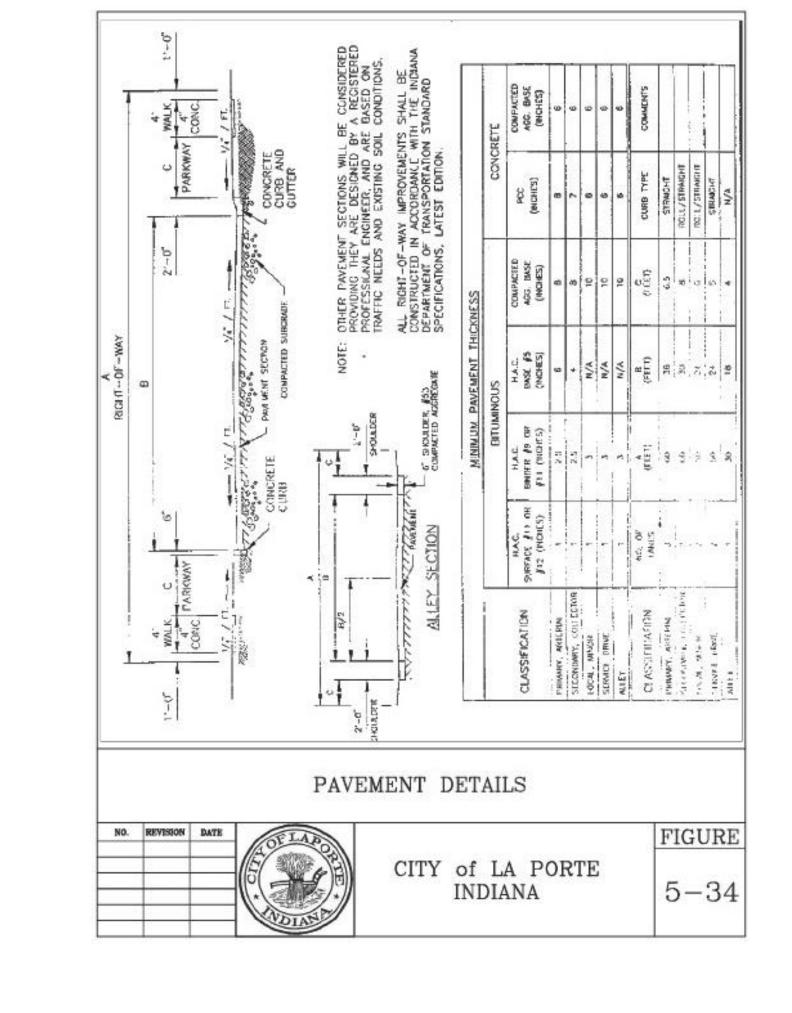
DUNELAND GROUP & SURVEYING ENGINEERING 1498 POPE COURT CHESTERTON, INDIANA 46304 Ph: 219-926-1007 E-MAIL dgi@dunelandgroup.com

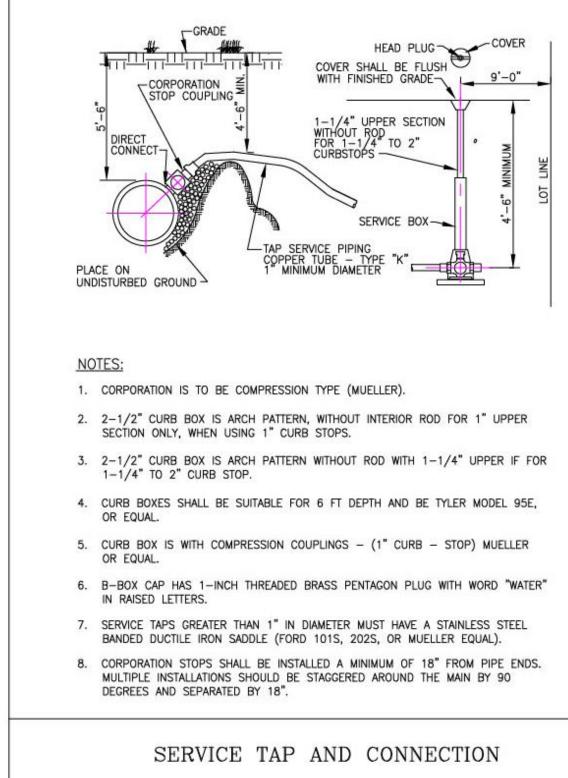
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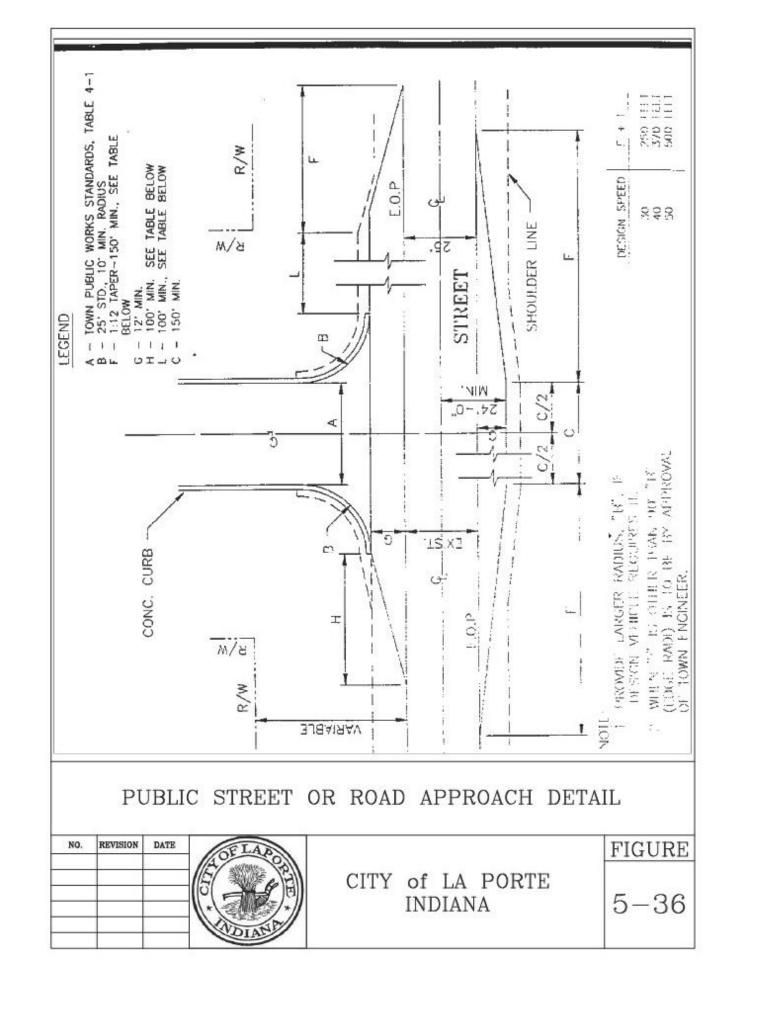








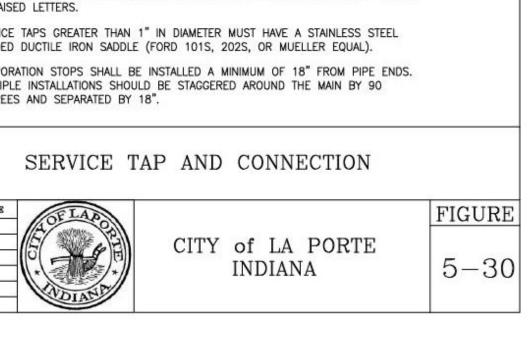
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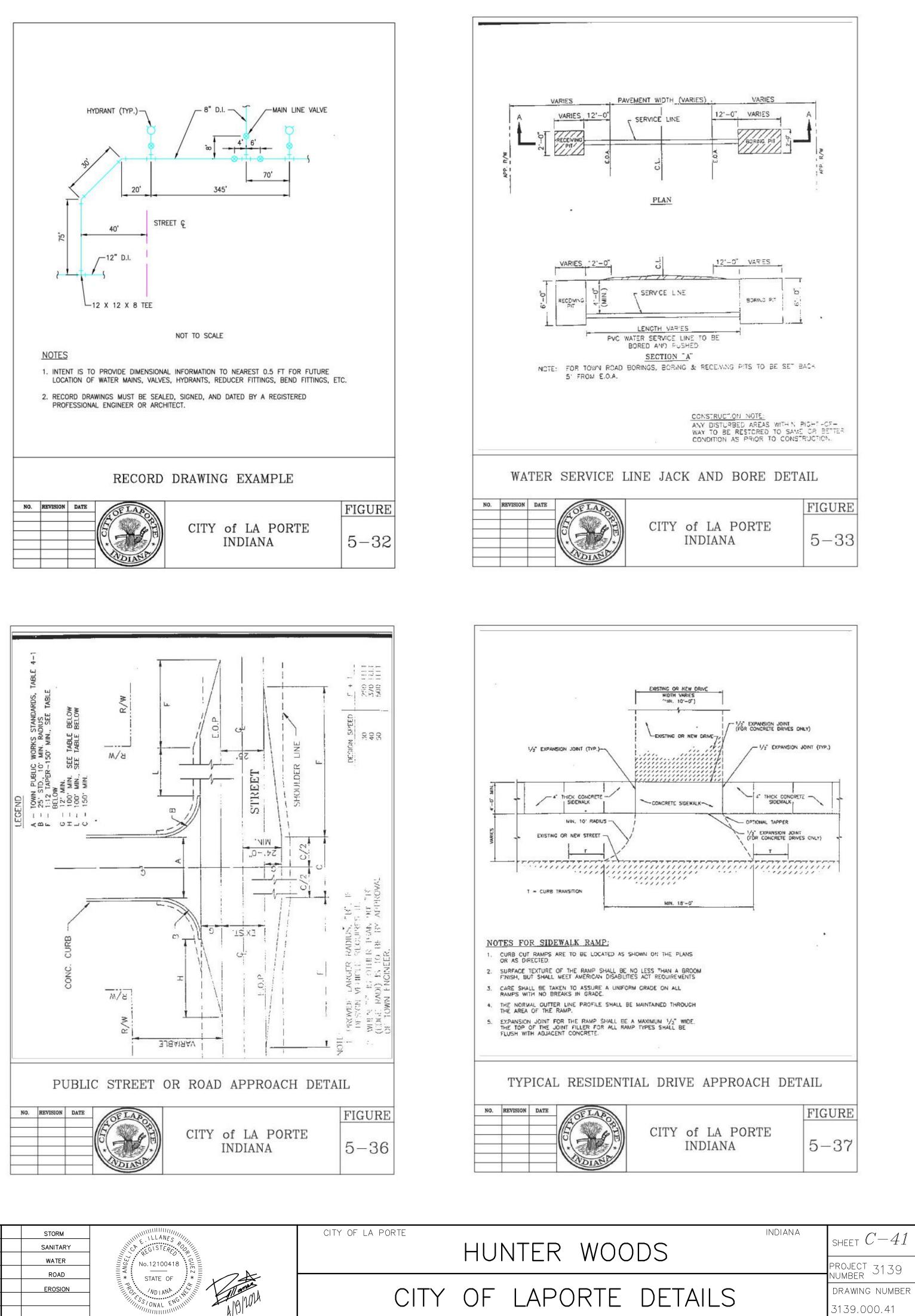


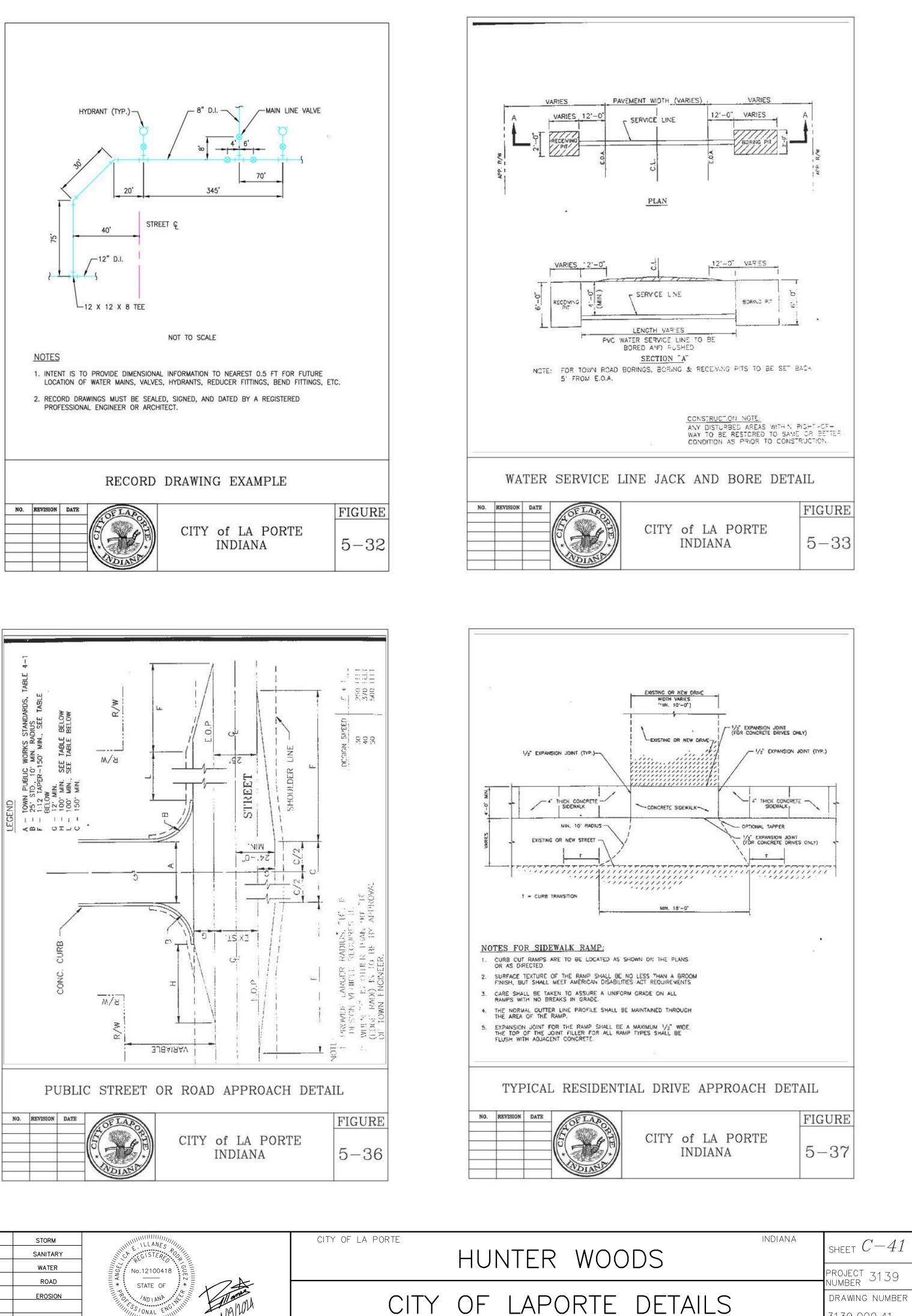
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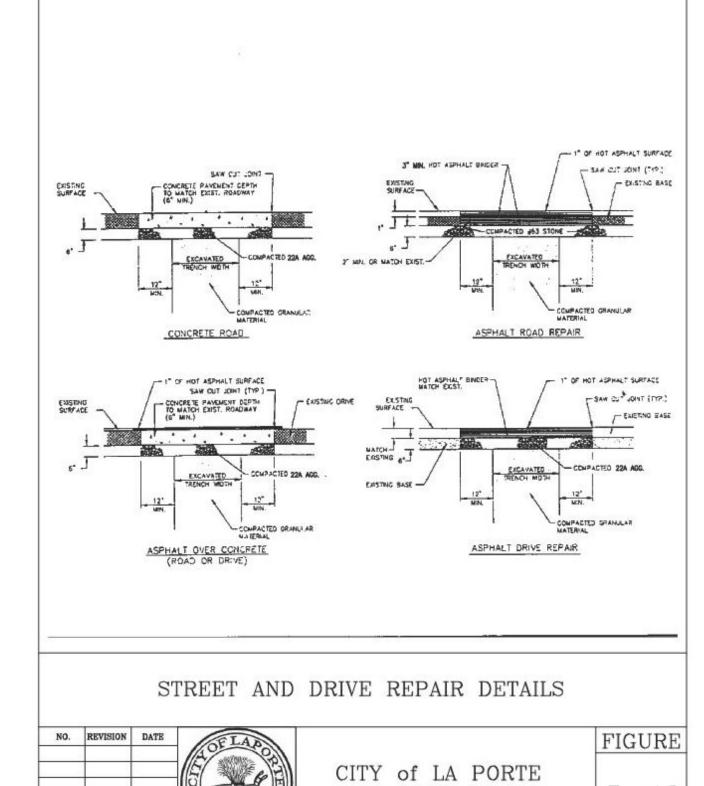


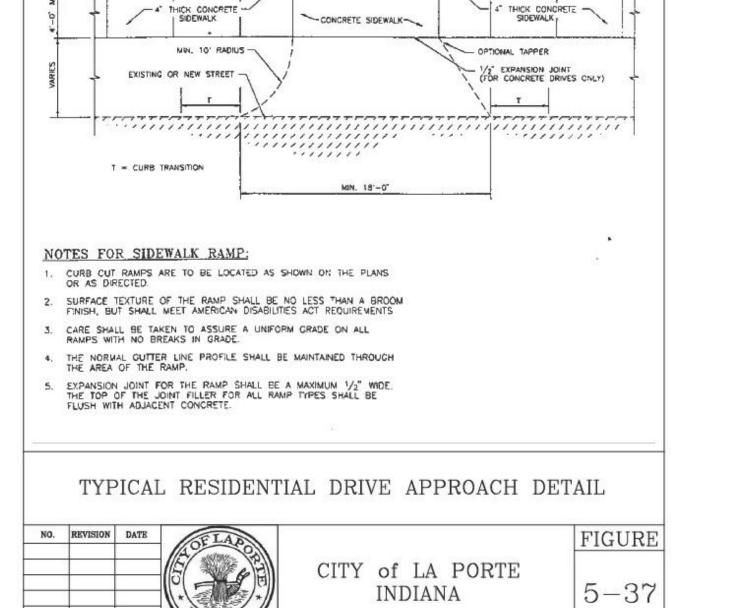












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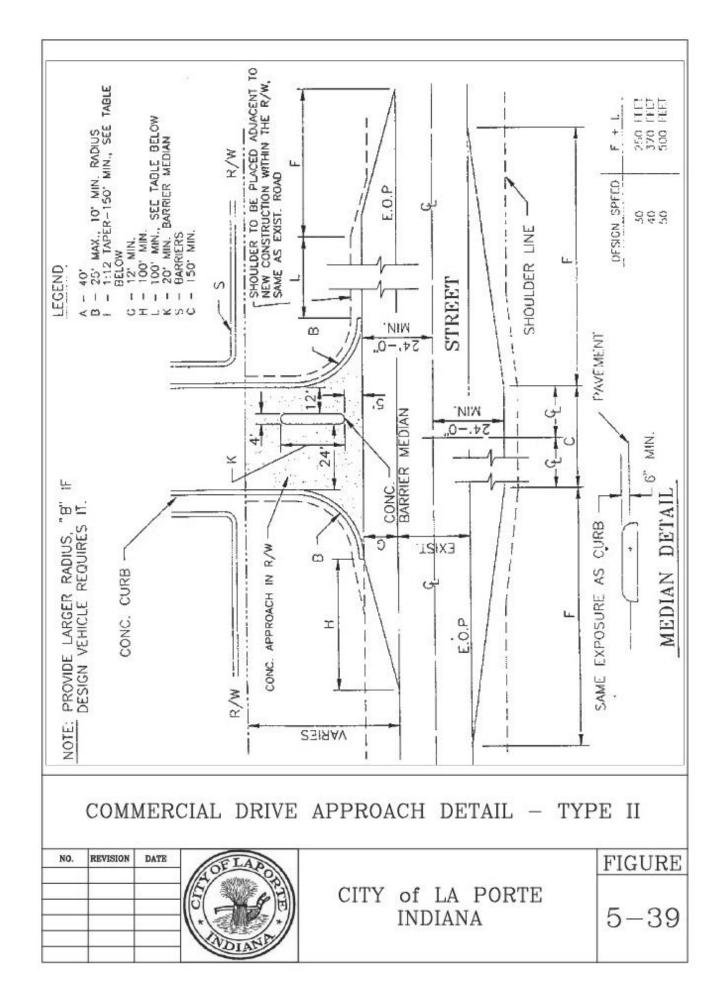
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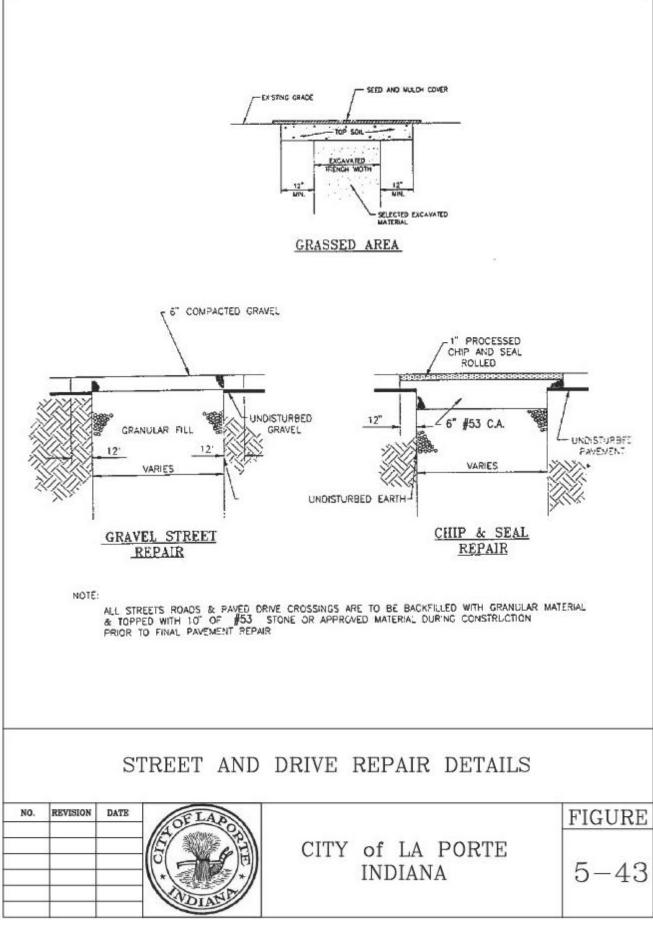
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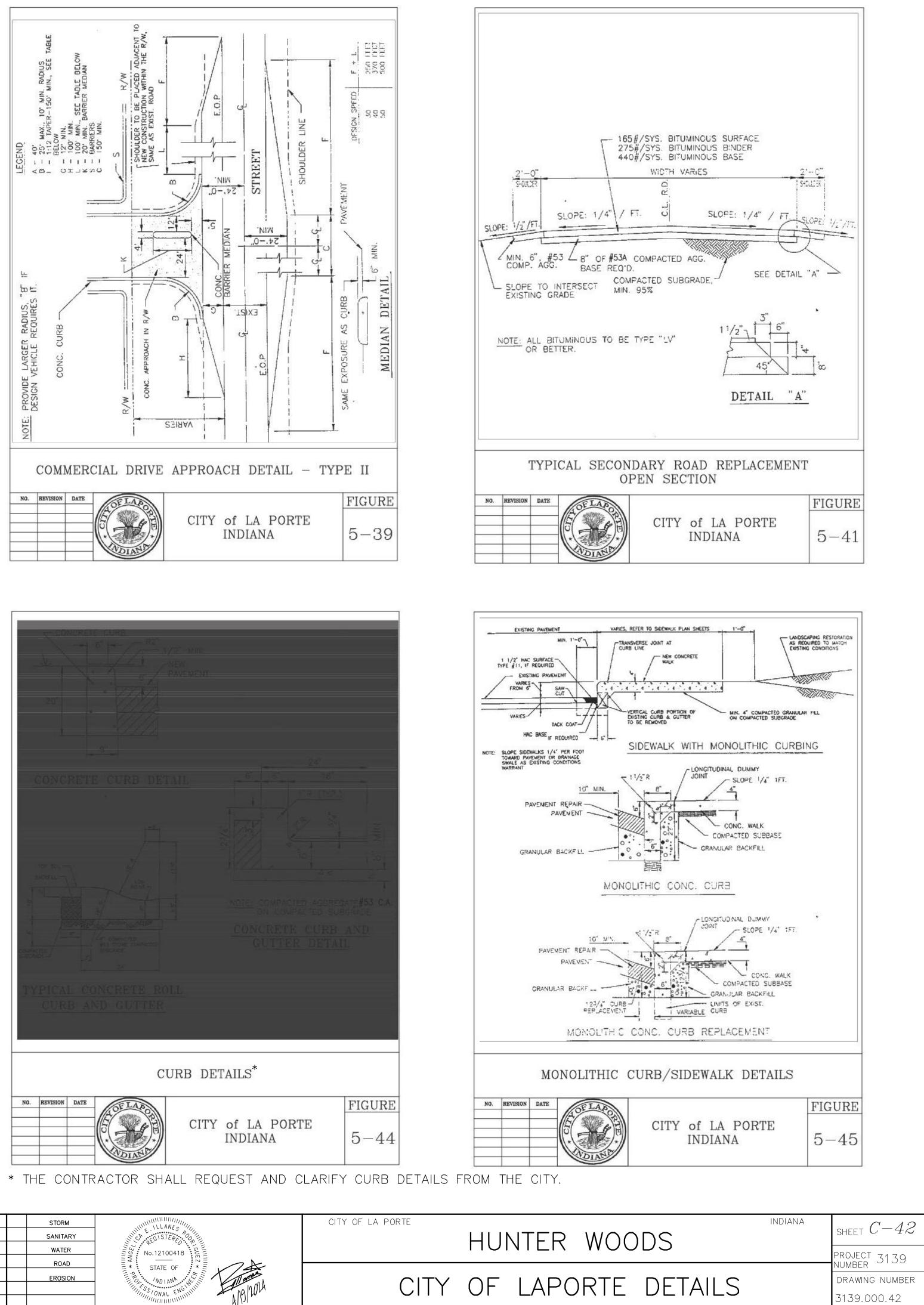
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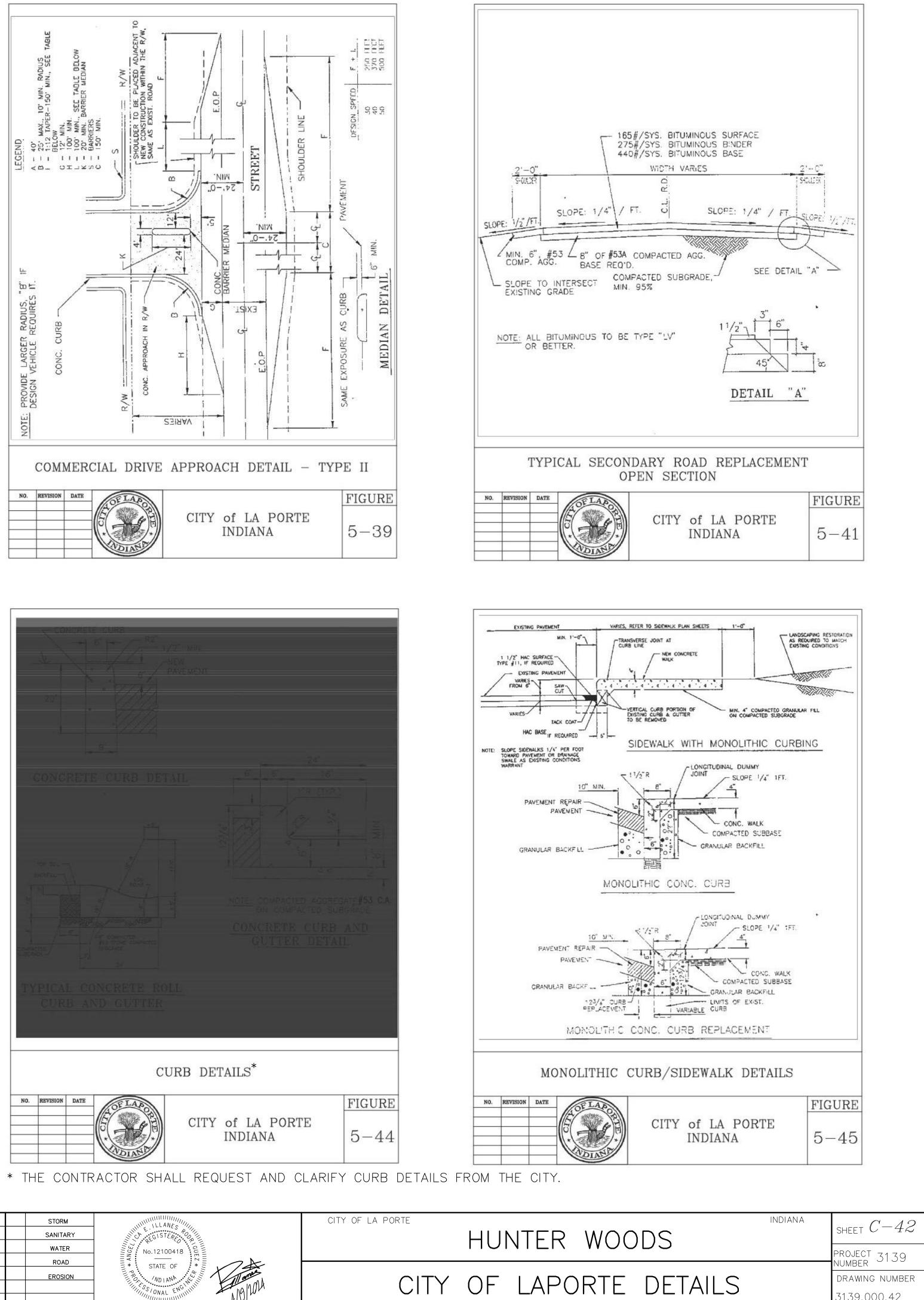
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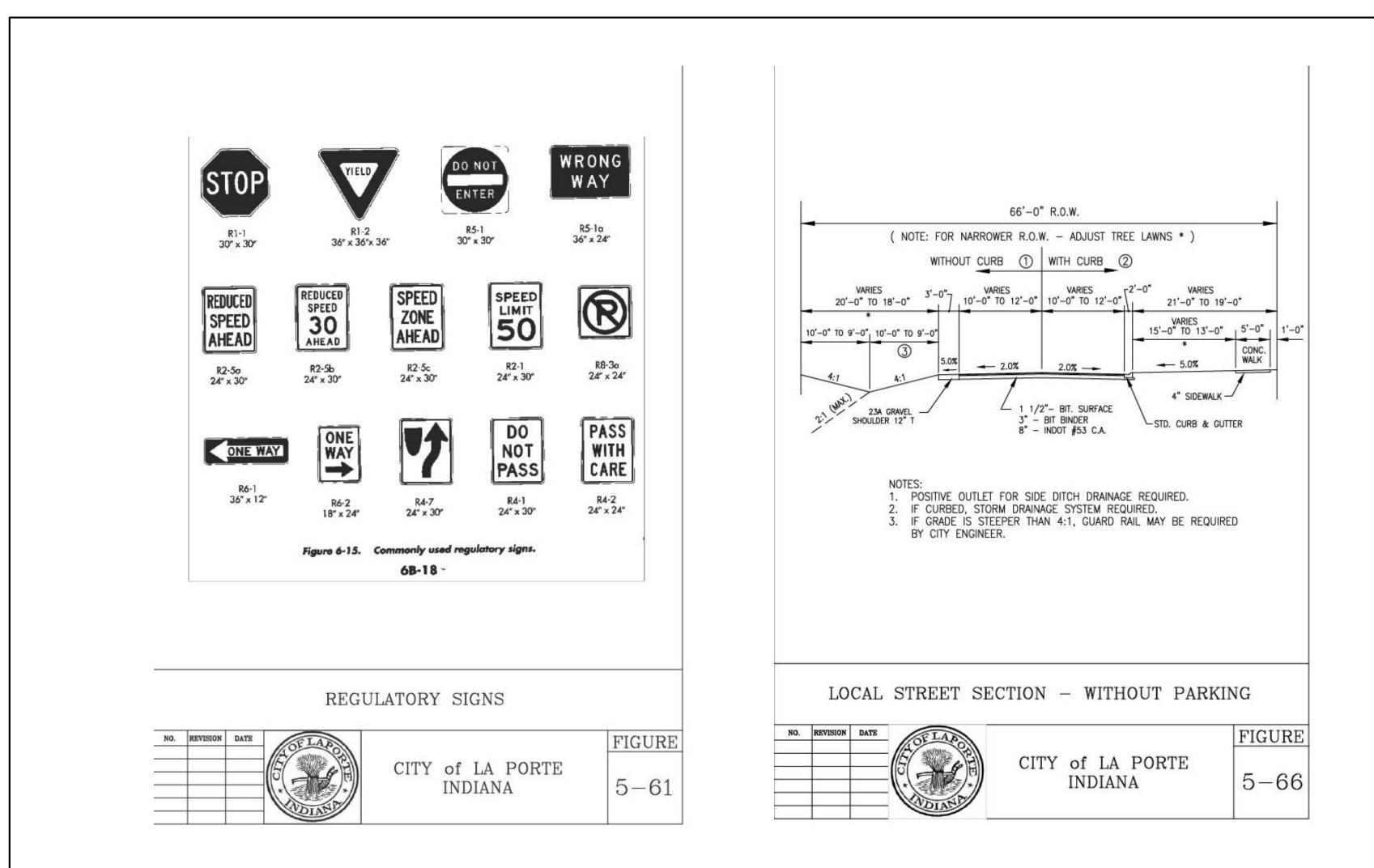


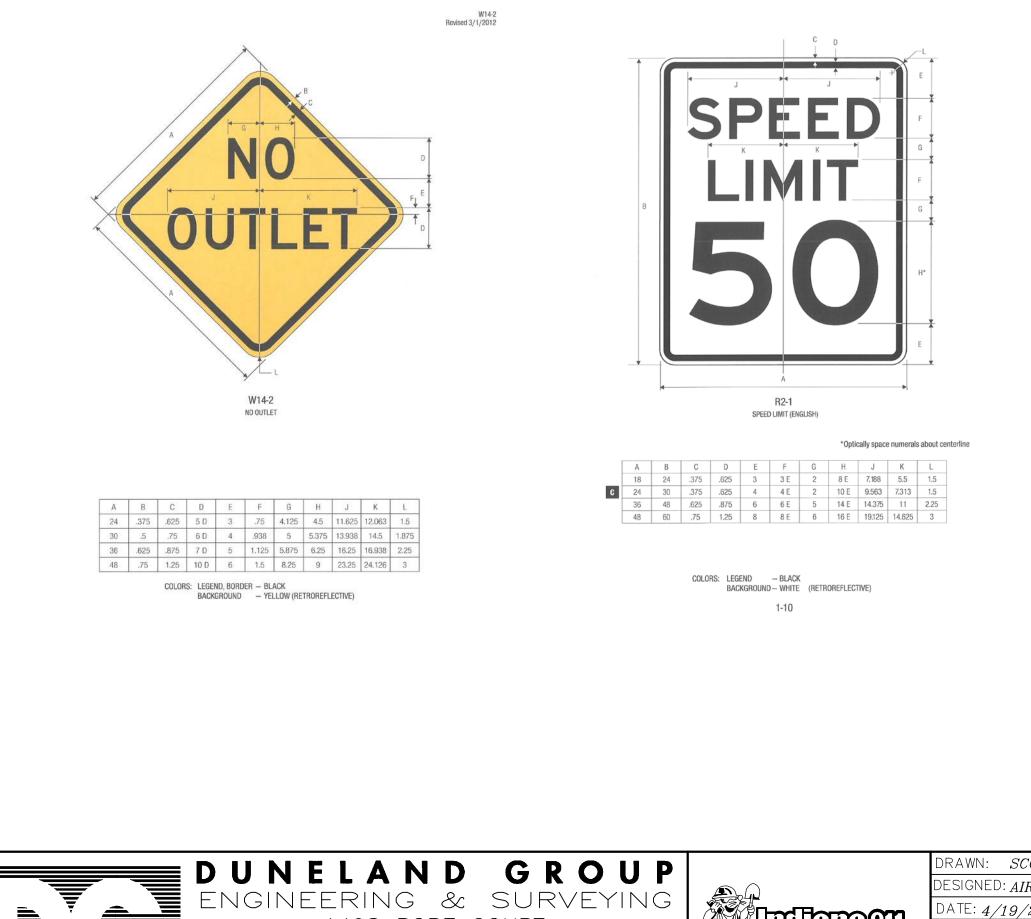






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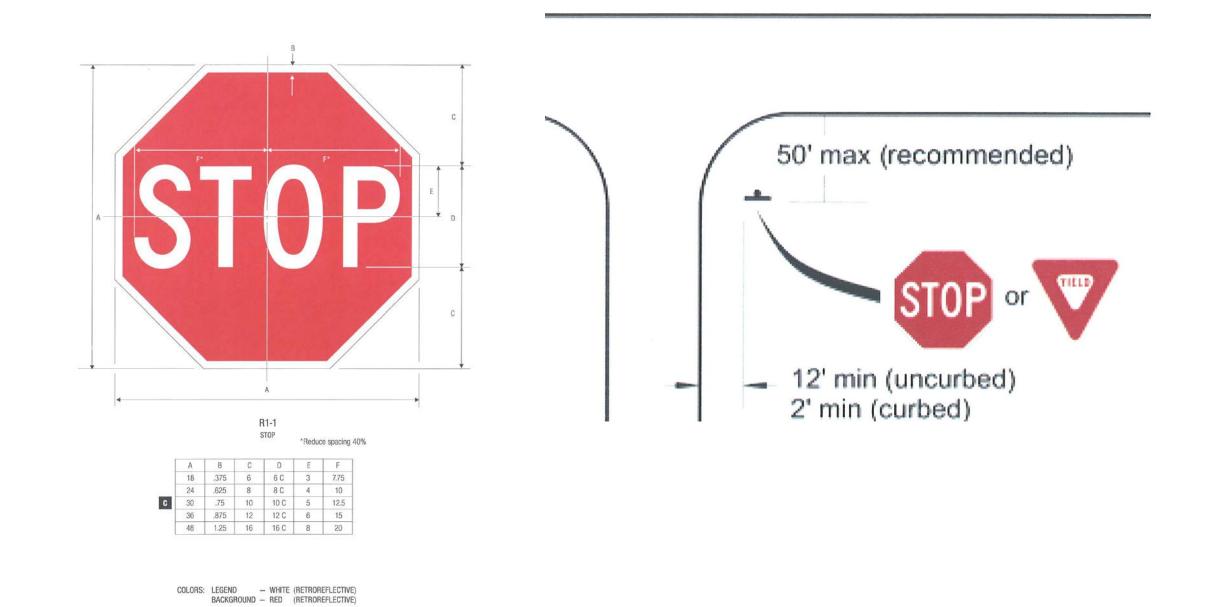


1498 POPE COURT

CHESTERTON, INDIANA 46304

Ph: 219-926-1007 E-MAIL dgi@dunelandgroup.com

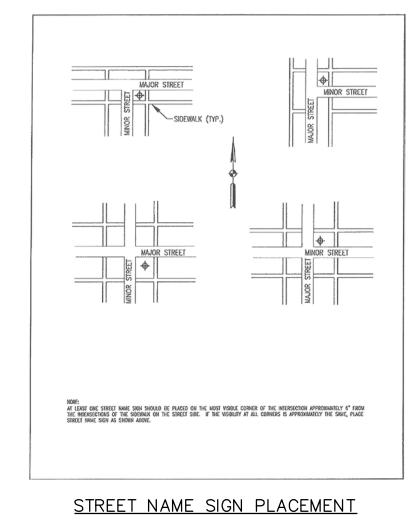




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# CITY OF LA PORTE INDIANA SHEET C-43 HUNTER WOODS PROJECT 3139 NUMBER 3139 DRAWING NUMBER 3139.000.43



			WATER QUALITY M	ANUAL.	TORM TO RULE 5 REGULATIONS A	
	NOR TH 0 60 120		USED TO OBTAIN SHALL BE RESPON	OR DISPOSE OF FILL MATERIA ISIBLE FOR OBTAINING THE AI	MPLEMENTING EROSION CONTROL L. IN THE EVENT THAT FILL FROI PPROPRIATE NPDES PERMITS FOR HALL COMPLY WITH ITS REQUIREN	M OUTSIDE R THE OFFSI
			PERIMETER OF ALL	STOCKPILES. NO STOCKPILE	S AS SHOWN ON THE PLAN. SIL S WILL BE ALLOWED NEAR STORM	M STRUCTUR
	BOUNDARY OF PROPOSED CONSTRUCTION. AREA OUTSIDE THIS BOUNDARY TO REMAIN DURING CONSTRUCTION OF IMPROVEMENTS AND BUILDING. - SILT FENCE – INSTALL ALONG SWALES OR DITCHES, IF REQUIRED. INSTALL ALONG FILL	_ MATERIAL	EROSION AND PRE	VENT SEDIMENT FROM LEAVIN SARY BY REGULARLY SCHEDU		ON AND SEI
	SLOPE/EMBANKMENT PRIOR TO CONSTRUCTION. MAINTAIN UNTIL A THICK GRASS GROW ON EXPOSED AREAS ADJACENT AND SLOPING TOWARD THE PAVEMENT / ROADS / DITC SILT FENCE CONSTRUCTION 1.) ALONG THE ENTIRE INTENDED FENCE LINE, DIG AN 8-IN. DEEP FLAT-BOTTOMED	CHES.	MS-4 OPERATOR,	1490 BROADWAY, STE 3, CHI HER SECTION, P.O. BOX 6015	E OWNER MUST NOTIFY THE APP ESTERTON, IN, 46304, PHONE: 2 INDIANAPOLIS, INDIANA, 46206-	19-728-13
	<ul> <li>2.)ON THE DOWNSLOPE SIDE OF THE TRENCH, DRIVE THE WOOD OR STEEL SUPPORT</li> <li>FT. INTO THE GROUND SPACING THEM NO MORE THAN 8 FT. APART IF THE FENC</li> <li>WIRE OR 6FT. IF EXTRA-STRENGTH FABRIC IS USED WITHOUT SUPPORT WIRE. AE</li> <li>NECESSARY, TO ENSURE THAT POSTS ARE SET AT THE LOW POINTS ALONG THE</li> </ul>	POSTS AT LEAST 1 6. E IS SUPPORTED BY 5. DJUST SPACING, IF	-EMERGENCY 9 -MINOR SPILLS	OR TO REPORT A CONCERN	PORTER COUNTY HAZMAT 219-4	65-3593
	<ul> <li>3.)FASTEN SUPPORT WIRE FENCE, IF THE MANUFACTURER RECOMMENDS ITS USE TO OF THE POSTS, EXTENDING IT 8 IN. INTO THE TRENCH.</li> <li>4.)RUN A CONTINUOUS LENGTH OF GEOTEXTILE FABRIC UPSLOPE OF THE SUPPORT V AVOIDING JOINTS, PARTICULARLY AT LOW POINTS IN THE FENCE LINE.</li> </ul>	THE UPSLOPE SIDE WIRE AND POSTS, 7.	-IDEM'S 24-HO		3-7745 SENTATIVE CONTACT INFORMATIC	
	<ul> <li>5.)IF A JOINT IS NECESSARY, NAIL THE OVERLAP TO THE NEAREST POST WITH LATH</li> <li>6.)PLACE THE BOTTOM 1 FT. OF FABRIC IN THE 8-IN. DEEP TRENCH, EXTENDING THE TOWARD THE UPSLOPE SIDE.</li> <li>7.)BACKFILL THE TRENCH WITH COMPACTED EARTH OR GRAVEL.</li> </ul>	E REMAINING 4 IN. 8.	WHEN POSSIBLE N		STED AT THE ENTRANCE TO THE	
	NOTE: IF USING A PRE-PACKED COMMERCIAL SILT FENCE RATHER THAN CONSTRUCTIN MANUFACTURER'S INSTALLATION INSTRUCTIONS. SILT FENCE OUTLET CONSTRUCTION (OPTIONAL)	IG ONE, FOLLOW 9.			A SEDIMENT BAG AND AWAY FRO	M AND NOT
	<ul> <li>SILT FENCE OUTLET CONSTRUCTION (OPTIONAL)</li> <li>1.) PLAN FOR THE FENCE TO BE AT LEAST 10' FROM THE TOE OF THE SLOPE TO PF STORAGE AREA.</li> <li>2.) PROVIDE ACCESS TO THE AREA IF SEDIMENT CLEANOUT WILL BE NEEDED.</li> <li>3.) DETERMINE THE APPROPRIATE LOCATION FOR A REINFORCED, STABILIZED BYPASS</li> </ul>		La Porte County Map Unit Symbol	y, Indiana (IN091) Map Ui	nr Name	Iydrologic Soil Group
	<ul> <li>4.)SET THE OUTLET ELEVATION SO THAT WATER DEPTH CANNOT EXCEED 1 ½ FEET / POINT ALONG THE FENCE LINE.</li> </ul>	24-HOUR DURATION	ChB EsB Hk	Chelsea fine sand, 2 to 6 percent Elston loam, 2 to 6 percent slo Homer loam	-	A A B
	<ul> <li>5.)LOCATE THE OUTLET WEIR SUPPORT POSTS NO MORE THAN 4 FT. APART, AND IN HORIZONTAL BRACE BETWEEN THEM. (WEIR HEIGHT SHOULD BE NO MORE THAN DEPTH NO MORE THAN 1 ½ FT. ANYWHERE ELSE ALONG THE FENCE.)</li> <li>6.)EXCAVATE THE FOUNDATION FOR THE OUTLET SPLASH PAD TO MINIMUMS OF 1 FT</li> </ul>	1 FT. AND WATER	TcA TcB TcC2	Tracy sandy loam, 0 to 2 perc Tracy sandy loam, 2 to 6 perc Tracy sandy loam, 6 to 12 perc	ent slopes	B B B
	<ul> <li>AND 5 FT. LONG ON LEVEL GRADE.</li> <li>7.)FILL THE EXCAVATED FOUNDATION WITH INDOT CA NO. 1 STONE, BEING CAREFUL SURFACE BLENDS WITH THE SURROUNDING AREA, ALLOWING NO OVERFALL.</li> <li>8.)STABILIZE THE AREA AROUND THE PAD.</li> </ul>		TcD2 Wh	Tracy sandy loam, 0 to 12 per Tracy sandy loam, 12 to 18 per Washtenaw silt loam	cent slopes, moderately eroded ercent slopes	B B/D
	SOIL TYPE BOUNDARY					
	INLET PROTECTION – INSTALL AROUND ALL INLETS AND CATCH BASINS IMMEDIA THEIR CONSTRUCTION AND MAINTAIN UNTIL PAVEMENT BASE MATERIAL IS PLACE EXISTING INLETS PRIOR TO THE START OF CONSTRUCTION. AS AN ALTERNATE A MANUFACTURED INLET DEVICE CAN BE UTILIZED PER MANUFACTURES RECOMMENI	D. INSTALL AT PRE				
	INLET PROTECTION AROUND YARD INLET 3 SHALL HAVE AN ADDITIONAL ROW OF AND/ OR MULCH FILTER SOCK UNTIL VEGETATION IS AT LEAST 70% ESTABLISHEI LOTS.	SILT FENCE	30" CMF	w.		+00
	STONE ENTRANCE PAD		CONC. HEAD INV.=79 (CLOGGED W/ N	8.9± \\	10+00 10+00	508 - 608 (08 - 508 (08 - 508 (08 - 508 (08 - 508) (08
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	EROSION CONTROL BLANKET TMAX OR APPROVED EQUAL; SEEDED. PERMANENT SEEDING – SEE EROSION CONTROL DETAIL SHEET FOR SCHEDULE OF	PERMANENT SEEDING	8±00	UNTY ROAD 10° (N) UNTY BHALF R/N) 35 HALF R/N)		
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	<b>DUNELAND GROUP</b> Engineering & Surveying			N: <i>TWE</i> CHK'D: <i>SCC</i> NED: <i>TWE</i> APPRV'D: <i>CLR</i> : <i>4/19/2024</i>	•	ISION
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	Ph: 219-926-1007 E-MAIL dgi@dunelandgroup.com		° PROJ	ect status E <i>LIMINARY</i>		

ES OUTLINED IN THESE PLANS AT ANY LOCATION IDE OF THE SITE IS REQUIRED, THE CONTRACTOR FFSITE LOCATION. IF A NPDES PERMIT FOR THE

URES.

SEDIMENT CONTROL MEASURES WILL BE INSTALLED

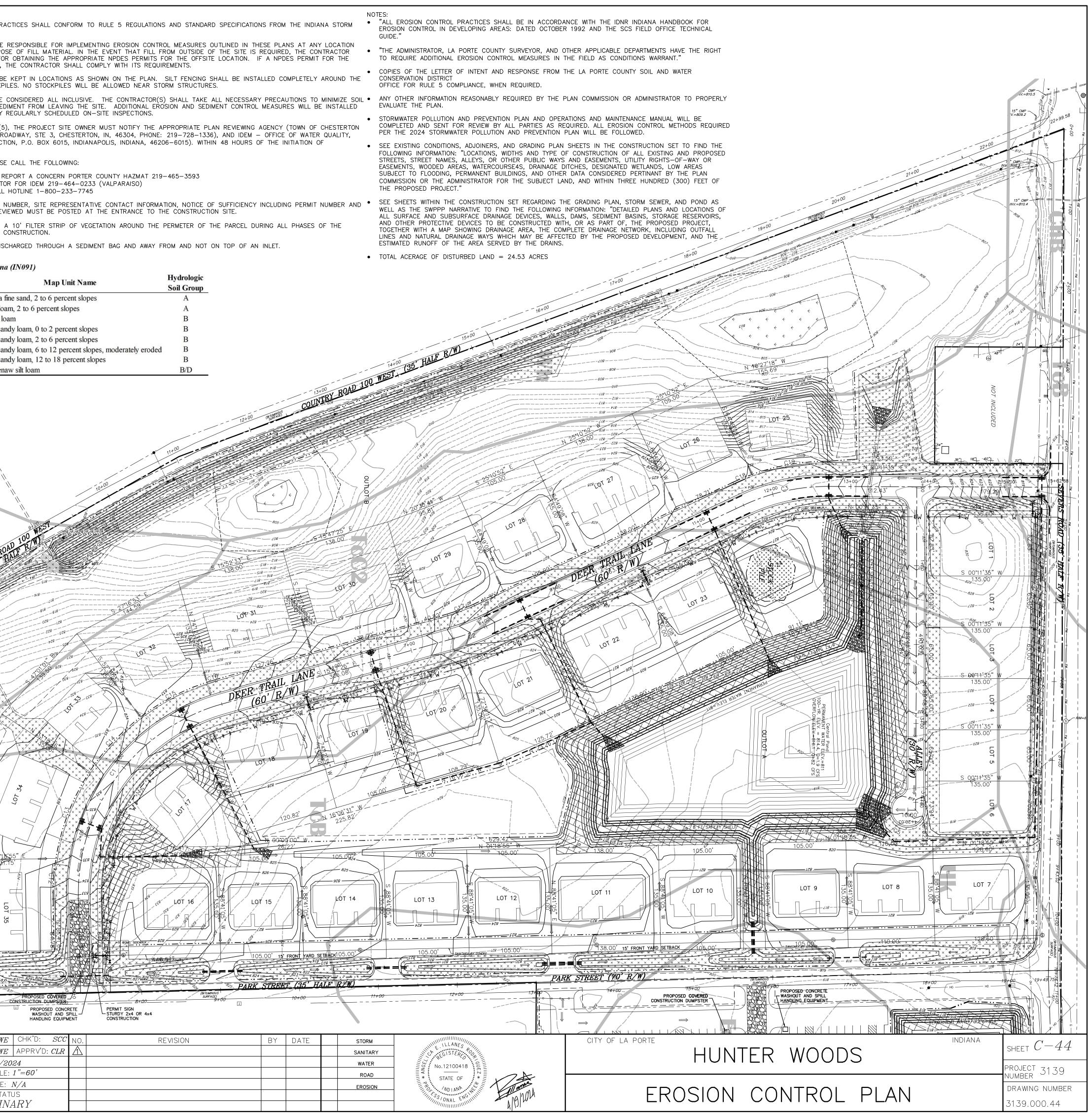
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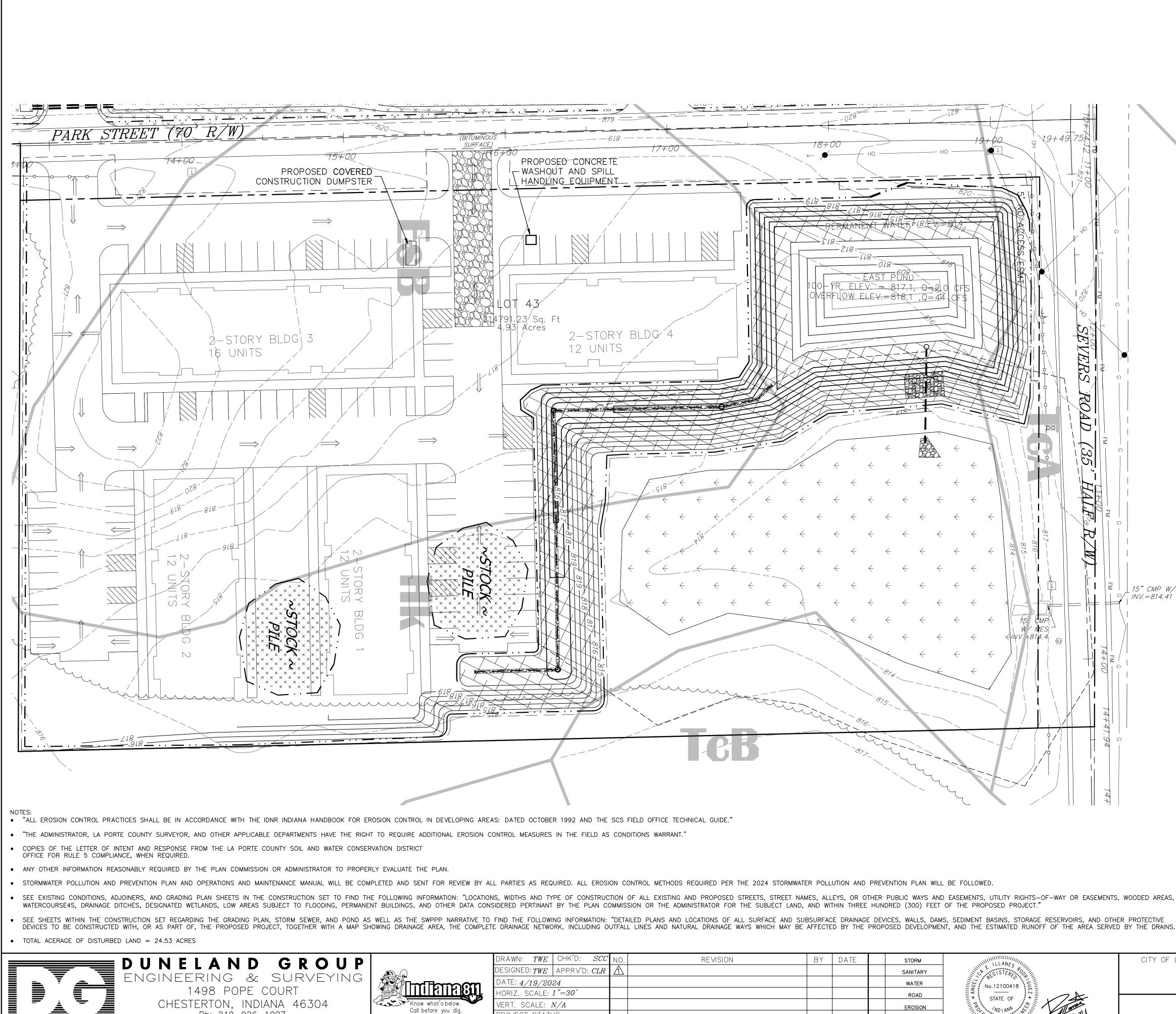
JCTION SITE.

NOTES:

- GUIDE."
- OFFICE FOR RULE 5 COMPLIANCE, WHEN REQUIRED.

- THE PROPOSED PROJECT."
- ESTIMATED RUNOFF OF THE AREA SERVED BY THE DRAINS.



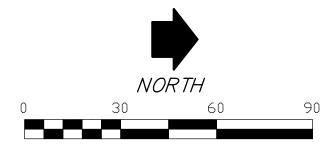


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PROJECT ST PRELIMI

Ph: 219-926-1007

E-MAIL dgi@dunelandgroup.com



BOUNDARY OF PROPOSED CONSTRUCTION. AREA OUTSIDE THIS BOUNDARY TO REMAIN UNDISTURBED DURING CONSTRUCTION OF IMPROVEMENTS AND BUILDING.

------ · · ------ SILT FENCE - INSTALL ALONG SWALES OR DITCHES, IF REQUIRED. INSTALL ALONG FILL MATERIAL SLOPE/EMBANKMENT PRIOR TO CONSTRUCTION. MAINTAIN UNTIL A THICK GRASS GROWTH IS ESTABLISHED ON EXPOSED AREAS ADJACENT AND SLOPING TOWARD THE PAVEMENT / ROADS / DITCHES. SILT FENCE CONSTRUCTION

1.) ALONG THE ENTIRE INTENDED FENCE LINE, DIG AN 8-IN. DEEP FLAT-BOTTOMED TRENCH. 2.)ON THE DOWNSLOPE SIDE OF THE TRENCH, DRIVE THE WOOD OR STEEL SUPPORT POSTS AT LEAST 1

FT. INTO THE GROUND SPACING THEM NO MORE THAN 8 FT. APART IF THE FENCE IS SUPPORTED BY WIRE OR 6FT. IF EXTRA-STRENGTH FABRIC IS USED WITHOUT SUPPORT WIRE. ADJUST SPACING, IF NECESSARY, TO ENSURE THAT POSTS ARE SET AT THE LOW POINTS ALONG THE FENCE LINE. 3.)FASTEN SUPPORT WRE FENCE, IF THE MANUFACTURER RECOMMENDS ITS USE TO THE UPSLOPE SIDE OF THE POSTS, EXTENDING IT 8 IN. INTO THE TRENCH. 4.) RUN A CONTINUOUS LENGTH OF GEOTEXTILE FABRIC UPSLOPE OF THE SUPPORT WIRE AND POSTS,

AVOIDING JOINTS, PARTICULARLY AT LOW POINTS IN THE FENCE LINE. 5.) IF A JOINT IS NECESSARY, NAIL THE OVERLAP TO THE NEAREST POST WITH LATH. 6.)PLACE THE BOTTOM 1 FT. OF FABRIC IN THE 8-IN. DEEP TRENCH, EXTENDING THE REMAINING 4 IN. TOWARD THE UPSLOPE SIDE.

7.)BACKFILL THE TRENCH WITH COMPACTED EARTH OR GRAVEL. NOTE: IF USING A PRE-PACKED COMMERCIAL SILT FENCE RATHER THAN CONSTRUCTING ONE, FOLLOW

MANUFACTURER'S INSTALLATION INSTRUCTIONS. SILT FENCE OUTLET CONSTRUCTION (OPTIONAL)

1.) PLAN FOR THE FENCE TO BE AT LEAST 10' FROM THE TOE OF THE SLOPE TO PROVIDE A SEDIMENT STORAGE AREA. 2.)PROVIDE ACCESS TO THE AREA IF SEDIMENT CLEANOUT WILL BE NEEDED

3.) DETERMINE THE APPROPRIATE LOCATION FOR A REINFORCED, STABILIZED BYPASS FLOW OUTLET (UNLESS THE FENCE IS DESIGNED TO RETAIN ALL FROM A 2-YEAR FREQUENCY, 24-HOUR DURATION STORM EVENT)

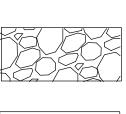
4.)SET THE OUTLET ELEVATION SO THAT WATER DEPTH CANNOT EXCEED 1 1/2 FEET AT THE LOWEST POINT ALONG THE FENCE LINE. 5.)LOCATE THE OUTLET WEIR SUPPORT POSTS NO MORE THAN 4 FT. APART, AND INSTALL A

HORIZONTAL BRACE BETWEEN THEM. (WEIR HEIGHT SHOULD BE NO MORE THAN 1 FT. AND WATER DEPTH NO MORE THAN 1 ½ FT. ANYWHERE ELSE ALONG THE FENCE.) 6.) EXCAVATE THE FOUNDATION FOR THE OUTLET SPLASH PAD TO MINIMUMS OF 1 FT. DEEP, 5 FT. WIDE,

AND 5 FT. LONG ON LEVEL GRADE. 7.)FILL THE EXCAVATED FOUNDATION WITH INDOT CA NO. 1 STONE, BEING CAREFUL THAT THE FINISHED SURFACE BLENDS WITH THE SURROUNDING AREA, ALLOWING NO OVERFALL. 8.) STABILIZE THE AREA AROUND THE PAD.

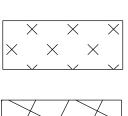
SOIL TYPE BOUNDARY

INLET PROTECTION - INSTALL AROUND ALL INLETS AND CATCH BASINS IMMEDIATELY AFTER THEIR CONSTRUCTION AND MAINTAIN UNTIL PAVEMENT BASE MATERIAL IS PLACED. INSTALL AT EXISTING INLETS PRIOR TO THE START OF CONSTRUCTION. AS AN ALTERNATE A PRE MANUFACTURED INLET DEVICE CAN BE UTILIZED PER MANUFACTURES RECOMMENDATIONS. INLET PROTECTION AROUND YARD INLET 3 SHALL HAVE AN ADDITIONAL ROW OF SILT FENCE AND/ OR MULCH FILTER SOCK UNTIL VEGETATION IS AT LEAST 70% ESTABLISHED ON ADJACENT LOTŚ.



STONE ENTRANCE PAD

TEMPORARY SEEDING



TEMPORARY SEEDING - SEE EROSION CONTROL DETAIL SHEET FOR SCHEDULE OF

EROSION CONTROL BLANKET TMAX OR APPROVED EQUAL; SEEDED. PERMANENT SEEDING - SEE EROSION CONTROL DETAIL SHEET FOR SCHEDULE OF PERMANENT SEEDING

# La Porte County, Indiana (IN091)

Map Unit Symbol	Map Unit Name	Hydrologic Soil Group
ChB	Chelsea fine sand, 2 to 6 percent slopes	Α
EsB	Elston loam, 2 to 6 percent slopes	А
Hk	Homer loam	В
TcA	Tracy sandy loam, 0 to 2 percent slopes	В
TcB	Tracy sandy loam, 2 to 6 percent slopes	В
TcC2	Tracy sandy loam, 6 to 12 percent slopes, moderately eroded	В
TcD2	Tracy sandy loam, 12 to 18 percent slopes	В
Wh	Washtenaw silt loam	B/D

1. ALL EROSION CONTROL PRACTICES SHALL CONFORM TO RULE 5 REGULATIONS AND STANDARD SPECIFICATIONS FROM THE INDIANA STORM WATER QUALITY MANUAL.

2. THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING EROSION CONTROL MEASURES OUTLINED IN THESE PLANS AT ANY LOCATION USED TO OBTAIN OR DISPOSE OF FILL MATERIAL. IN THE EVENT THAT FILL FROM OUTSIDE OF THE SITE IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE APPROPRIATE NPDES PERMITS FOR THE OFFSITE LOCATION. IF NPDES PERMIT FOR THE OFFSITE LOCATION EXISTS, THE CONTRACTOR SHALL COMPLY WITH ITS REQUIREMENTS.

3. SOIL STOCKPILES SHALL BE KEPT IN LOCATIONS AS SHOWN ON THE PLAN. SILT FENCING SHALL BE INSTALLED COMPLETELY AROUND THE PERIMETER OF ALL STOCKPILES. NO STOCKPILES WILL BE ALLOWED NEAR STORM STRUCTURES.

4. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR(S) SHALL TAKE ALL NECESSARY PRECAUTIONS TO MINIMIZE SOIL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY REGULARLY SCHEDULED ON-SITE INSPECTIONS.

5. PER 327 IAC 15-5-5(a)(5), THE PROJECT SITE OWNER MUST NOTIFY THE APPROPRIATE PLAN REVIEWING AGENCY (TOWN OF CHESTERTON MS-4 OPERATOR, 1490 BROADWAY, STE 3, CHESTERTON, IN, 46304, PHONE: 219-728-1336), AND IDEM - OFFICE OF WATER QUALITY, URBAN WET WEATHER SECTION, P.O. BOX 6015, INDIANAPOLIS, INDIANA, 46206-6015). WITHIN 48 HOURS OF THE INITIATION OF CONSTRUCTION ACTIVITY.

6. IN CASE OF SPILLS PLEASE CALL THE FOLLOWING: -EMERGENCY 911

-MINOR SPILLS OR TO REPORT A CONCERN PORTER COUNTY HAZMAT 219-465-3593 -ON-SCENE COORDINATOR FOR IDEM 219-464-0233 (VALPARAISO) -IDEM'S 24-HOUR SPILL HOTLINE 1-800-233-7745

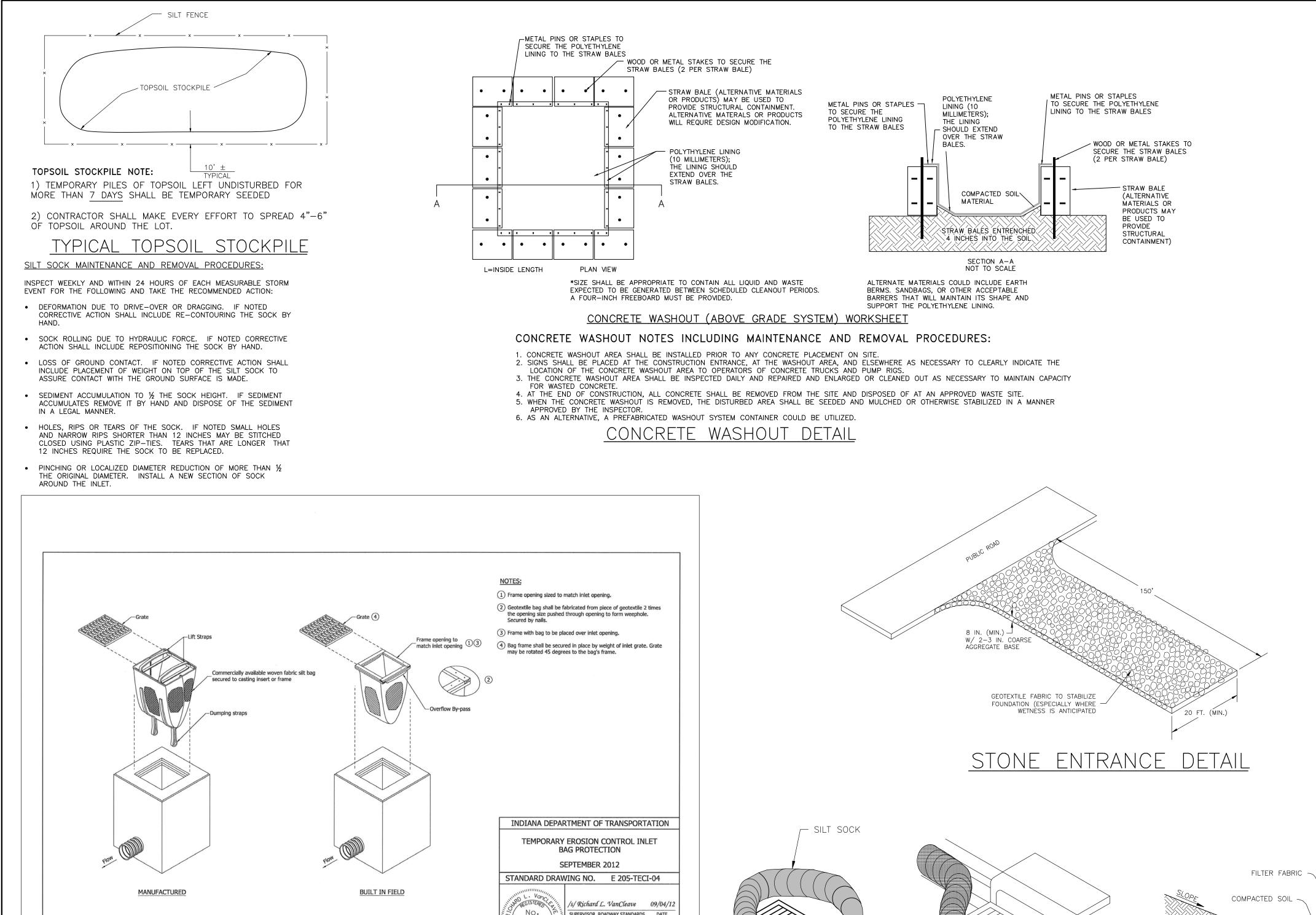
7. THE NOI, NPDES PERMIT NUMBER, SITE REPRESENTATIVE CONTACT INFORMATION, NOTICE OF SUFFICIENCY INCLUDING PERMIT NUMBER AND WHERE PLANS CAN BE REVIEWED MUST BE POSTED AT THE ENTRANCE TO THE CONSTRUCTION SITE.

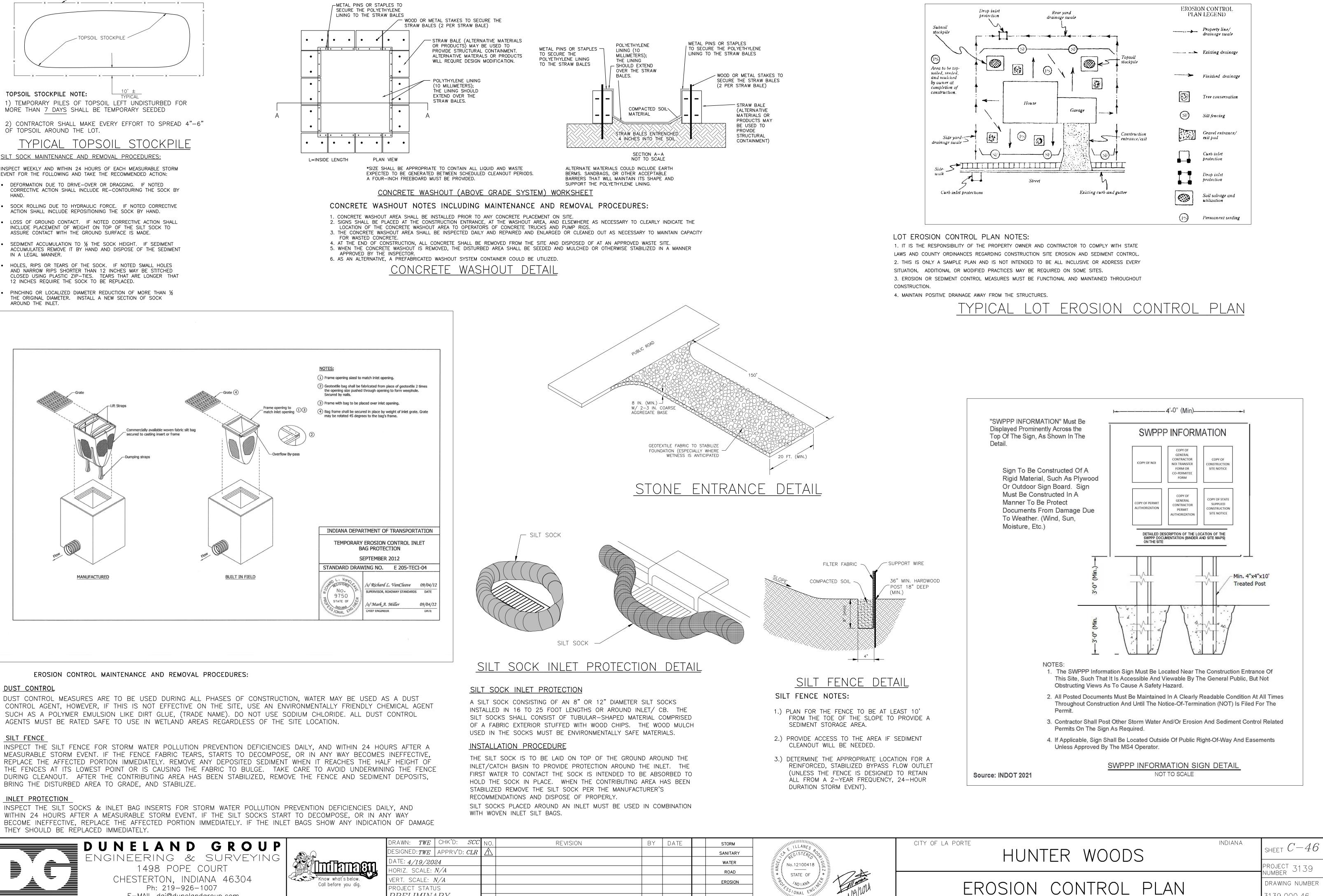
8. WHEN POSSIBLE MAINTAIN A 10' FILTER STRIP OF VEGETATION AROUND THE PERMETER OF THE PARCEL DURING ALL PHASES OF THE PROJECT PRIOR TO HOME CONSTRUCTION.

9. DEWATERING SHALL BE DISCHARGED THROUGH A SEDIMENT BAG AND AWAY FROM AND NOT ON TOP OF AN INLET.



15" CMP W/ MES \_ /NV.=814.41





# DUST CONTROL

# SILT FENCE

BRING THE DISTURBED AREA TO GRADE, AND STABILIZE.

# INLET PROTECTION



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3	APPRV'D	CLR	$\triangle$					SANITARY	S C C S C S C S C S C S C S C S C S C S	
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3139.000.46

# PLAN NARRATIVE

A. Site Description: Hunter Woods comprises 13 lots (R1C), 29 lots (R2B), and 52 Units (R3A). Construction activity consists of grading, sanitary sewer construction, storm sewer, water, roadway construction, and associated site restoration work.

B. Phasing of Construction:

- The sequence of construction should commence in the following order: NO MASS GRADING WILL BE ALLOWED.
- Post storm water pollution prevention plan.
   Establish ingress/egress construction entrances for the site.
- 3. Install silt fence.
- Install protection measures for existing utilities.
- Establish location of stockpile and install silt fence around stockpile.
   Begin self monitoring program.
- 7. Clear swale before building subdivision. Clear from southwest property corner up to proposed pond outlet.
- 8. Clear site in proposed areas of construction only.
- Begin grading of site. This includes creating the ponds and swales.
   Install concrete washout.
- Install utilities including sanitary sewers, water, lighting, and storm sewers. Storm utility also includes the outfall pipe. The lift station/force main is included with the sanitary utility installation.
- 12. Install protection measures for new utilities. This includes the protection for the outfall pipe.
- 13. Construct roads including curbs.
- 14. Temporary seed as required. This is intended to occur on the disturbed areas which are to remain untouched for a period of <u>7 days</u>.
- 15. Final grading of site.
- 16. Permanent seeding stabilization.
- 17. Each builder will be responsible for erosion control measures for the individual lots.

18. Removal and proper disposal of temporary erosion control measures when 70% of permanent stabilization is achieved.

C. Existing Site Conditions:

The site is currently a vacant grassed area. The southern portion of the site is wooded and wetland.

D. Erosion /Sediment Control Measures:

# Erosion and Sediment Controls

Clearing and grubbing operations are limited to construction areas shown on the plan. Areas outside of the limits will be left in their natural state which will provide a physical barrier for any discharges of sediment from the site. Upon completion of construction, sod or permanent seeding will be placed at all unvegetated areas.

### Other Controls:

None anticipated.

### Self-monitoring Program:

- 1. Self-monitoring reports shall be submitted to the City of La Porte's MS4 coordinator on a weekly basis and after every measurable storm event.
- 2. The self-monitoring forms shall be kept in a binder and be made available
- at the request of town personnel.
- 3. Equipment shall be routinely inspected. See the maintenance section for each erosion protection measure for more information.

# SWPPP IMPLEMENTATION SEQUENCE:

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT, SEDIMENT TRAP AND SWPPP INFORMATION SIGN
- 2. INSTALL SILT FENCES ON THE SITE (CLEAR ONLY NECESSARY AREAS FOR SILT FENCE INSTALL)
- 3. INSTALL INLET PROTECTION DEVICES AROUND ALL EXISTING STORM SEWER INLETS PER PLAN
- 4. PREPARE TEMPORARY PARKING AND STORAGE AREA.
- 5. BEGIN CLEARING AND GRUBBING THE SITE
- 6. BEGIN MASS GRADING OF SITE: PHASE SITE AS NEEDED FOR PROPER BALANCING OF CUT AND FILLS.
- 7. TEMPORARILY SEED WITHIN 7 DAYS

8. IMMEDIATELY PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.

9. INSTALL UTILITIES, STORM SEWERS, WATERMAIN, SANITARY SEWER, AND CURBS AND GUTTERS.

10. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.

11. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.

- 12. PREPARE SITE FOR PAVING AND PAVE SITE
- 13. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.

14. AFTER THE SITE IS FULLY STABILIZED, BEGIN REMOVING ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.

- 15. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMP'S
- 16. CONTINUE DAILY INSPECTIONS UNTIL FINAL INSPECTION TO BE SIGNED BY GC.



Temporary vegetation shall be established for barren areas rough graded but left undisturbed for more than <u>7 days</u>. Seeding shall be applied according to the following chart depending on the time of year. Fertilizer and mulch are required.

# SITE PREPARATION

- 1. These installation practices are needed to control erosion, sedimentation, and water runoff, such as temporary and permanent diversions, sediment traps or basins, silt fences, and triangular silt dikes.
- 2. Grade the site as specified in the construction plans. MASS GRADING WILL NOT BE ALLOWED.

# SEEDBED PREPARATION

- 1. Fertilize as required.
- 2. Work the fertilizer into the soil 2 to 4 inches deep with a disk or rake operated across the slope.

### SEEDING

- 1. Select a seeding mixture and rate from the table and plant at depth and dates shown.
- Apply seed uniformly with a drill or cultipacker seeder or by broadcasting, firm the seedbed with a roller or cultipacker.
   If drilling or broadcasting, firm the seedbed with a roller or cultipacker.
- 4. Mulch seeded area to increse seeding success.

### MAINTENANCE

- 1. Inspect periodically after planting to see that vegetative stands are adequately established, re-seed if necessary.
- 2. Check for erosion damage after storm events and repair, reseed and mulch if necessary.
- 3. Topdress fill seeded wheat or rye seeding with 50 lbs./acres in February or March if nitrogen deficiency is apparent.

### Temporary Seeding Recommendations:

Seed species	Rate/acre	Planting depth	Optimum dates
Wheat or rye	150 lbs.	1 to 1 1/2 in.	9/15 to 10/30
Spring oats	100 lbs.	1 in.	3/1 to 4/15
Annual ryegrass	40 lbs.	1/4 in.	3/1 to 5/1 & 8/1 to 9/1
German millet	40 lbs.	1 to 2 in.	5/1 to 6/1
Sudangrass	35 lbs.	1 to 2 in.	5/1 to 7/30

### Permanent seeding:

Disturbed areas which are at finish grade shall be permanently seeded within <u>seven (7)</u> days. Use a perennial ryegrass mixtures chosen for slope characteristics from the following list. Fertilizer and mulch are required.

### SITE PREPARATION

- 1. These installation practices are needed to control erosion, sedimentation, and water runoff, such as temporary and permanent diversions, sediment traps or basins, silt fences, and triangular silt dikes.
- 2. Grade the site as specified in the construction plans. MASS GRADING WILL NOT BE ALLOWED.
- 3. Add topsoil to achieve needed depth for establishment of vegetation.

### SEEDBED PREPARATION

Fertilize as required.
 Work the fertilizer into the soil 2 to 4 inches deep with a disk or rake operated across the slope.

### <u>SEEDING</u>

Optimum seeding dates are March 1 — May 10 and August 10 — September 30. Permanent seeding done between May 10 and August 10 may need to be irrigated. As an alternative, use temporary seeding until the prefered date for permanent seeding.

- 1. Select a seeding mixture and rate from the table and plant at depth and dates shown.
- 2. Apply seed uniformly with a drill or cultipacker seeder or by broadcasting, firm the seedbed with a roller or cultipacker.
- 3. If drilling or broadcasting, firm the seedbed with a roller or cultipacker.
- 4. Mulch seeded area to increase seeding success. Use erosion control blankets on sloping areas. If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.

### MAINTENANCE

1. Inspect periodically after planting to see that vegetative stands are adequately established, re-seed if necessary.

2. Check for erosion damage after storm events and repair, reseed and mulch if necessary.

### OPEN AND DISTURBED AREAS (REMAINING IDLE MORE THAN 1 YR.)

Seed Species & Mixtures	Rate/Acre	<u>Optimum Soil pH</u>
1. Perennial ryegrass	70 lbs.	5.6 to 7.0
+ white clover*	2 lbs.	
2. Perennial ryegrass**	70 lbs.	5.6 to 7.0
+ tall fescue**	50 lbs.	
STEEP BANKS A	AND CUTS, LOW MAINTENANCE AREAS ( NOT MOWED)	
1. Orchardgrass	30 lbs.	5.6 to 7.0
+ red clover*	20 lbs.	
+ white clover*	2 lbs.	
2. Tall fescue**	50 lbs.	5.5 to 7.5
+ red clover*	20 lbs.	
	LAWNS AND HIGH MAINTENANCE AREAS	
1. Perennial ryegrass (turf-type)**	170 lbs.	5.6 to 7.5
+ bluegrass	30 lbs.	
	ANNELS AND AREAS OF CONCENTRATED FLOW	5.5 to 7.0
1. Perennial ryegrass	150 lbs.	3.3 (0 7.0
+ white clover*	2 lbs.	
2. Tall fescue**	150 lbs.	5.5 to 7.5
+ Perennial ryegrass	20 lbs.	
+ Kentucky bluegrass	20 lbs.	

\* For best results: (a) legume seed should be inoculated; (b) seeding mixtures containing legumes should preferably be spring-seeded, although the grass may be fall-seeded and the legume frost-seeded; and (c) if legumes are fall-seeded, do so in early fall.

\*\* Tall fescue provides little cover for, and may be toxic to, some species of wildlife. The IDNR recognizes the need for additional research on alternatives to tall fescue, such as buffalograss, orchardgrass, smooth bromegrass, and switch-grass. This research, in conjunction with demonstration areas, should focus on erosion control characteristics, wildlife toxicity, turf durability, and drought resistance.

DRAWN: <i>TWE</i> CHK'D: <i>SCC</i>	'NO.	REVISION	BY	DATE	STORM		CITY O
DESIGNED: TWE APPRV'D: CLR					SANITARY	STER OF	
DATE: 4/19/2024					WATER	No.12100418	
HORIZ. SCALE: $N / A$					ROAD	STATE OF	
VERT. SCALE: $N/A$					EROSION	STATE OF STATE	
PROJECT STATUS						NO TALENGUILTING NO MAN	
PRELIMINARY						- A A A A A A A A A A A A A A A A A A A	

A project site owner shall meet the following requirements, at a minimum:

1. Sediment-laden water flowing from the project site shall be treated by erosion

- and sediment control measures appropriate to minimize sedimentation;
  Appropriate measures shall be implemented to minimize or eliminate wastes or unused building materials, including garbage, debris, cleaning wastes, wastewater, concrete truck washout and other substances from being carried from a project site by run-off or wind. Identification of areas where concrete truck washout is permissible must be clearly posted at appropriate areas of the site. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable statutes and regulations;
- 3. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site;
- 4. Public or private roadways shall be kept cleared of accumulated sediment that is a result of run-off or tracking. Bulk clearing of sediment shall not include flushing the area with water. Cleared sediment shall be redistributed or disposed of in a manner that is in accordance with all applicable statutes and regulations;
  5. Storm water run-off leaving a project site must be discharged in a manner that
- is consistent with town code and all applicable state or federal laws;
  6. The project site owner shall post a notice near the main entrance of the project
- 5. The project site owner shall post a notice hear the main entrance of the project site. For linear project sites, such as a pipeline or highway, the notice must be placed in a publicly accessible location near the project field office. The notice must be maintained in a legible condition and contain the following information:
  - A. A copy of the valid erosion and sediment control permit and any applicable NPDES permit number;
  - B. The name, company name, telephone number, e-mail address (if available) and address of the project site owner, or a local contact person; and
  - C. The location of the construction plan, if the project site does not have an on-site location to store and keep a copy of the plan.
- 7. The construction plan/SWPPP shall serve as a guideline for storm water quality, but should not be interpreted to be the only basis for implementation of storm water quality measures for a project site. The project site owner is responsible for implementing, in accordance with this rule, all measures necessary to adequately prevent polluted storm water run-off;
- 8. The project site owner shall inform all general contractors, construction management firms, grading or excavating contractors, utility contractors and the contractors that have primary oversight on individual building lots of the terms and conditions of this rule and the conditions and standards of the construction plan/SWPPP and the schedule for proposed implementation;
- Phasing of construction activities shall be used, where possible, to minimize disturbance of large areas;
- 10. Appropriate measures shall be planned and installed as part of an erosion and sediment control system;
- 11. All storm water quality measures must be designed and installed under the guidance of a trained individual;
- 12. Sediment control measures for sheet flow areas;
- 13. Sediment control measures for concentrated flow areas;
- 14. Sediment control measures for storm sewer inlet protection;
  15. Run-off control measures (e.g., diversions, rock check dams, slope drains and the like);
- 16. Storm water outlet protection specifications;
- 17. Grade stabilization structure locations and specifications;
- 18. Sediment control associated with dewatering and directional boring operations;
- Erosion and sediment control provisions for stream/channel crossings;
   Collected run-off leaving a project site must be either discharged directly into a well-defined, stable receiving channel or diffused and released to adjacent property without causing an erosion or pollutant problem to the adjacent property owner;
- 21. Drainage channels and swales must be designed and adequately protected so that their final gradients and resultant velocities will not cause erosion in the receiving channel or at the outlet;
- 22. Natural features, including wetlands and sinkholes, shall be protected from pollutants associated with storm water run-off;
- 23. Un-vegetated areas that are scheduled or likely to be left inactive for 15 calendar days or more must be temporarily or permanently stabilized with measures appropriate for the season to minimize erosion potential. Alternative measures to site stabilization are acceptable if the project site owner or his, her or their representative can demonstrate they have implemented erosion and sediment control measures adequate to prevent sediment discharge. Vegetated areas with a density of less than 70% shall be re-stabilized using appropriate methods to minimize the erosion potential;
- 24. During the period of construction activities, all storm water quality measures necessary to meet the requirements of this article shall be maintained in working order;
- 25. A self-monitoring program that contains all requirements in § 24-58 of this chapter;
- 26. Proper storage and handling of materials, such as fuels or hazardous wastes, and spill prevention and clean-up measures shall be implemented to minimize the potential for pollutants to contaminate surface or ground water or degrade soil auality; and
- 27. Achieve final stabilization.
- Individual building lots within a permitted project shall meet the following requirements:1. Erosion and sediment control requirements associated with activities on individual lots.
- 2. Installation and maintenance of a stable construction site access.
- 3. Installation and maintenance of appropriate perimeter erosion and sediment control measures prior to land disturbance.
- Sediment discharge and tracking from each lot must be minimized throughout the land disturbing activities on the lot until permanent stabilization has been achieved.
   Clean-up of sediment that is either tracked or washed onto roads. Bulk clearing of
- sediment shall not include flushing the area with water. Cleared sediment must be redistributed or disposed of in a manner that is in compliance with all applicable statutes and rules.
- 6. Erosion and sediment control specifications for individual building lots. 7. Adjacent lots disturbed by an individual lot operator must be repaired and stabilized
- with temporary or permanent surface stabilization.
- 8. Each individual residential lot shall meet the criteria for final stabilization.

HUNTER WOODS	sheet $C{-}47$
	PROJECT 3139 NUMBER
FROSION CONTROL PLAN	DRAWING NUMBER
	3139.000.47



TENCATE GEOSYNTHETICS Americas

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EROSION	FILTRATION	SEPARATIO

# Mirafi<sup>®</sup> FW402

Mirafi<sup>®</sup> FW402 is composed of high-tenacity monofilament polypropylene yarns, which are woven into a stable network such that the yarns retain their relative position. Mirafi® FW402 geotextile is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP). NTPEP Listed

Mechanical Properties	Test Method	Unit		
		Served State of Long	Minimum Roll V           MD           365 (1624)           24           115 (512)           675 (3)           Minimum F           12.5 x 300	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	365 (1624)	200 (890)
Grab Tensile Elongation	ASTM D4632	%	24	10
Trapezoid Tear Strength	ASTM D4533	lbs (N)	115 (512)	75 (334)
CBR Puncture Strength	ASTM D6241	lbs (N)	675 (3	3004)
			Minimum I	Roll Value
Percent Open Area	COE-02215	%	1(	)
Permittivity	ASTM D4491	sec <sup>-1</sup>	2.	1
Flow Rate	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	145 (5907)	
r			Maximum O	pening Size
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	40 (0.	425)
			Minimum 1	Fest Value
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	9(	)
Physical Properties	5	Unit	Roll	Size
Roll Dimensions (width x	ength)	ft (m)	12.5 x 300	(3.8 x 91)

Roll Area yd² (m²) 417 (348)

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Fax 706 693 4400

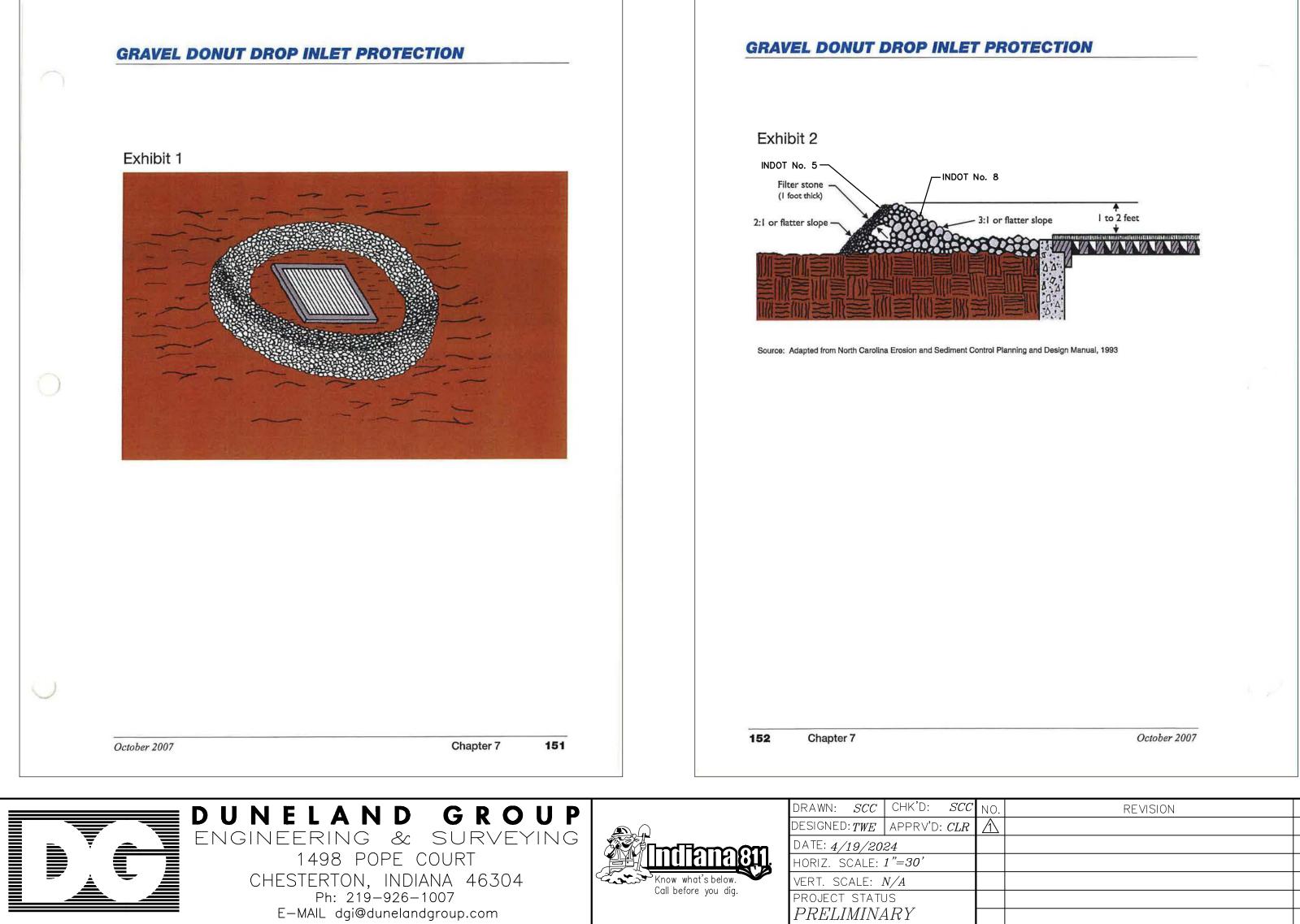
www.tencate.com

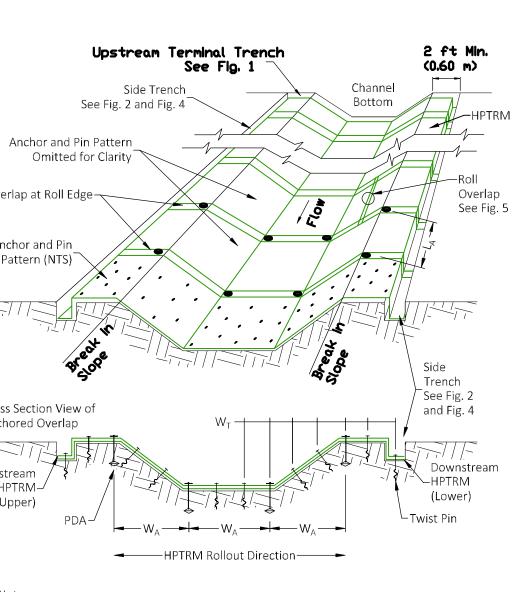
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365 South Holland Drive Tel 706 693 2226 Pendergrass, GA 30567 Tel 888 795 0808 FGS000070 ETQR50

GAI-LAP ACCREDITED LABORATORY (GMÁ PSSURAN GAI-LAP-25-97

GEOTEXTILE FILTER FABRIC SPECIFICATION





1) Drawings not to scale. Spacing exaggerated, vegetation omitted and some fasteners 2) Secure anchors at top and toe of bank at each seam overlap (shingled in the direction of flow). W<sub>A</sub> shall not exceed spacing design dimension (Table 1), secure additional anchors along bottom of channel and between top and toe to meet spacing design dimension. Secure Twist Pins in side trenches and between anchors to meet spacing

3) If roll width exceeds spacing design dimension  $(L_A)$ , add identical, parallel row of anchors and pins to reduce distance between rows, equal to or less than spacing design

4) Embed all anchors to design depth, D<sub>A</sub>.

Overlap at Roll Edge 🔨

Anchor and Pin

Pattern (NTS)

Cross Section View of

PDA-

excluded for clarity.

design dimension,  $W_{T}$ .

dimension.

Anchored Overlap

7\_\_\_\_\_

Upstream

HPTRM-

(Upper)

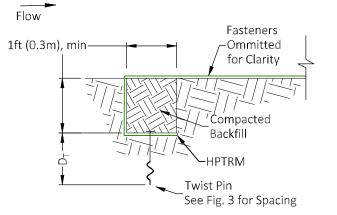
\*Notes:

5) Secure trenches as indicated, with Twist Pins to meet the minimum design depth,  $D_{T}$ . Twist Pins in trench not to exceed spacing,  $L_{T}$ .

6) TL-TA1 Twist Pins are specified, however TL-TA2 pins may be substituted, based on in-situ soil conditions, with no change in length.

7) Add tie-down pins through the body of the installation (between anchor rows) to meet the spacing design requirements (Figure 4).





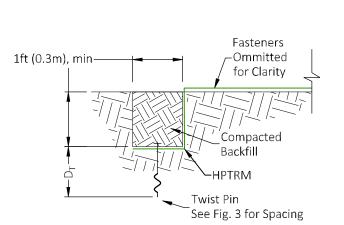


Figure 2 - Cross Section View of Downstream and Side Trench

Table 1 - Anchor and Pin Spacing and Depths				
Configuration	TERMS-110			
HPTRM	TMAX			
Fastener Type	Dimension	Value		
	W <sub>A</sub> (Max)	5.0' (1.5 m)		
PDA	L <sub>A</sub> (Max)	5.0' (1.5 m)		
	D <sub>A</sub> (Min)	3.0' (0.9 m)		
	W <sub>T</sub> (Max)	20" (0.5 m)		
Twist Pin	L <sub>T</sub> (Max)	1.5' (0.5 m)		
	D <sub>T</sub> (Min)	8" (22 cm)		
	W <sub>P</sub> (Max)	20" (0.5 m)		
Steel Pin	L <sub>P</sub> (Max)	2.5' (0.8 m)		
	D <sub>P</sub> (Min)	12" (30 cm)		

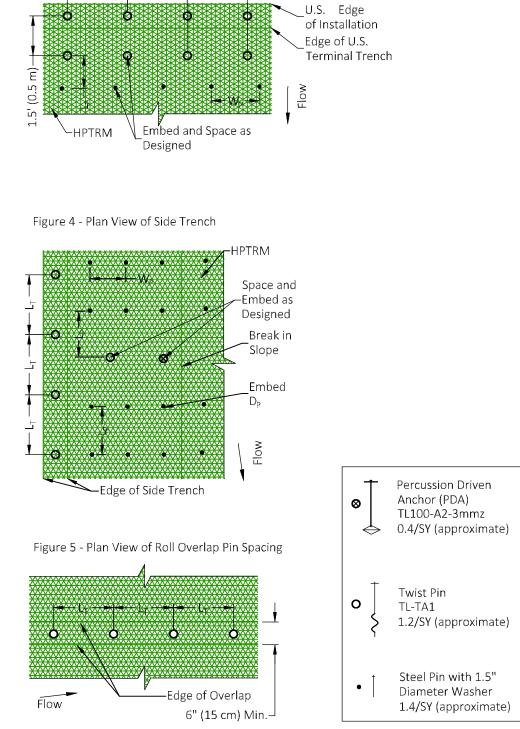


Figure 3 - Plan View of Upstream, Terminal Trench

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# TMAX HIGH-PERFORMANCE TURF REINFORCMENT MAT - CHANNEL DETAIL

SCC CHK'D: SCC	NO.	REVISION	ΒY	DATE	STORM		CIT
WE APPRV'D: CLR	$\triangle$				SANITARY	Store & GISTER OS	
/2024					WATER	No.12100418	
LE: 1"=30'					ROAD	T T T T T T T T T T T T T T T T T T T	
E: N/A					EROSION	NDIANA	
TATUS						SS ONAL ENGINEERIC A PLANA	
INARY							

Constituentie	n Cheat		-		
Specificatio			0001		
	I-Performan				
Turf Reinfo	rcement Ma	t			
DESCRIPTION			Index Property	Test Method	Typical
		orcement mat (HP-TRM)	Thickness	ASTM D6525	0.4 in (10 mm)
and the second	and a second state of the second s	1% UV-stabilized, high ns woven into permanent,	Resiliency	ASTM D6524	75%
high-strength, thre	e-dimensional turf r	einforcement matting.	Mass/Unit Area	ASTM D6566	11.3 oz/yd² (382 g/
Available in either a green/black or a tan/black coloring, the mat shall be composed of polypropylene yarns woven into a uniform configuration of resilient, pyramid-like projections. The mat			Tensile Strength - MD	ASTM D6818	4,400 lbs/ft (64 kl
provides sufficient	thickness, optimum	open area, and three-	Elongation - MD	ASTM D6818	35%
dimensionality for effective erosion control and vegetation reinforcement against high flow induced shear forces. The mat			Tensile Strength - TD	ASTM D6818	3,300 lbs/ft (48.2 kN/m)
has high tensile strength for excellent damage resistance and for increasing the bearing capacity of vegetated soils subject to heavy loads from maintenance equipment and other vehicular traffic. The material has very high interlock and reinforcement capacities			Elongation - TD	ASTM D6818	30%
			Light Penetration	ASTM D6567	75% coverage
	-	designed for erosion	UV Stability	ASTM D4355	>90% @ 3000 hr
control applications	on steep slopes and	l vegetated waterways.	Design	Permissible Sh	near Stress*
	Material Content		Vegetated Shear	16 psf (766 Pa)	
Woven Structure	100% UV stable Polypropylene Monofilament yarns	Black/Green or Black/Tan	Vegetated Velocity + Minimum Average Roll *Design values extrapolat		M D6460 testing
	Standard Roll	Sizes			
	11.5 ft (3.5 m)	11.5 ft (3.5 m)			
Width	78 ft (23.8 m)	156 ft (47.5 m)			
Width Length					
	72 lbs (32.7 kg)	143.5 lbs (65.1 kg)			
Length Weight ± 10% Area	100 yd² (83.6 m²)	143.5 lbs (65.1 kg) 200 yd² (167 m²) t product index data, performance ratings, bench			

Percussion Driven Anchor (PDA) TL100-A2-3mmz

Steel Pin with 1.5" Diameter Washer

CITY OF LA PORTE

HUNTER WOODS

INDIANA

sheet *C*-48 ROJECT 3139 IUMBER DRAWING NUMBER

3139.000.48

# EROSION CONTROL PLAN

