

SYSTEM #1

Pipe Report

Pipe Section	Upstream Node	Downstream Node	Discharge (cfs)	Constructed (ft/ft)	Length (ft)	Section Size	Mannings n	Upstream Invert (ft)	Downstream Invert (ft)	Upstream Ground (ft)	Downstream Ground (ft)	Upstream HGL (ft)	Downstream HGL (ft)
5-Yr	I-4	I-3	3.5	0.011905	42	15 inch	0.013	189.00	188.50	193.90	193.90	190.97	190.84
	I-1	I-2	5.07	0.004762	42	15 inch	0.013	190.50	190.30	193.80	193.80	192.27	192.01
	I-2	I-3	10.09	0.003114	546	24 inch	0.013	190.20	188.50	193.80	193.90	191.84	190.84
	I-3	Outlet	15.86	0.003738	107	24 inch	0.013	188.40	188.00	193.90	194.00	190.53	190.00

Node Report

Node	Area (acres)	Runoff Coefficient	Tc (min)	Rainfall Intensity (in/hr)	Discharge (cfs)	Ground Elevation (ft)	HGL In (ft)	HGL Out (ft)
I-4	1.62	0.47	15	4.56	3.5	193.90	191.03	190.97
I-1	2.45	0.45	15	4.56	5.07	193.80	192.40	192.27
I-2	2.45	0.45	15	4.54	10.09	193.80	192.01	191.84
I-3	1.62	0.47	15	4.22	15.86	193.90	190.84	190.53
Outlet	N/A	N/A	N/A	4.18	N/A	194.00	190.00	190.00

TYPICAL DITCH SECTION A-A
Worksheet for Trapezoidal Channel

Project Description	
Project File	f:\hydro\projects\nemiddles\ditch.fm2
Worksheet	NE MIDDLE SCHOOL - DITCH SECTION A-A
Flow Element	Trapezoidal Channel
Method	Manning's Formula
Solve For	Discharge

Input Data	
Mannings Coefficient	0.030
Channel Slope	0.003000 ft/ft
Depth	4.00 ft
Left Side Slope	4.000000 H : V
Right Side Slope	4.000000 H : V
Bottom Width	5.00 ft

Results		
Discharge	386.81	cfs
Flow Area	84.00	ft ²
Wetted Perimeter	37.98	ft
Top Width	37.00	ft
Critical Depth	3.01	ft
Critical Slope	0.011223	ft/ft
Velocity	4.60	ft/s
Velocity Head	0.33	ft
Specific Energy	4.33	ft
Froude Number	0.54	
Flow is subcritical.		

TYPICAL DITCH SECTION B-B
Worksheet for Trapezoidal Channel

Project Description	
Project File	f:\hydro\projects\nemiddles\ditchbb.fm2
Worksheet	NE MIDDLE SCHOOL - DITCH SECTION B-B
Flow Element	Trapezoidal Channel
Method	Manning's Formula
Solve For	Discharge

Input Data	
Mannings Coefficient	0.030
Channel Slope	0.005000 ft/ft
Depth	4.00 ft
Left Side Slope	4.000000 H : V
Right Side Slope	4.000000 H : V
Bottom Width	20.00 ft

Results		
Discharge	982.19	cfs
Flow Area	144.00	ft ²
Wetted Perimeter	52.98	ft
Top Width	52.00	ft
Critical Depth	3.35	ft
Critical Slope	0.010038	ft/ft
Velocity	6.82	ft/s
Velocity Head	0.72	ft
Specific Energy	4.72	ft
Froude Number	0.72	
Flow is subcritical.		

STAFF REPORT
(One-Step Final Plat)

CASE NUMBER: SUB 2001-119 – NORTHEAST MIDDLE SCHOOL ADDITION

OWNER/APPLICANT: Koch Industries, Inc., Attn: Brent Stewart, P.O. Box 2256, Wichita, KS 67201-2256

SURVEYOR/ENGINEER: Baughman Company, P.A., 315 Ellis, Wichita, KS 67211

LOCATION: South side of 45th St. North, West of Oliver

SITE SIZE: 42.31 Acres

NUMBER OF LOTS

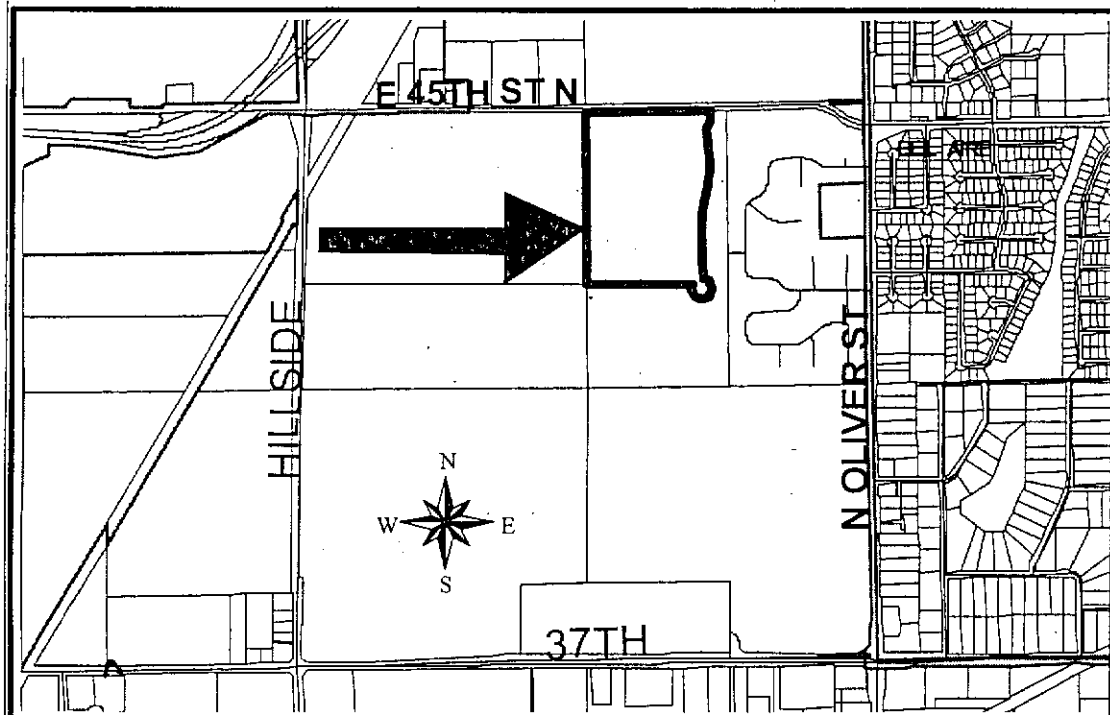
Residential:	1
Office:	
Commercial:	
Industrial:	
Total:	1

MINIMUM LOT AREA: 39.35 Acres

CURRENT ZONING: SF-5, Single-Family Residential

PROPOSED ZONING: Same

VICINITY MAP



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Note: This is unplatted property located in the City of Wichita.

MAPD recommends the deferral of this plat due to the unknown pattern of development for the abutting properties; the remainder strip of land to the east adjoining a potential collector street; and the exclusion from the plat of an undevelopable strip of land between the west line of plat and the creek. In addition, it is recommended that a meeting be held with the School, Koch Industries and the Parks and Recreation Department to discuss the potential for joint planning and shared use of outdoor land and indoor facilities.

Should the Subdivision Committee consider the plat at this time, the following conditions shall apply.

STAFF COMMENTS:

- A. **City Engineering** needs to comment on the need for guarantees or easements.
- B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- C. **City Engineering** needs to comment on the status of the applicant's drainage plan.
- D. **Traffic Engineering** requests a 66-ft right-of-way width for Broadview Circle.
- E. The applicant shall guarantee the installation of the proposed street to the urban street standard. The guarantee shall also provide for sidewalks on both sides of the street.
- F. Provisions shall be made for ownership and maintenance of the proposed reserves. The applicant shall either form a lot owners' association prior to recording the plat or shall submit a covenant stating when the association will be formed, when the reserves will be deeded to the association and who is to own and maintain the reserves prior to the association taking over those responsibilities.
- G. For those reserves being platted for drainage purposes, the required covenant which provides for ownership and maintenance of the reserves shall grant, to the City, the authority to maintain the drainage reserves in the event the owner(s) fail to do so. The covenant shall provide for the cost of such maintenance to be charged back to the owner(s) by the governing body.
- H. **City Fire Department** needs to comment on the street length of Broadview Circle (1650 feet) exceeding the 1,200-ft limitation of the Subdivision Regulations. Approval of the plat will require a modification.
- I. The **City Fire Department/GIS** needs to comment on the plat's street names.
- J. The applicant shall submit a copy of the instrument which establishes the pipeline easements on the property, which verifies that the easements shown are sufficient and that utilities may be located adjacent to and within the easements. Any relocation, lowering or encasement of the pipeline, required by this development, will not be at the expense of the City.
- K. The applicant's agent shall determine any setback requirements for the pipelines by researching the text of the pipeline agreements. If a setback from the pipeline easements is provided for in the pipeline easement agreements, it shall be indicated on the face of the plat.

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- L. The owners noted in the platting binder need to be signatories to the plat, or a revision to the binder showing that the site's ownership is only in the party now shown on the final plat.
- M. The platting text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.
- N. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)
- O. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.
- P. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.
- Q. The applicant is advised that various State and Federal requirements (specifically but not limited to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 317, Valley Center, KS 67147) for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.
- R. The owner of the subdivision should be aware of the fact that the development of any subdivision greater than five (5) acres in size may require an NPDES Storm Water Discharge Permit from the Kansas Department of Health and Environment in Topeka. Further, on all construction sites, the City of Wichita requires that best management practices be used to reduce pollutant loadings in storm water runoffs.
- S. Perimeter closure computations shall be submitted with the final plat tracing.
- T. Recording of the plat within thirty (30) days after approval by the City Council and/or County Commission.
- U. The representatives from the utility companies should be prepared to comment on the need for any additional utility easements to be platted on this property.
- V. The applicant is reminded that a disk shall be submitted with the final plat tracing to the Planning Department detailing this plat in digital format in AutoCAD. This will be used by the City and County GIS Department.

Neclose

CLOSURE - NORTHEAST MIDDLE SCHOOL ADDITION

PT 1 North: 21120.9855 East : 17731.5055
Line Course: N 89-54-40 E Length: 1152.0000
PT 2 North: 21122.7727 East : 18883.5042
Line Course: S 00-05-20 E Length: 130.0000
PT 3 North: 20992.7728 East : 18883.7058
Line Course: S 09-00-05 W Length: 75.9500
PT 4 North: 20917.7582 East : 18871.8228
Line Course: S 00-05-20 E Length: 342.7300
PT 5 North: 20575.0286 East : 18872.3545
Curve Length: 357.8366 Radius: 2533.0000
Delta: 8-05-39 Tangent: 179.2182
Chord: 357.5425 Course: S 03-57-30 W
Course In: S 89-54-40 W Course Out: S 81-59-41 E
RP North: 20571.0989 East : 16339.3576
PT 6 End North: 20218.3424 East : 18847.6741
Curve Length: 419.4735 Radius: 2467.0000
Delta: 9-44-32 Tangent: 210.2468
Chord: 418.9748 Course: S 03-08-03 W
Course In: S 81-59-41 E Course Out: S 88-15-47 W
RP North: 19874.7773 East : 21290.6338
PT 7 End North: 19800.0007 East : 18824.7673
Line Course: S 01-44-13 E Length: 292.7100
PT 8 North: 19507.4252 East : 18833.6396
Curve Length: 423.5011 Radius: 90.0000
Delta: 269-36-33 Tangent: 90.6160
Chord: 127.7126 Course: S 64-34-40 W
Course In: S 19-46-23 W Course Out: N 70-37-04 W
RP North: 19422.7316 East : 18803.1930
PT 9 End North: 19452.5997 East : 18718.2937
Line Course: S 89-54-40 W Length: 999.3100
PT 10 North: 19451.0494 East : 17718.9849
Line Course: N 00-25-47 E Length: 1670.0000
PT 1 North: 21121.0024 East : 17731.5099