

CITY OF TONTITOWN PLANNING OFFICE

201 E. Henri de Tonti Blvd. 479-361-2700 planning@tontitownar.gov Meeting: **September 22, 2020**Project: **Elementary School**Planner: Courtney McNair, Garver

AGENDA ITEM

D

PRELIMINARY LARGE-SCALE DEVELOPMENT PLAN APPROVAL REQUEST

Northeast Intersection of S. Barrington Road and E. Fletcher Avenue 354 E. Fletcher Ave.

Parcel #s 830-37661-006, 830-37666-000

SUMMARY: The Springdale Elementary School is requesting Preliminary Large-Scale Development (LSD) approval for an approximately 65,100 SF elementary school building and ancillary uses on twenty (20) acres.

CURRENT ZONING: R-3 Residential

CITY WARD: 1-Gene McCartney, Amber Ibarra

FLOODPLAIN: No

INFRASTRUCTURE SERVICE AREAS (not a guarantee of service availability):

Water: Tontitown Water, existing 3" and 6" line (needs to be upgraded)

Electric: Ozarks Electric

Sewer/Septic: Tontitown Sewer

Phone: AT&T

Natural Gas: Black Hills Energy Cable: Cox Communications School District: Springdale

PROJECT SYNOPSIS:

A Conditional Use Permit was approved last month to allow a school use in R3 zoning. Now the Springdale Elementary School is requesting Preliminary Large-Scale Development (LSD) approval for an approximately 65,100 SF elementary school building and ancillary uses on twenty (20) acres.

TECHNICAL INFORMATION:

Utilities:

Water: Tontitown Water- According to the Water System information, there is an existing 6-inch water line along S. Barrington Road, the existing line on Fletcher Avenue is a 3". There is an existing 8" sewer line on the Northwest Corner of the property coming from Westbrook Subdivision, Phase II.

Electric: Ozarks Electric-No comments were received from OECC.

Sewer/Septic: Sewer- this project proposes to connect to the City of Tontitown sewer

system. The connection must be approved prior to construction.

Phone: AT&T- No comments were received from ATT.

Natural Gas: Black Hills Energy- No comments were received from BHE. **Cable:** Cox Communications- No comments were received from Cox.

It is the applicant's responsibility to coordinate any additional utility easements or connections as needed to service their property.

School District: Springdale school district is the applicant for this project.

Stormwater Pollution Prevention Plan (SWPPP):

The applicant has provided a grading a drainage plan. A SWPPP must be completed and posted on site prior to construction.

Police:

The Tontitown Police Department has worked with the school officials to develop a traffic plan for the bus entry on S. Barrington Road. No additional concerns were noted.

Fire:

There are four (4) fire hydrants shown on the plans. The nearest offsite hydrant is at the southwest corner of the site and has a 919 GPM flow rate.

The main drives are adequate for emergency vehicles. "No Parking" signs or striping must be added per discussion with the Fire Marshal. All interior drives must meet the required compaction rating to support emergency vehicles.

Drainage:

There are three (3) detention ponds proposed for this site. The applicant's engineer has submitted a drainage report for review. The City Engineer is currently reviewing the revised drainage report and plans. All remaining comments from the City Engineer must be addressed prior to Construction Plan approval.

The school has requested Grading Permit approval prior to full Construction Plan approval. The Grading Plans are under review by the City Engineer.

Roads:

This project has access on S. Barrington Road and E. Fletcher Ave. A waiver is requested for improvements to Barrington Road, and the applicant will be completing updates to the entire width of Fletcher Road.

Sidewalks: In addition to fully improving E. Fletcher Road, the applicant will be constructing the Trail Section along S. Barrington Road and E. Fletcher Road, with internal ADA sidewalk connections. Pedestrian connections to the subdivision to the east and north are shown.

Site visibility appears to be adequate from the proposed entrance locations.

The applicant has submitted a Traffic Study. The Findings and Recommendations are attached, and the LSD plans shall be required to meet or exceed the recommendations.

Planning: There are some minor checklist items to be completed.

Landscaping. Landscape plans shall be signed by a Landscape Architect or other landscape professional, and shall comply with Chapter 153.212 Landscaping, Screening, and Buffering.

Included in this section is the requirement for a three-year guarantee on plant material. Additional

details are needed to bring the landscape plan into compliance with city regulations. Code sections that were not addressed are:

(H) Landscaped street frontage buffer. The street frontage buffer is the planting area parallel to the public street right-of-way.

- (4) *Buffer options: commercial/institutional.* The site plan for any development, other than a development that is exempt, shall show a landscaped street frontage buffer along all public rights-of-way. The applicant may choose a combination of options below.
 - (a) Ten-foot buffer strip; minimum 10 feet wide.
 - 1. *Minimum number of shrubs*. Five shrubs/small trees per 30 linear feet of street frontage. A minimum of 50% of shrubs/small trees shall be evergreen. Preference for grouping.
 - 2. Sight visibility must be maintained.
 - (b) Earth berm.
 - Minimum height. Two and one-half feet higher than the finished elevation of the parking lot.
 - 2. *Minimum number of shrubs/small trees*. Three shrubs/small trees per 30 linear feet of street frontage. A minimum of 50% of shrubs/small trees shall be evergreen. Preference for grouping.
 - 3. Sight visibility must be maintained.

(J) Interior site landscaping. Interior site landscaping is immediately adjacent to the front of buildings.

- (3) Commercial and institutional: interior site landscaping. Shrubs, perennial plants, or other vegetation in curbed planting beds or raised planters to span a minimum of 25% of the building frontage. Planters are encouraged be arranged to create outdoor seating opportunities. At least one large tree or two small trees per unit/suite is required.
 - (a) Living materials shall make up 80% of the curbed planting beds or raised planters.
 - (b) Non-living material shall be organic (mulch or other) and shall make up the remainder of the groundcover.

(K) Landscaped perimeter buffer. Perimeter landscaping is a peripheral planting strip along rear and side lot lines that separates uses.

- (2) Requirements. The site plan for any development shall show perimeter landscaping in addition to the landscaped street frontage buffer required.
 - (a) Width. A five-foot landscaped strip is required along the side and rear lots lines of a development.
 - (b) Minimum number of trees. One large tree or two small trees per every 50 feet.
 - (c) *Groundcover*. All perimeter landscaped areas not dedicated to preservation of existing vegetation shall be landscaped with groundcover.
 - 1. Living materials such as grass/other vegetation shall make up 60% of the groundcover for the perimeter landscaping.
 - 2. Non-living material shall be organic (mulch or other) and shall make up the remainder of the groundcover.
 - 3. Non-organic material may be approved if the perimeter landscaping area functions as a bioswale. Any adjustments shall be approved by the Planning Board.
- (5) Pavement. No pavement may extend within five feet of the property line on any lot unless it is included with an ingress/egress location.
- (6) Special standards: commercial/institutional. When located adjacent to and visible from a residential use, increased landscaping standards shall be applied to reduce noise and light glare and to ensure residents' privacy.
 - (a) *Physical barrier*. A physical barrier shall be required that shall be a minimum of six feet in height and may consist of wood or masonry fencing, rock or brick walls, berms, or a combination of these methods.
 - (b) Trees and shrubs shall be placed in front of the barrier (on the developing side) to reduce parking lot noise.
 - (c) Trees and shrubs planted shall provide 60% coverage of the physical barrier within two years.

- (d) At least 50% of the trees and shrubs shall be evergreen.
- (e) Tree preservation. Existing healthy trees (as detailed in division (M)) may be included as a portion of the landscaped screening.

Signage. All signage shall be permitted separately.

Lighting. The development does not show street lighting or provide onsite lighting specifications. Cut sheets for lighting, showing cutoff lighting, shall be provided prior to construction.

Architectural Sketch. An architectural sketch has been submitted showing the proposed materials and articulation. Information regarding the percentages of materials proposed shall be required to be submitted.

WAIVER REQUEST:

The developer is requesting a waiver from improvements on S. Barrington Road. They are requesting to provide the necessary ROW and trail section, but not improve the driving surface. In addition, the applicant is proposing to improve Fletcher Ave. to the full master street plan section even though it is a boundary street, and they would only be required to make improvements to the centerline of Fletcher Ave.

The applicant and the city have discussed this request and agree that the improvements to Fletcher Ave. are critical. This demonstrates a special circumstance as this development only requires that half street improvements to Fletcher Ave are required, but due to the condition of Fletcher Ave., this property is hindered from improvements. Therefore, the applicant is proposing to improve "both sides" of Fletcher Ave. in exchange for not widening S. Barrington Road to the street standard required. This is also the most minimal waiver, as the applicant is going to dedicate the required ROW and construct the Trail Section.







152.026 WAIVERS.

- (A) General.
- (1) When, by the strict interpretation of these regulations, an applicant incurs undue restrictions on the physical property to be subdivided, a waiver for such requirements may be granted by the Planning Commission.
- (2) Under no circumstance should a waiver be granted because of a personal hardship or for personal or emotional reasons. Waivers shall not be granted based strictly on financial hardship.
- (3) A waiver is determined by the strict interpretation and enforcement of the rules and regulations upon a given piece of property to be subdivided.
 - (B) Procedures.
- (1) No waiver shall be granted except upon written petition by the applicant when the application is filed. The petition shall state fully the grounds for the waiver and all the facts upon which the petition is made.
- (2) In granting the waiver, the Planning Commission shall prescribe any conditions that it deems necessary to or desirable in the public interest.
- (3) In considering the petition for a waiver, the Planning Commission shall take into account the nature of the proposed use of land involved, existing uses of land in the area, proximity to public utilities, the number of persons who will reside or work in the proposed subdivision, and the probable effect of such waiver upon traffic conditions and upon the public health, safety and general welfare in the vicinity.
- (4) The findings of the Planning Commission, together with the specific facts upon which findings are based, shall be incorporated into the official minutes of the Planning Commission meetings at which such waiver is granted. Waivers may be granted only when in harmony with the general purpose and intent of these regulations.
 - (5) No waiver shall be granted unless the Planning Commission finds all of the following:
 - (a) That there are special circumstances or conditions affecting the land involved such that the strict application of the provision of these regulations would deprive the applicant of the reasonable use of this land.
 - (b) That the waiver is necessary for the preservation and enjoyment of a substantial property right of the applicant.
 - (c) That the granting of the waiver will not be detrimental to the public health, safety, and welfare or injurious to other property in the area.
 - (d) That the granting of the waiver will not have the effect of preventing the orderly subdivision of other land in the area in accord with the provision of these regulations.

STAFF RECOMMENDATIONS:

WAIVER: Staff agrees that the condition of Fletcher Ave. and the necessity to improve "both sides" of Fletcher Ave. are a special circumstance, and therefore recommends approval of the waiver of improvements to S. Barrington Road.

CONDITION RECOMMENDED FOR APPROVAL OF WAIVER:

- The developer shall provide all required ROW and construct the Trail Section on S. Barrington Road.
- 2. The developer shall improve Fletcher Ave. to the required Typical Street Section on "both sides" as shown on the plans.

PRELIMINARY PLAT: There are some details that remain to be addressed at the Construction Plan phase of plan review, but nothing that should significantly impact the overall design.

Therefore, staff recommends approval of Springdale Elementary School Preliminary Large-Scale Development with conditions.

CONDITIONS RECOMMENDED FOR APPROVAL:

- 1. It is the applicant's responsibility to coordinate any additional utility easements or connections as needed to service their property.
- 2. The SWPPP shall be completed and posted on site prior to construction.
- 3. Correct all remaining items on the "Plat Requirement Worksheet" prior to Construction Plan approval. Planning Staff will provide a copy of the remaining requirements to the engineer for the project.
- 4. "No Parking" signs or striping shall be added in coordination with the Fire Marshal.
- 5. Knox Boxes shall be required for emergency entry.
- 6. All interior drives shall meet the required compaction rating to support emergency vehicles.
- 7. Prior to building permits being issued, full architectural plans shall be required to be submitted for review and approval by the city.
- 8. Information regarding the percentages of materials proposed in the architectural plans shall be required to be submitted.
- 9. All interior drives must meet the required compaction rating to support emergency vehicles.
- 10. The applicant has submitted a Traffic Study. The Findings and Recommendations are attached, and the LSD plans shall be required to meet or exceed the recommendations.
- 11. Landscape plans shall be signed by a Landscape Architect or other landscape professional, and shall comply with Chapter 153.212 Landscaping, Screening, and Buffering.
- 12. Additional details are needed to bring the landscape plan into compliance with city regulations.
- 13. Correct all comments from the City Engineer prior to Construction Plan approval.
- 14. All signage shall be permitted separately.
- 15. The plans shall show street lighting and provide onsite lighting specifications. Cut sheets shall be required to show cutoff type lighting fixtures.
- 16. The applicant shall apply for all required permits prior to construction.

ENGINEERING SERVICES INC.

1207 S. Old Missouri Rd. ● P.O. Box 282 ● Springdale, Arkansas 72765-0282

Ph: 479-751-8733 • Fax: 479-751-8746

September 17, 2020

City of Tontitown 235 E Henri De Tonti Blvd Tontitown, AR 72770

RE: New Elementary School 2021

Waiver – Barrington Road Improvements

Tontitown, AR

Dear Sir or Ma'am:

Please let this letter serve as a waiver for the New Elementary School 2021 as we are requesting that the required improvements laid out in the City of Tontitown Development Codes for Barrington Road be waved. Barrington Road is classified as an Arterial roadway per the City's Master Street Plan with a 90-foot Right-of-Way swath that contains 3 travel lanes with room for expansion of two additional lanes, greenspaces, and pedestrian walkways. Proposed plans at this point, with the City's input show partial improvements along Barrington Road in the form of dedicating the required Right-of-Way and constructing the regional 12-foot wide trail that is located just inside the Right-of-Way. Along with this request, the school district intends to improve Fletcher Road to full master street plan section along the property frontage. Improving Fletcher Avenue will provide a great walkable corridor connection to the already existing neighborhood to the East on Fletcher Avenue.

If you have any questions regarding the development or this request, please contact me.

Sincerely,

Dillon B. Bentley

Dillon Bentley, P.E.

Project Engineer



Brian J. Moore, P.E.
President

Tim J. Mays, P.E.

Jason Appel, P.E. Secretary/Treasurer

Jerry W. Martin Chairman of the Board

PLANS FOR A

CABLE COMPANY:

CONTACT: MICHAEL MOORE 4901 SOUTH 48TH STREET

SPRINGDALE, AR 72762 PH: 479-717-3730 FAX: 479-872-0174 EMAIL: MICHAEL.MOORE3@COX.COM

TELEPHONE COMPANY:

CONTACT: JOHN HILL PH. 479-442-1963 EMAIL: JH7313@ATT.COM

GAS COMPANY:

BLACK HILLS ENERGY CONTACT: BRANDON STOKES PH. 479-225-3726

ELECTRIC COMPANY:

CONTACT: WES MAHAFFEY PH. 479-684-4949 EMAIL: WMAHAFFEY@OZARKSECC.COM WATER /SEWER DEPARTMENT: TONTITOWN WATER UTILITIES

201 E HENRI DE TONTI BLVD TONTITOWN, AR 72762 PH. 479-361-2700

PLANNING DEPARTMENT:

235 E. HENRI DE TONTI TONTITOWN, AR 72762 PH. 479-361-2700

BUILDING DEPARTMENT:

TONTITOWN BUILDING DEPARTMENT 235 E. HENRI DE TONTI TONTITOWN, AR 72762 PH. 479-361-2700

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LARGE SCALE DEVELOPMENT

TO SERVE

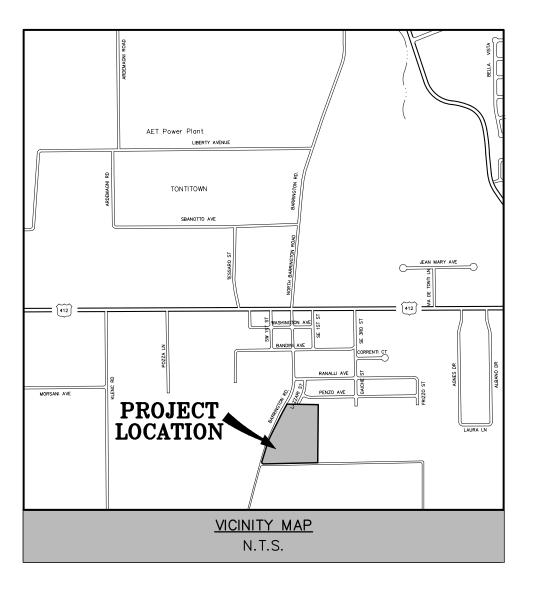
SPRINGDALE ELEMENTARY SCHOOL

A COMMERCIAL DEVELOPMENT

IN THE CITY OF

TONTITOWN, ARKANSAS

ADDRESS: 354 E. FLETCHER AVENUE SPRINGDALE, AR 72762



REVIEW OF THESE PLANS IS LIMITED TO COMPLIANCE WITH CITY CODES AND REGULATIONS. BY REVIEWING AND APPROVING THESE PLANS THE REVIEWER AND THE CITY OF TONTITOWN ASSUME NO RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE PLANS. THE ADEQUACY OF THE PLANS IS THE SOLE RESPONSIBILITY OF THE DESIGN ENGINEER HOWEVER, THE CITY OF TONTITOWN RESERVES THE RIGHT TO REQUIRE CORRECTIVE ACTION, IF ANY INADEQUACIES ARE FOUND AFTER THE IMPROVEMENTS ARE CONSTRUCTED.

September 15, 2020

BY ENGINEERING SERVICES INC.



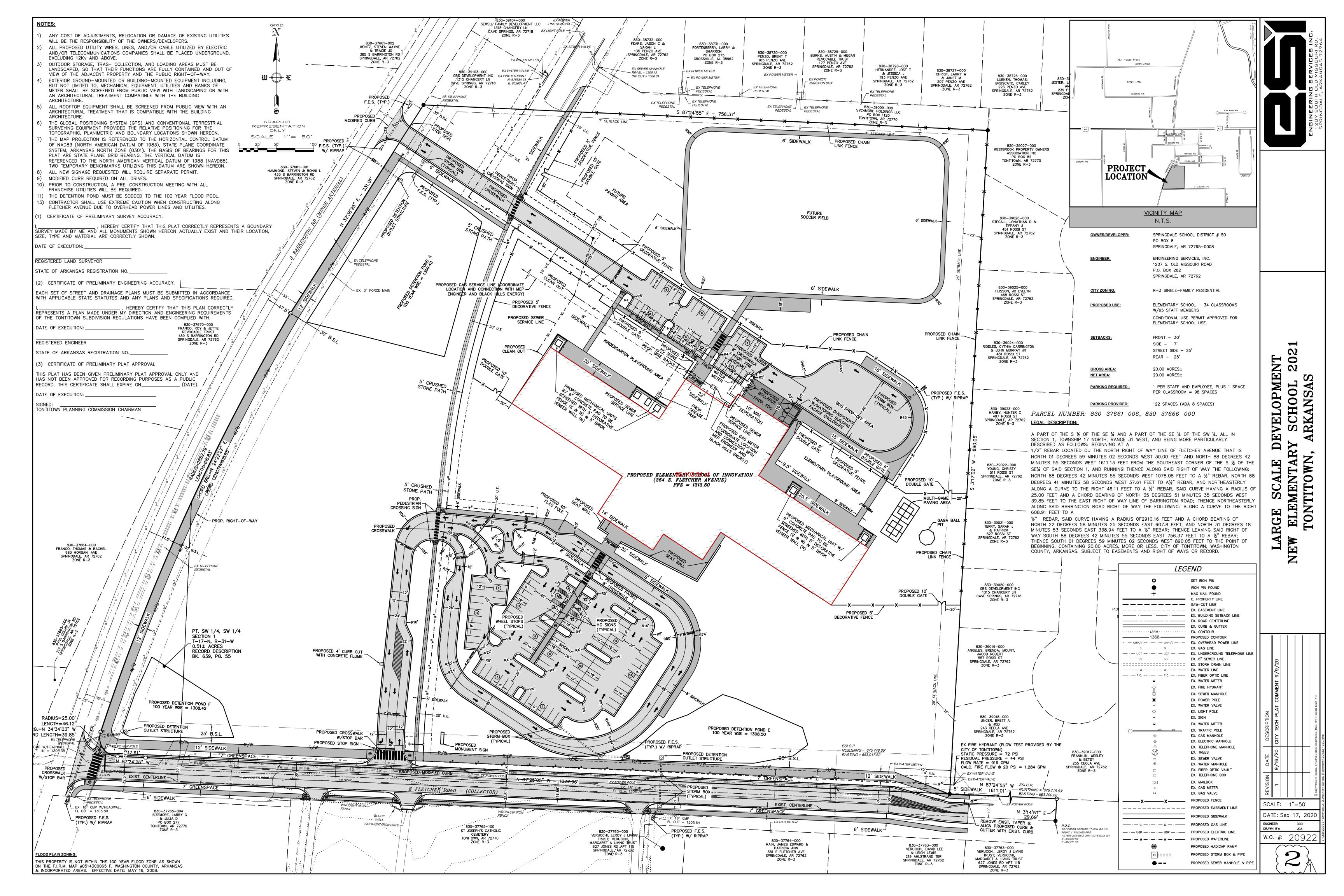
CONSULTING ENGINEERS SPRINGDALE, ARKANSAS PHONE: 479-751-8733 FAX: 479-751-8746 WWW.ENGINEERINGSERVICES.COM

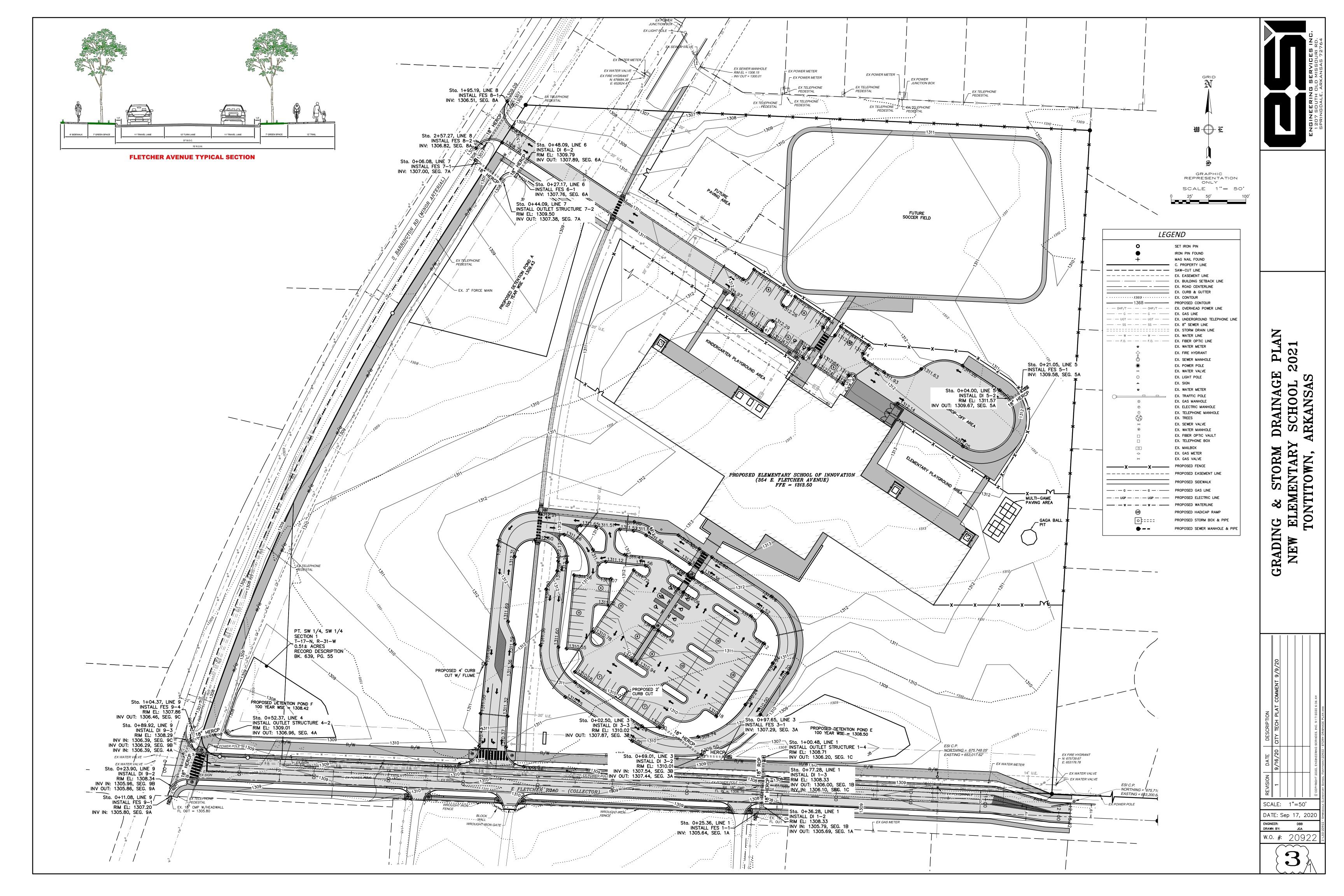


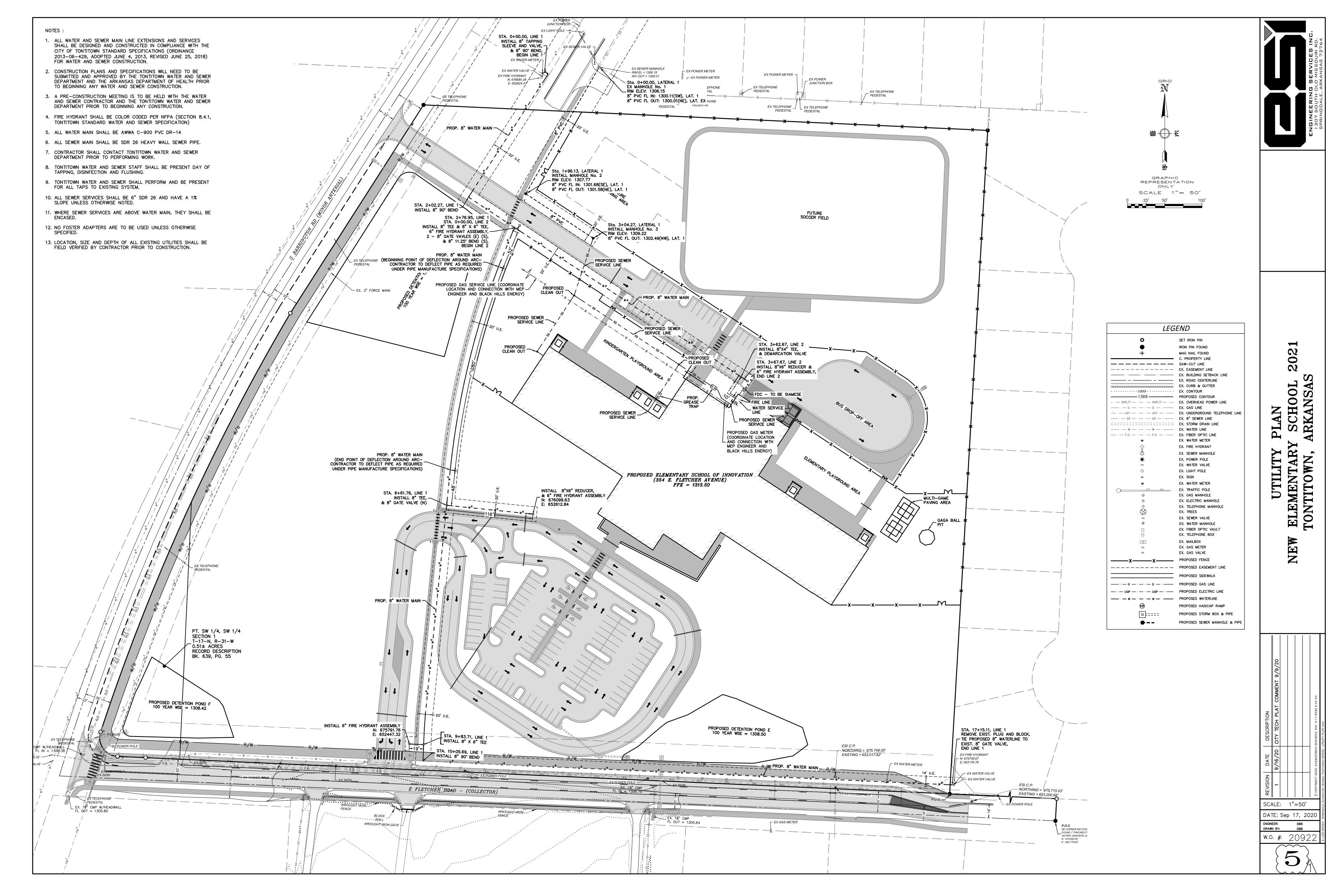
	INDEX OF SHEETS		
SHEET No.	DESCRIPTION		
0	COVER SHEET		
1	EXISTING CONDITIONS		
2	LARGE SCALE DEVELOPMENT		
3	GRADING & STORM DRAINAGE PLAN		
4	TYPICAL DETAILS		
5	UTILITY PLAN		
6	SANITARY SEWER PROFILE		
7	OFF-SITE UTILITY IMPROVEMENTS		
8	WATER & SEWER DETAILS		
9	PAVING PLAN		
10	STORM WATER POLLUTION PREVENTION PLAN		
11	STORM WATER POLLUTION PREVENTION DETAILS		
12	LANDSCAPE PLAN		

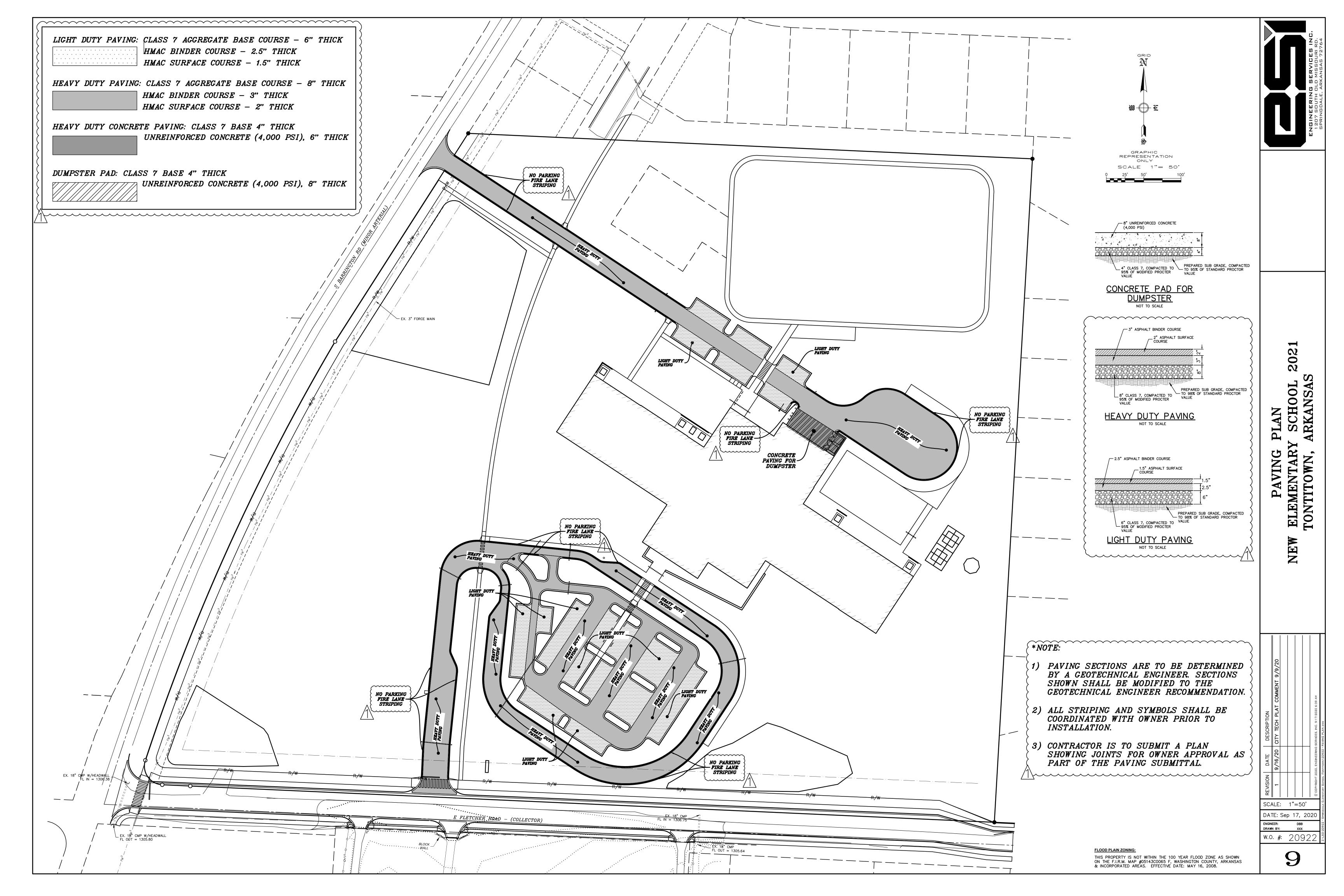
THOMAS J. APPEL, P.E. No. 13828 ENGINEERING SERVICES, INC.

- 1) ALL STREET AND DRAINAGE CONSTRUCTION MUST COMPLY WITH THE REQUIREMENTS OF THE CITY OF TONTITOWN, ARKANSAS.
- 2) ALL WATER AND SEWER CONSTRUCTION MUST COMPLY WITH THE SPECIFICATION REQUIREMENTS (ORDINANCE 2013-06-429, ADOPTED JUNE 4, 2013, REVISED JUNE 25, 2018) FOR THE CONSTRUCTION OF WATER AND SEWER FACILITIES OF THE CITY OF TONTITOWN WATER UTILITIES.
- 3) ALL FORCE MAIN & SANITARY SEWER CONSTRUCTION MUST COMPLY WITH THE REQUIREMENTS OF THE CITY OF TONTITOWN, ARKANSAS.
- 4) TRAFFIC SAFETY CONTROL FEATURES ARE TO BE PROVIDED BY THE CONTRACTOR.
- 5) ANY STREET CLOSURES ARE TO BE COORDINATED WITH THE CITY OF TONTITOWN 48 HOURS PRIOR TO WORK.
- 6) THERE ARE NO KNOWN WETLANDS ON THIS PROPERTY.
- 7) NO KNOWN EROSION PROBLEMS EXIST ON THIS SITE
- 8) THERE ARE NO KNOW EXISTING OR ABANDONED WATER WELLS, SUMPS, CESSPOOLS, SPRINGS, WATER IMPOUNDMENTS, OR UNDERGROUND STRUCTURES ON THIS PROPERTY.
- 9) THERE ARE NO KNOWN POTENTIALLY DANGEROUS AREAS.
- 10) THERE ARE NO KNOWN EXISTING OR PROPOSED GROUND LEASES OR ACCESS AGREEMENTS.
- 11) THIS PROPERTY IS NOT WITHIN THE 100 YEAR FLOOD PLAIN ZONE AS SHOWN ON THE F.I.R.M. MAP #05143C0065 F, WASHINGTON COUNTY, ARKANSAS & INCORPORATED AREAS. EFFECTIVE DATE: MAY 16, 2008.









WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY OF

4-INCHES OF TOPSOIL, AND HYDROMULCHED OR SODDED

- 1) NATURAL VEGETATION SHALL BE RETAINED WHEREVER
- 2) SEED AND MULCH SHALL BE PLACED (BY OWNER) IN
- 3) STRAW AND WOOD CHIPS SHALL BE PLACED TO PROVIDE TEMPORARY PROTECTION WHILE FINAL GRADING

*WATTLES MUST BE MAINTAINED UNTIL SITE IS PERMANENTLY

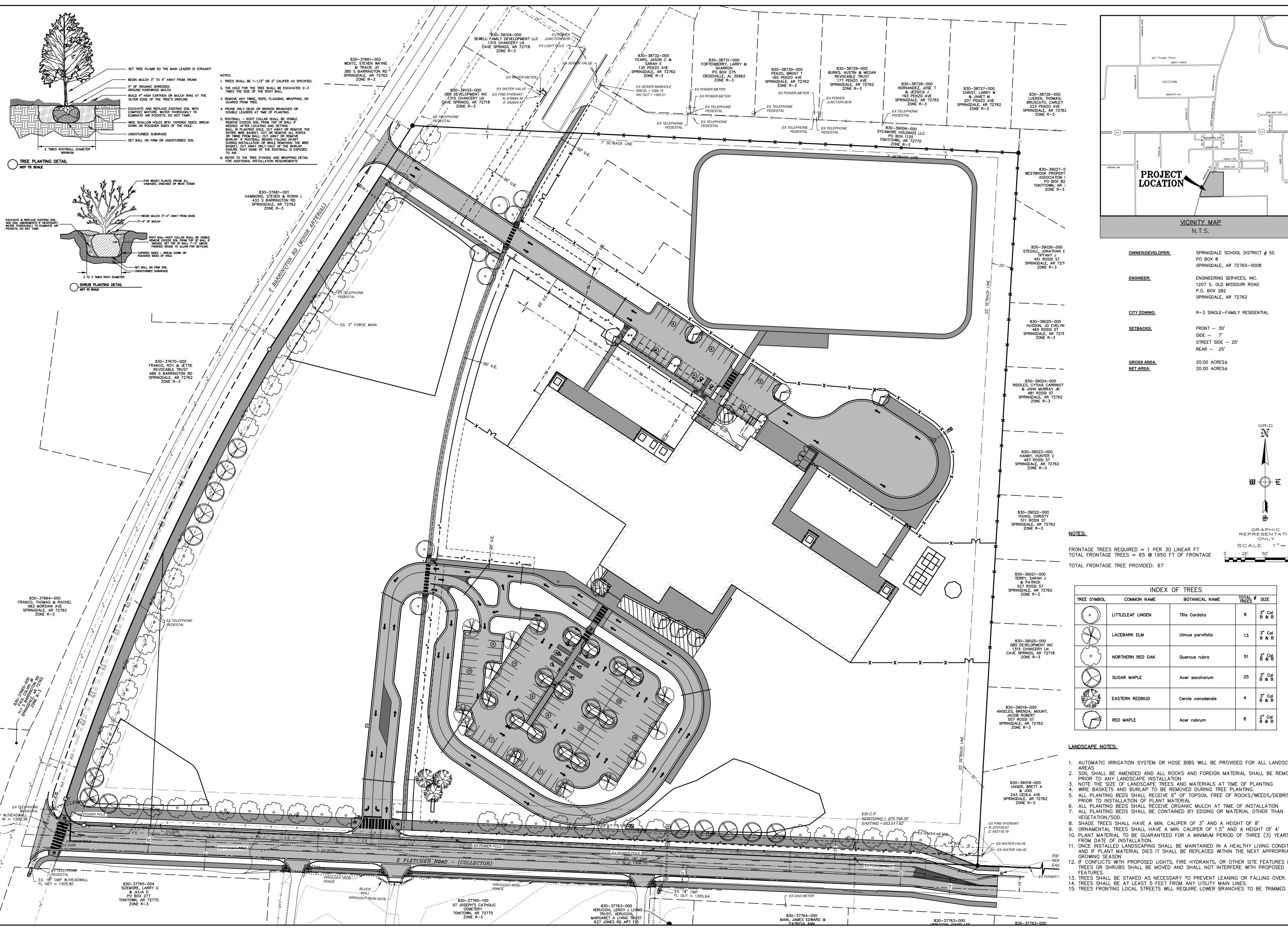
AREA OF SOIL DISTURBANCE: 19.65 ACRES FULL SCOPE 3.75 ACRES — EARLY GRADING

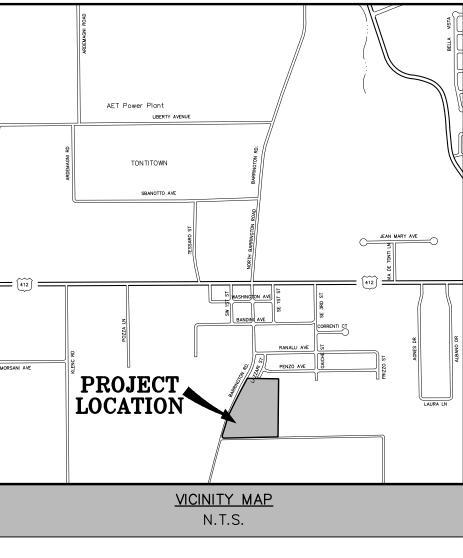
PREVENTIO 0 Ñ OL SAS JTION FER POLLUELE ELEMENTATION WATER NEW

SCALE: 1"=50' DATE: Sep 17, 2020

w.o. #: 20922

STORM





OWNER/DEVELOPER:

SPRINGDALE SCHOOL DISTRICT # 50 PO BOX 8 SPRINGDALE, AR 72765-0008

ENGINEERING SERVICES, INC. 1207 S. OLD MISSOURI ROAD P.O. BOX 282

CITY ZONING:

R-3 SINGLE-FAMILY RESIDENTIAL

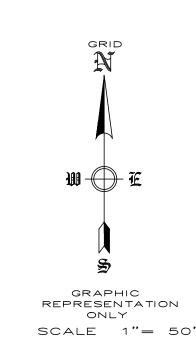
SIDE - 7' STREET SIDE - 25' REAR - 25'

FRONT - 30'

SPRINGDALE, AR 72762

GROSS AREA: NET AREA:

20.00 ACRES± 20.00 ACRES±



FRONTAGE TREES REQUIRED = 1 PER 30 LINEAR FT TOTAL FRONTAGE TREES = 65 @ 1950 FT OF FRONTAGE

	INDEX	OF TREES		
TREE SYMBOL	COMMON NAME	BOTANICAL NAME	TOTAL #	SIZE
·	LITTLELEAF LINDEN	Tilia Cordata	8	3" Co B & I
	LACEBARK ELM	Ulmus parvifolia	13	3" Co B & 1
	NORTHERN RED OAK	Quercus rubra	51	3" Co B &
	SUGAR MAPLE	Acer saccharum	25	3" Co B &
	EASTERN REDBIUD	Cercis canadensis	4	3" Co B & I
	RED MAPLE	Acer rubrum	8	2" Co

- 1. AUTOMATIC IRRIGATION SYSTEM OR HOSE BIBS WILL BE PROVIDED FOR ALL LANDSCAPED 2. SOIL SHALL BE AMENDED AND ALL ROCKS AND FOREIGN MATERIAL SHALL BE REMOVED
- PRIOR TO ANY LANDSCAPE INSTALLATION

 3. NOTE THE SIZE OF LANDSCAPE TREES AND MATERIALS AT TIME OF PLANTING

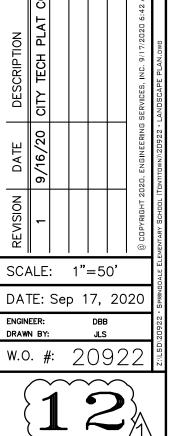
 4. WIRE BASKETS AND BURLAP TO BE REMOVED DURING TREE PLANTING.
- 5. ALL PLANTING BEDS SHALL RECEIVE 6" OF TOPSOIL FREE OF ROCKS/WEEDS/DEBRIS
- PRIOR TO INSTALLATION OF PLANT MATERIAL

 6. ALL PLANTING BEDS SHALL RECEIVE ORGANIC MULCH AT TIME OF INSTALLATION

 7. ALL PLANTING BEDS SHALL BE CONTAINED BY EDGING OR MATERIAL OTHER THAN
- 8. SHADE TREÉS SHALL HAVE A MIN. CALIPER OF 3" AND A HEIGHT OF 8'
 9. ORNAMENTAL TREES SHALL HAVE A MIN. CALIPER OF 1.5" AND A HEIGHT OF 4'
- 10. PLANT MATERIAL TO BE GUARANTEED FOR A MINIMUM PERIOD OF THREE (3) YEARS FROM DATE OF INSTALLATION. 11. ONCE INSTALLED LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY LIVING CONDITION, AND IF PLANT MATERIAL DIES IT SHALL BE REPLACED WITHIN THE NEXT APPROPRIATE
- 12. IF CONFLICTS WITH PROPOSED LIGHTS, FIRE HYDRANTS, OR OTHER SITE FEATURES EXIST, TREES OR SHRUBS SHALL BE MOVED AND SHALL NOT INTERFERE WITH PROPOSED FEATURES.

 13. TREES SHALL BE STAKED AS NECESSARY TO PREVENT LEANING OR FALLING OVER.

 14. TREES SHALL BE AT LEAST 5 FEET FROM ANY UTILITY MAIN LINES.



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SCHOOL RKANSAS

PLAN

CAPE

LANDS

EW



DISTRIC

RING Δ_

BUILDING PRO ELEV

19-072 JOB. NO. FOR REFERENCE ONLY

A2.01



FINDINGS and RECOMMENDATIONS

Findings of this study are summarized as follows:

- It is estimated that 671 AM peak hour trips and 274 school PM peak hour trips are projected with a maximum enrollment of 820 students plus (grades K-5).
- Capacity and level of service analysis was performed for existing traffic volumes, lane geometry and traffic control for the AM and school PM peak hours for the study intersection. All existing vehicle movements for existing traffic conditions at the study intersection of S. Barrington Road and E. Fletcher Avenue presently operates at what calculates as an acceptable LOS "B" or better for the AM and school PM peak hours.
- Capacity and LOS analysis was performed for projected traffic conditions of full build-out of the site to include a maximum enrollment of approximately 820 students (grades K-5) plus fiveyears background growth for the AM and school PM peak hours for the study intersections. All vehicle movements are expected to operate at what calculates as LOS "D" or better for these projected five-year traffic conditions at the study intersections for the AM and school PM peak hours except for the westbound leftturn vehicle movement on E. Fletcher Avenue at S. Barrington Road during the AM peak hour (LOS "E") with "Stop" sign control. The addition of an approximate 120-foot (plus taper) westbound left-turn lane on E. Fletcher Avenue at S. Barrington Road has been included in this analysis. Widening E. Fletcher Avenue to accommodate a westbound left-turn lane was found to be necessary for this intersection. The westbound left-turn 95th percentile vehicle queue on E. Fletcher Avenue approach to S. Barrington Road is calculated to be approximately only two to three vehicles with an approximate 21.2 second per vehicle delay during the highest volume AM peak hour with proposed lane geometry and "Stop" sign control.
- The access drive from E. Fletcher Avenue to the school campus, if build as shown on attached site plan, would provide approximately 1,980 linear feet of available vehicle queuing (includes





double-stacking). This is more than the calculated vehicle queue length needed of 1,353 linear feet for a maximum enrollment of 820 students. It is expected that the planned school vehicle queuing will likely not exceed the proposed available storage within the site with the access drive constructed as planned.

- Based on peak hour volume criteria set out in the MUTCD, it
 was found that traffic signal warrants are not projected to be
 met at the intersection of S. Barrington Road and E. Fletcher
 Avenue for projected 5-year traffic conditions during either the
 AM or School PM peak hours.
- As shown on the attached site plan, it is recommended to construct the access drive along S. Barrington Road (North Drive) to consist of one inbound receiving lane, an outbound lane. It will serve as the access drive to support services and bus access.
- As shown on the attached site plan, it is recommended to construct the access drive along E. Fletcher Avenue (South Drive) to consist of one inbound receiving and one left-turn and one right left-turn outbound lane. South Drive is proposed to serve access to the parent pickup/drop-off area as well as the parking area for staff.
- It is recommended to construct roadway widening for addition of an approximate 120-foot (plus taper) westbound left-turn lane on E. Fletcher Avenue at S. Barrington Road to coincide with the school development.

The conclusion of traffic operational findings associated with this study is that projected traffic associated with the planned elementary school can be accommodated adequately by the adjacent street that offers access to and from the site for projected 5-year traffic conditions to include a maximum enrollment of 820 students with the recommendations included in this study.



