CITY OF LA CROSSE, WI
General Billing - 126307 - 2015
001869-0013 Amber W. 06/05/2015 04:31PM
9271 - THREE SIXTY REAL ESTATE SOLUTI

PETITION FOR CHANGE TO ZONING
CITY OF LA CROSSE

Payment Amount: 500.00

AMENDMENT OF ZONING DISTRICT BOUNDARIES
For a Planned Development District or
Traditional Neighborhood District

Petitioner (name and address): School House Properties LLC
119 North 19th St
La Crosse WI 54601

Owner of site (name and address): Same

Address of subject premises: 1243 Badger St, 507, 513, & 517 13th St N,
~~1234 & 1240 La Crosse St, 531 13th St N,~~ 529 13th St N

Tax Parcel No.: 17-20131-120 17-20131-120 17-20131-140
17-20132-10
~~17-20110-70~~
17-20140-65
17-20132-50
17-20132-40

Legal Description: Tax bills Attached

PDD/TND: Y General ____ Specific ____ General & Specific

Zoning District Classification: R-6

Proposed Zoning Classification: PDD- General

Is the property located in a floodway/floodplain zoning district? ___ Yes X No

Is the property/structure listed on the local register of historic places? ___ Yes X No

Is the Rezoning consistent with Future Land Use Map of the Comprehensive Plan? X Yes ___ No

Is the consistent with the policies of the Comprehensive Plan? Y Yes ___ No

Property is Presently Used For: Rental Housing

Property is Proposed to be Used For: Rental Housing

Proposed Rezoning is Necessary Because (Detailed Answer): Flexibility on design for parking and mixes of use

Chapter 115, Article IV of the La Crosse Municipal Code
(Rev. 08/2014)

AFFIDAVIT

STATE OF)
) ss
COUNTY OF)

The undersigned, Marvin Wanders, being duly sworn states:

1. That the undersigned is an adult resident of the City of LaCrosse, State of Wisconsin.

2. That the undersigned is (one of the) legal owner(s) of the property located at Tax bills attached.

3. By signing this affidavit, the undersigned authorizes the application for a conditional use permit/district change or amendment (circle one) for said property.

Subscribed and sworn to before me this 1st day of June, 2015

Louise K. Olson
Notary Public
My Commission expires 10/27/2017

529 13th Street N

Proposed Rezoning will not be Detrimental to the Neighborhood or Public Welfare Because (Detailed Answer):

Proposed Rezoning will not be Detrimental to the City's Long Range Comprehensive Plan Goals, Objectives, Actions and Policies Because (Detailed Answer):

The undersigned depose and state that I/we am/are the owner of the property involved in this petition and that said property was purchased by me/us on the _____ day of _____, _____.

I hereby certify that I am the owner or authorized agent of the owner (include affidavit signed by owner) and that I have read and understand the content of this petition and that the above statements and attachments submitted hereto are true and correct to the best of my knowledge and belief.

Karen Kellicutt
(signature)

608-784-5819 (telephone) 6-5-15 (date)

Karen-Kellicutt@gbpd.com
(email)

STATE OF WISCONSIN)
) ss.
COUNTY OF LA CROSSE)

Personally appeared before me this 5th day of June, 2015, the above named individual, to me known to be the person who executed the foregoing instrument and acknowledged the same.

Barbara A Benson
Notary Public
My Commission Expires: 12-26-2017

At least 30 days prior to filing the petition for approval of the designation of a Planned Development District, the owner or his agent making such petition shall meet with the Planning Department, Engineering Department and Building & Inspections Department to discuss the scope and proposed nature of the contemplated development. ***(Pursuant sec. 115-156(3)(e)(1) of the Municipal Code of Ordinances of the City of La Crosse.)***

PETITIONER SHALL, BEFORE FILING, HAVE PETITION REVIEWED AND INFORMATION VERIFIED BY THE DIRECTOR OF PLANNING & DEVELOPMENT.

Review was made on the 5th day of June, 2015

Signed: Senior Planner
Director of Planning & Development

STATE OF WISCONSIN
CITY OF LA CROSSE
LA CROSSE COUNTY

REAL ESTATE PROPERTY TAX BILL FOR 2014

BILL NO. 04985

TAX ACCOUNT NUMBER: 17-20131-120
JURISDICTION CODE: 5863

IMPORTANT: Correspondence should refer to tax account number.
See enclosed form for important information.
Be sure this description covers your property. This description is for tax bill only and may not be a legal description.

c5**s1523**5-DIGIT 54601
SCHOOL HOUSE PROPERTIES LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

32-16 N-07 Acres 0.160
Document No 1388047
1243 BADGER ST
USTICKS ADDITION LOT 7 BLOCK
4 EX PRT USED AS FOREST AVE
LOT SZ: IRR

Our office will be closed on December 24, 25, 31, 2014 and January 1, 2015

Assessed Value Land	Ass'd Value Improvements	Total Assessed Value	Ave. Assmt. Ratio	Net Assessed Value Rate (Does NOT reflect First Dollar or Lottery Credit)
18,400	94,100	112,500	0.9561	0.029036821
Est. Fair Mkt. Land	**Est. Fair Mkt. Improvements**	**Total Est. Fair Mkt.**	☐ A STAR IN THIS BOX MEANS PRIOR YEAR TAXES CONTACT COUNTY TREASURER.	School taxes reduced by school levy tax credit
19,200	98,400	117,600		206.90

Taxing Jurisdiction	2013 Est. State Aids Allocated Tax Dist.	2014 Est. State Aids Allocated Tax Dist.	2013 Net Tax	2013 vs 2014 % Tax Change	2014 Net Tax
STATE OF WISCONSIN			19.29	3.3	19.92
La Crosse County	2,039,293	2,030,258	425.25	1.6	432.13
Local Municipality	13,305,549	13,327,456	1,376.84	0.0	1,376.84
LA CROSSE SCHOOL	26,959,988	28,810,384	1,241.29	-0.8	1,250.79
WTC	1,129,699	1,086,288	282.17	-33.7	186.96
Total			3,364.84	-2.9	3,266.64
		First Dollar Credit	82.52	-2.2	80.72
		Lottery & Gaming Credit	0.00	0.0	0.00
		Net Property Tax	3,282.32	-2.9	3,185.92

LOCAL TREASURER

Make Check Payable to:

LA CROSSE CITY TREASURER

CITY OF LA CROSSE
400 LA CROSSE ST
LA CROSSE, WI 54601

OTHER:

Total of Net Tax & Other 3,185.92

☐ CHECK FOR BILLING ADDRESS CHANGE

BILL NO. 04985

TAX ACCOUNT NUMBER 17-20131-120

Use Name & Address Below for Return to Taxpayer.

SCHOOL HOUSE PROPERTIES LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

TOTAL DUE FOR FULL PAYMENT

PAY BY **JANUARY 31, 2015** 3,185.92

Warning: If not paid by due dates, installment option is lost and the total tax is delinquent subject to interest and if applicable, penalty. (See Enclosed)

PAY TO CITY TREAS. THE MINIMUM PAYMENTS SHOWN BELOW BY DUE DATES LISTED TO AVOID INTEREST & PENALTY

DUE DATES	AMOUNT
1/31/2015	796.48
3/31/2015	796.48
5/31/2015	796.48
7/31/2015	796.48

Please enclose a copy of bill with your payment. The validated copy will be returned to you.

STATE OF WISCONSIN
CITY OF LA CROSSE
LA CROSSE COUNTY

REAL ESTATE PROPERTY TAX BILL FOR 2014

BILL NO. 04986

TAX ACCOUNT NUMBER: 17-20131-130
JURISDICTION CODE: 5863

IMPORTANT: Correspondence should refer to tax account number.
See enclosed form for important information.
Be sure this description covers your property. This description is for tax bill only and may not be a legal description.

c5**s1524**5-DIGIT 54601
SCHOOL HOUSE PROPERTIES LLC
C/O HERITAGE PROPERTY MANAGEMENT LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

32-16 N-07 Acres 0.110
Document No 1388047
507 13TH ST N
USTICKS ADDITION S 40 FT LOT 8 BLOCK 4 EXC E 30 FT LOT S
Z: 40 X 120

Our office will be closed on December 24, 25, 31, 2014 and January 1, 2015

Assessed Value Land	Ass'd Value Improvements	Total Assessed Value	Ave. Assmt. Ratio	Net Assessed Value Rate (Does NOT reflect First Dollar or Lottery Credit)	0.029036821
14,400	44,400	58,800	0.9561		
Est. Fair Mkt. Land	Est. Fair Mkt. Improvements	Total Est. Fair Mkt.	☐ A STAR IN THIS BOX MEANS PRIOR YEAR TAXES CONTACT COUNTY TREASURER.	School taxes reduced by school levy tax credit	108.14
15,100	46,400	61,500			

Taxing Jurisdiction	2013 Est. State Aids Allocated Tax Dist.	2014 Est. State Aids Allocated Tax Dist.	2013 Net Tax	2013 vs 2014 % Tax Change	*2014 Net Tax*
STATE OF WISCONSIN			10.08	3.3	10.41
La Crosse County	2,039,293	2,030,238	222.26	1.6	225.86
Local Municipality	13,305,549	13,327,456	719.63	0.0	719.63
LA CROSSE SCHOOL	26,959,988	28,810,384	659.24	-0.8	653.75
WTC	1,129,699	1,086,288	147.48	-33.7	97.72
Total			1,758.69	-2.9	1,707.37
		First Dollar Credit	82.52	-2.2	80.72
		Lottery & Gaming Credit	0.00	0.0	0.00
		Net Property Tax	1,676.17	-3.0	1,626.65

LOCAL TREASURER

Make Check Payable to:

LA CROSSE CITY TREASURER

CITY OF LA CROSSE
400 LA CROSSE ST
LA CROSSE, WI 54601

OTHER:

Total of Net Tax & Other 1,626.65

☐ CHECK FOR BILLING ADDRESS CHANGE

BILL NO. 04986

TAX ACCOUNT NUMBER 17-20131-130

Use Name & Address Below for Return to Taxpayer.

SCHOOL HOUSE PROPERTIES LLC
C/O HERITAGE PROPERTY MANAGEMENT LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

TOTAL DUE FOR FULL PAYMENT

PAY BY **JANUARY 31, 2015** 1,626.65

Warning: If not paid by due dates, installment option is lost and the total tax is delinquent subject to interest and if applicable, penalty. (See Enclosed)

PAY TO CITY TREAS. THE MINIMUM PAYMENTS SHOWN BELOW BY DUE DATES LISTED TO AVOID INTEREST & PENALTY.

DUE DATES	AMOUNT
1/31/2015	406.67
3/31/2015	406.66
5/31/2015	406.66
7/31/2015	406.66

Please enclose a copy of bill with your payment. The validated copy will be returned to you.

STATE OF WISCONSIN
CITY OF LA CROSSE
LA CROSSE COUNTY

REAL ESTATE PROPERTY TAX BILL FOR 2014

BILL NO. 04987

TAX ACCOUNT NUMBER: 17-20131-140
JURISDICTION CODE: 5863

IMPORTANT: Correspondence should refer to tax account number.
See enclosed form for important information.
Be sure this description covers your property. This description is for tax bill only and may not be a legal description.

c5**s1525**5-DIGIT 54601
SCHOOL HOUSE PROPERTIES LLC
C/O HERITAGE PROPERTY MANAGEMENT LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

32-16 N-07 Acres 0.110
Document No 1388047
513 13TH ST N
USTICKS ADDITION N 20FT LOT
8 & S 20FT LOT 9 BLOCK 4 EX
E 30FT LOT SZ: 40 X 120

Our office will be closed on December 24, 25, 31, 2014 and January 1, 2015

Assessed Value Land	Ass'd Value Improvements	Total Assessed Value	Ave. Assmt. Ratio	Net Assessed Value Rate (Does NOT reflect First Dollar or Lottery Credit)
14,400	58,200	72,600	0.9561	0.029036821
Est. Fair Mkt. Land	**Est. Fair Mkt. Improvements**	**Total Est. Fair Mkt.**	☐ A STAR IN THIS BOX MEANS PRIOR YEAR TAXES CONTACT COUNTY TREASURER.	School taxes reduced by school levy tax credit
15,100	60,900	76,000		133.52

Taxing Jurisdiction	2013 Est. State Aids Allocated Tax Dist.	2014 Est. State Aids Allocated Tax Dist.	2013 Net Tax	2013 vs 2014 % Tax Change	*2014 Net Tax*
STATE OF WISCONSIN			12.43	3.5	12.86
La Crosse County	2,039,293	2,030,258	274.43	1.6	278.87
Local Municipality	13,305,549	13,327,456	888.52	0.0	888.52
LA CROSSE SCHOOL	26,959,988	28,810,384	813.95	-0.8	807.18
WTC	1,129,699	1,086,288	182.10	-33.7	120.65
Total			2,171.43	-2.9	2,108.08
		First Dollar Credit	82.52	-2.2	80.72
		Lottery & Gaming Credit	0.00	0.0	0.00
		Net Property Tax	2,088.93	-2.9	2,027.36

LOCAL TREASURER

Make Check Payable to:

LA CROSSE CITY TREASURER

CITY OF LA CROSSE
400 LA CROSSE ST
LA CROSSE, WI 54601

OTHER:

Total of Net Tax & Other 2,027.36

☐ CHECK FOR BILLING ADDRESS CHANGE

TOTAL DUE FOR FULL PAYMENT

PAY BY **JANUARY 31, 2015** 2,027.36

Warning: If not paid by due dates, installment option is lost and the total tax is delinquent subject to interest and if applicable, penalty. (See Enclosed)

BILL NO. 04987

TAX ACCOUNT NUMBER 17-20131-140

Use Name & Address Below for Return to Taxpayer.

SCHOOL HOUSE PROPERTIES LLC
C/O HERITAGE PROPERTY MANAGEMENT LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

PAY TO CITY TREAS. THE MINIMUM PAYMENTS SHOWN BELOW BY DUE DATES LISTED TO AVOID INTEREST & PENALTY

DUE DATES	AMOUNT
1/31/2015	506.84
3/31/2015	506.84
5/31/2015	506.84
7/31/2015	506.84

Please enclose a copy of bill with your payment. The validated copy will be returned to you.

STATE OF WISCONSIN
CITY OF LA CROSSE
LA CROSSE COUNTY

REAL ESTATE PROPERTY TAX BILL FOR 2014

BILL NO. 04988

TAX ACCOUNT NUMBER: 17-20132-010
JURISDICTION CODE: 5863

IMPORTANT: Correspondence should refer to tax account number.
See enclosed form for important information.
Be sure this description covers your property. This description is for tax bill only and may not be a legal description.

c5**s1526**5-DIGIT 54601
SCHOOL HOUSE PROPERTIES LLC
C/O HERITAGE PROPERTY MANAGEMENT LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

32-16 N-07 Acres 0.110
Document No 1388047
517 13TH ST N
USTICKS ADDITION W 120 FT OF
N 40 FT LOT 9 BLOCK 4 LOT S
Z: 40 X 120

Our office will be closed on December 24, 25, 31, 2014 and January 1, 2015

Assessed Value Land	Ass'd Value Improvements	Total Assessed Value	Ave. Assmt. Ratio	Net Assessed Value Rate (Does NOT reflect First Dollar or Lottery Credit)	0.029036821
14,400	45,500	59,900	0.9561		
Est. Fair Mkt. Land	Est. Fair Mkt. Improvements	Total Est. Fair Mkt.	☐ A STAR IN THIS BOX MEANS PRIOR YEAR TAXES CONTACT COUNTY TREASURER.	School taxes reduced by school levy tax credit	110.16
15,100	47,600	62,700			

Taxing Jurisdiction	2013 Est. State Aids Allocated Tax Dist.	2014 Est. State Aids Allocated Tax Dist.	2013 Net Tax	2013 vs 2014 % Tax Change	*2014 Net Tax*
STATE OF WISCONSIN			10.27	3.3	10.61
La Crosse County	2,039,293	2,030,258	226.42	1.6	230.08
Local Municipality	13,305,549	13,327,456	733.09	0.0	733.09
LA CROSSE SCHOOL	26,959,988	28,810,384	671.57	-0.8	665.98
WTC	1,129,699	1,086,283	150.24	-33.7	99.55
Total			1,791.59	-2.9	1,739.31
First Dollar Credit			82.52	-2.2	80.72
Lottery & Gaming Credit			0.00	0.0	0.00
Net Property Tax			1,709.07	-3.0	1,658.59

LOCAL TREASURER

Make Check Payable to:

LA CROSSE CITY TREASURER

CITY OF LA CROSSE
400 LA CROSSE ST
LA CROSSE, WI 54601

OTHER:

Total of Net Tax & Other 1,658.59

☐ CHECK FOR BILLING ADDRESS CHANGE

BILL NO. 04988

TAX ACCOUNT NUMBER 17-20132-010

Use Name & Address Below for Return to Taxpayer

TOTAL DUE FOR FULL PAYMENT

PAY BY **JANUARY 31, 2015** 1,658.59

Warning: If not paid by due dates, installment option is lost and the total tax is delinquent subject to interest and if applicable, penalty. (See Enclosed)

SCHOOL HOUSE PROPERTIES LLC
C/O HERITAGE PROPERTY MANAGEMENT LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

PAY TO CITY TREAS. THE MINIMUM PAYMENTS SHOWN BELOW BY DUE DATES LISTED TO AVOID INTEREST & PENALTY.

DUE DATES	AMOUNT
1/31/2015	414.67
3/31/2015	414.64
5/31/2015	414.64
7/31/2015	414.64

Please enclose a copy of bill with your payment. The validated copy will be returned to you.

STATE OF WISCONSIN
CITY OF LA CROSSE
LA CROSSE COUNTY

REAL ESTATE PROPERTY TAX BILL FOR 2014

BILL NO. 04992

TAX ACCOUNT NUMBER: 17-20132-050
JURISDICTION CODE: 5863

IMPORTANT: Correspondence should refer to tax account number.
See enclosed form for important information.
Be sure this description covers your property. This description is for tax bill only and may not be a legal description.

c5**s1527**5-DIGIT 54601
SCHOOL HOUSE PROPERTIES LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

32-16 N-07 Acres 0.119
Document No 1512453
531 13TH ST N
USTICKS ADDITION LOT 12 BLK
4 LOT SZ: 32.83 X 150

Our office will be closed on December 24, 25, 31, 2014 and January 1, 2015

Assessed Value Land	Ass'd Value Improvements	Total Assessed Value	Ave. Assmt. Ratio	Net Assessed Value Rate (Does NOT reflect First Dollar or Lottery Credit)
13,200	87,700	100,900	0.9561	0.029036821
Est. Fair Mkt. Land	**Est. Fair Mkt. Improvements**	**Total Est. Fair Mkt.**	☐ A STAR IN THIS BOX MEANS PRIOR YEAR TAXES CONTACT COUNTY TREASURER.	School taxes reduced by school levy tax credit
13,800	91,700	105,500		185.57

Taxing Jurisdiction	2013 Est. State Aids Allocated Tax Dist.	2014 Est. State Aids Allocated Tax Dist.	2013 Net Tax	2013 vs 2014 % Tax Change	*2014 Net Tax*
STATE OF WISCONSIN			17.30	-3.3	17.87
La Crosse County	2,039,293	2,040,258	381.40	1.6	387.57
Local Municipality	13,305,549	13,327,456	1,234.87	0.0	1,234.87
LA CROSSE SCHOOL	26,959,988	28,810,384	1,131.24	-0.8	1,121.82
WTC	1,129,699	1,086,288	253.08	+33.7	167.68
Total			3,017.89	+2.9	2,929.81
First Dollar Credit			82.52	-2.2	80.72
Lottery & Gaming Credit			0.00	0.0	0.00
Net Property Tax			2,935.37	-2.9	2,849.09

LOCAL TREASURER

Make Check Payable to:

LA CROSSE CITY TREASURER

CITY OF LA CROSSE
400 LA CROSSE ST
LA CROSSE, WI 54601

OTHER:

Total of Net Tax & Other 2,849.09

☐ CHECK FOR BILLING ADDRESS CHANGE

BILL NO. 04992

TAX ACCOUNT NUMBER 17-20132-050

Use Name & Address Below for Return to Taxpayer.

SCHOOL HOUSE PROPERTIES LLC
119 19TH ST N
LA CROSSE, WI 54601-3724

TOTAL DUE FOR FULL PAYMENT

PAY BY **JANUARY 31, 2015** 2,849.09

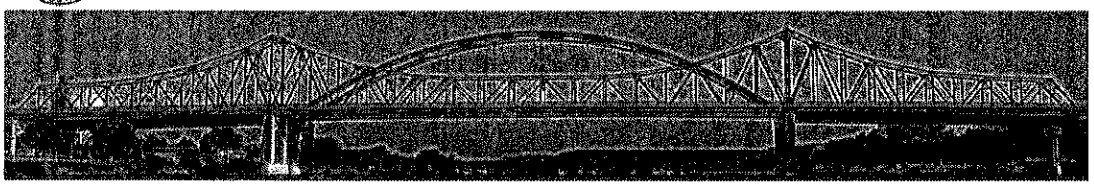
Warning: If not paid by due dates, installment option is lost and the total tax is delinquent subject to interest and if applicable, penalty. (See Enclosed)

PAY TO CITY TREAS. THE MINIMUM PAYMENTS SHOWN BELOW BY DUE DATES LISTED TO AVOID INTEREST & PENALTY.

DUE DATES	AMOUNT
1/31/2015	712.28
3/31/2015	712.27
5/31/2015	712.27
7/31/2015	712.27

Please enclose a copy of bill with your payment. The validated copy will be returned to you.

La Crosse County



1234 LA CROSSE ST LA CROSSE

Print View

Parcel:	17-20140-70	Internal ID:	29159
Municipality:	City of La Crosse	Record Status:	Current

Parcel
Taxes
Outstanding Taxes
Assessments
Deeds
Permits
History

Parcel Information:

Parcel:	17-20140-70
Internal ID:	29159
Municipality:	City of La Crosse
Record Status:	Current
On Current Tax Roll:	Yes
Total Acreage:	0.124
Township:	16
Range:	07
Section:	32
Qtr:	NW-SE

Legal Description:

D C EVANS ADDITION LOT 14 BLOCK 3 LOT SZ: 60 X 80.75 W 95.66 E

Property Addresses:

Street Address	City(Postal)
1234 LA CROSSE ST	LA CROSSE

Owners/Associations:

Name	Relation	Mailing Address	City	State	Zip Code
C/O HERITAGE PROPERTY MANAGEMENT LLC		119 19TH ST N	LA CROSSE	WI	54601-3724
SCHOOL HOUSE PROPERTIES LLC		119 19TH ST N	LA CROSSE	WI	54601-3724

Districts:

Code	Description	Taxation District
2849	LA CROSSE SCHOOL	Y
2	Book 2	N

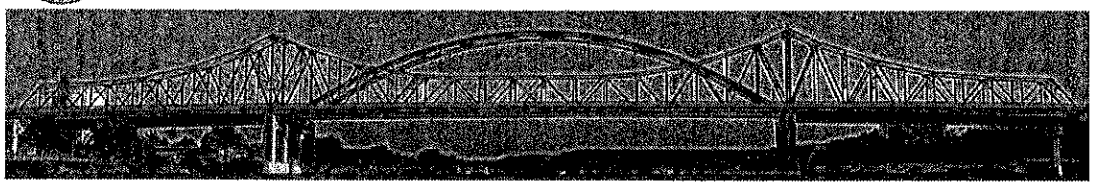
Additional Information

Category	Description
2012+ VOTING SUPERVISOR	2012+ Supervisor District 5
2012 + VOTING WARDS	2012+ Ward 8
POSTAL DISTRICT	LACROSSE POSTAL DISTRICT 54601
Use	1 UNIT

Lottery Tax Information

Lottery Credits Claimed:	0
Lottery Credit Application Date:	

La Crosse County



1240 LA CROSSE ST LA CROSSE

Print View

Parcel:	17-20140-65	Internal ID:	29158
Municipality:	City of La Crosse	Record Status:	Current

Parcel
Taxes
Outstanding Taxes
Assessments
Deeds
Permits
History

Parcel Information:

Parcel:	17-20140-65
Internal ID:	29158
Municipality:	City of La Crosse
Record Status:	Current
On Current Tax Roll:	Yes
Total Acreage:	0.080
Township:	16
Range:	07
Section:	32
Qtr:	NW-SE

Legal Description:

D C EVANS ADDITION LOT 13 EXC ELY 26 BLOCK 3 LOT SZ: 34 X 95.66 W 100 E

Property Addresses:

Street Address	City(Postal)
1240 LA CROSSE ST	LA CROSSE

Owners/Associations:

Name	Relation	Mailing Address	City	State	Zip Code
C/O HERITAGE PROPERTY MANAGEMENT LLC		119 19TH ST N	LA CROSSE	WI	54601-3724
SCHOOL HOUSE PROPERTIES LLC		119 19TH ST N	LA CROSSE	WI	54601-3724

Districts:

Code	Description	Taxation District
2849	LA CROSSE SCHOOL	Y
2	Book 2	N

Additional Information

Category	Description
2012+ VOTING SUPERVISOR	2012+ Supervisor District 5
2012 + VOTING WARDS	2012+ Ward 8
POSTAL DISTRICT	LACROSSE POSTAL DISTRICT 54601
Use	1 UNIT

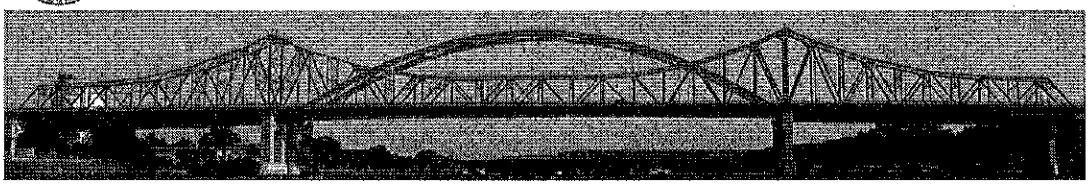
Lottery Tax Information

Lottery Credits Claimed:	0
Lottery Credit Application Date:	

La Crosse County Land Records Information
(Ver: 2015.5.26.0)

Site Disclaimer

La Crosse County



Print View

529 13TH ST N LA CROSSE

Parcel:	17-20132-40	Internal ID:	29103
Municipality:	City of La Crosse	Record Status:	Current

Parcel
Taxes
Outstanding Taxes
Assessments
Deeds
Permits
History

Parcel Information:

Parcel:	17-20132-40
Internal ID:	29103
Municipality:	City of La Crosse
Record Status:	Current
On Current Tax Roll:	Yes
Total Acreage:	0.138
Township:	16
Range:	07
Section:	32
Qtr:	NW-SE

Legal Description:

USTICKS ADDITION N 40FT LOT 11 BLOCK 4 LOT SZ: 40 X 150

Property Addresses:

Street Address	City(Postal)
529 13TH ST N	LA CROSSE

Owners/Associations:

Name	Relation	Mailing Address	City	State	Zip Code
DANNY W KELLICUTT		529 13TH ST N	LA CROSSE	WI	54601-3554

Districts:

Code	Description	Taxation District
2849	LA CROSSE SCHOOL	Y
2	Book 2	N

Additional Information

Category	Description
2012+ VOTING SUPERVISOR	2012+ Supervisor District 5
2012 + VOTING WARDS	2012+ Ward 8
POSTAL DISTRICT	LACROSSE POSTAL DISTRICT 54601
Use	1 UNIT

Lottery Tax Information

Lottery Credits Claimed:	1 on 10/27/1999
Lottery Credit Application Date:	8/26/1999

La Crosse County Land Records Information
(Ver: 2015.5.26.0)

Site Disclaimer

MEMORANDUM OF AGREEMENT

This Memorandum of Agreement (hereinafter "Agreement") is made by and between Aguilera Development, LLC, a Wisconsin limited liability company (hereinafter "Aguilera Development" or "Party") and University of Wisconsin – La Crosse (hereinafter "UW-L" or "Party") (collectively hereinafter "Parties").

RECITALS

WHEREAS, Aguilera Development is in the process of designing, obtaining the necessary governmental approvals for, and constructing a commercial building and improvements for infill development of high-density housing, office space, and rental space in the "Goose Town Neighborhood" (herein "Project") on the real estate located at 13th and Badger Streets, La Crosse, Wisconsin; and

WHEREAS, the building containing the residential housing units in the Project will be named "Aguilera"; and

WHEREAS, UW-L and Aguilera Development desire to ensure that up to one hundred (100) students enrolled at UW-L that are tenants of Aguilera will receive a UW-L issued, on-campus overnight parking pass; and.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants, promises, obligations and commitment contained herein, the Parties agree as follows:

I.
AGUILERA DEVELOPMENT'S OBLIGATIONS

A. During the term of this Agreement, Aguilera Development shall pay to UW-L a Parking Permit Fee of Twenty Dollars ($20.00) per month for each Parking Permit issued to a tenant of Aguilera Development. The minimum Parking Permit Fee payable by Aguilera Development to UW-L annually shall be the equivalent of fifty (50) annual Parking Permit Fees (12 x monthly Parking Permit Fee x 50). As an example, the minimum fee for the first year of this Agreement would be Twelve Thousand Dollars ($12,000.00).

B. Each year on the anniversary date of the Effective Date, the Parking Permit Fee shall be increased by the increase in the Consumer Price Index (Midwest Region, All Urban Consumers) since the previous anniversary date of the Effective Date or three percent (3%), whichever is less.

C. Aguilera Development shall provide UW-L with written notice of the date upon which residential units in Aguilera are available for occupancy. The date of availability identified in the notice shall be the Effective Date under this Agreement.

D. Aguilera Development shall provide known UW-L student residents of Aguilera, as part of its lease package, a copy of the UW-L Aguilera Parking Permit Policy (herein "Policy") promulgated by UW-L pursuant to Section II of this Agreement.

E. Upon UW-L's written request, Aguilera Development will provide written verification that a Parking Permit applicant is a tenant of Aguilera.

II.
UW-L OBLIGATIONS

A. UW-L shall establish the Policy for enrolled UW-L students that reside at Aguilera. The maximum number of Parking Permits that UW-L shall have outstanding at any one time pursuant to the Policy shall be one hundred (100). The Parking Permit Fees charged to UW-L students pursuant to the Policy shall be consistent with those parking permit fees charged to other UW-L parking facilities.

B. An Aguilera tenant validly holding a Parking Permit pursuant to the Policy shall be entitled to park one motor vehicle in UW-L designated parking areas twenty-four (24) hours a day and seven (7) days a week. A Parking Permit issued pursuant to the Policy shall be valid for a twelve (12) month period.

C. Eligible UW-L students shall be solely responsible for applying for the Parking Permit, paying all applicable fees, and complying with applicable rules created by UW-L related to the Parking Permit issued pursuant to the Policy.

D. UW-L may modify the terms and conditions applicable to the Policy applicable to the student participants as UW-L deems appropriate at its sole and absolute discretion.

III.
TERM

A. The term of this Agreement shall commence on the Effective Date, and remain in full force and effect for ten (10) years following the Effective Date.

B. Aguilera Development shall have the option to extend this Agreement for four (4) extension terms of five (5) years each. Aguilera Development may exercise each extension option by providing UW-L with written notice at least one hundred twenty (120) days prior to the expiration of the then in effect term or extension term.

C. Commencing on the nineteenth (19^{th}) anniversary of the Effective Date, either Party may terminate this Agreement upon twelve (12) calendar months advance written notice to the other Party.

IV.
ADDITIONAL PROVISIONS

A. This Agreement and any dispute arising from or related to this Agreement shall be governed by the law of the State of Wisconsin, without regard to the conflicts of laws provisions thereof.

B. All notices or communications required or permitted to be given by either Party to the other under this Agreement shall be in writing to the following addresses:

Aguilera Development:	Aguilera Development, LLC Attn: Managing Member 119 N. 19th Street La Crosse, WI 54601
UW-L:	University of Wisconsin – La Crosse Attn: Bob Hetzel Vice Chancellor for Administration & Finance 233 Graff Main Hall 1725 State Street La Crosse, WI 54601

or such other place as such Party may subsequently designate in writing.

Notice shall be deemed to have been received on the date of mailing if sent by registered or certified mail. For all other forms of transmission, notice shall be deemed received on the date of actual receipt.

C. Aguilera Development may assign this Agreement to any purchaser of the Aguilera Project, such that this Agreement shall run with the real estate and improvements that are a part of the Project. Except as provided in this Section, neither Party shall assign this Agreement to any third party without the other Party's prior written consent. Any assignment in violation of this Section is void.

D. This Agreement constitutes the entire Agreement between the Parties and shall supersede all previous communications and commitments, whether written or verbal, between the Parties regarding the subject matter of this Agreement. No agreement or understanding changing, modifying or extending this Agreement, shall be binding on either Party unless in a writing signed by both Parties' authorized representatives.

[signature page follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed in duplicate, each constituting an original, by their duly-authorized representatives.

Aguilera Development, LLC		**University of Wisconsin – La Crosse**	
By: _____		By: _____	
Name:	Marvin W. Wanders	Name:	_____
Title:	Managing Member	Title:	_____
Date:	June _____, 2015	Date:	June _____, 2015

Colin H. Klos, AIA
3823 Creekside Lane
Holmen, WI 54636
608-785-2760 FAX: 608-785-2750

June 5, 2015

Re: Aguilera Rezoning Petition

Zoning Chapter 115, IV of the La Crosse Municipal Code (rev. 08/2014)

Responses for section c. Specific Comprehensive Development Plan, d. Additional material & #2 for Planned Development Districts

c. Specific Comprehensive Development Plan

1. See attached site plans.
2. See attached tax bills and legal descriptions
3. This mixed use/high density housing project fits into the neighborhood fabric and the city's comprehensive mixed use high density district. The neighborhood fabric that surrounds the project are retail, restaurant and housing towers.
4. See attached site and utility plans.
5. See attached site and utility plans.
6. See attached site and 2nd floor plan.
7. The project will procure necessary signage permits, applications and fees and abide by all signage ordinances for temporary and permanent signage for this project.
8. See attached landscape plan.
9. See attached building plans and elevations.
10. See attached site and utilities plans.
11. See attached site and utilities plans.
12. See attached soil boring for the project.
13. See attached site plans.
14. See attached site and utilities plans.
15. The project will be a 2 phased plan with the Phase I being the building site (Planned August development) and Phase II the north parking parcel adjacent to La Crosse Street (Planned spring of 2016 development)
16. At this point, we are unaware of any restrictive covenants.
17. See Erosion control plan attached.
18. We agree to the present documentation from the city on this project, as previously discussed in meeting notes.

d. Additional material:

1. (i) Aguilera student housing contains 54-3 bedroom apartments and 4 – ADA 2 bedroom apartments for a total of 58 units and 170 bedrooms. See site plans for total acreage for development.
   (ii) See building and site plans.

2. For Planned Development Districts or portions thereof for which a commercial development plan is proposed, the general development plan shall contain at least the following information:
   (i) Retail sales floor area = 1,633SF
   Office area = 3,543 SF
   Commercial development total area = 5,176 SF
   (ii) The office area will be the home of 360 Development and the retail area will be a pedestrian coffee shop and not intended for vehicular business.
   (iii) See attached site plans for vehicular, pedestrian, landscape buffers, bicycle stations and racks, etc.

Sincerely,

Colin H Klos

Colin H. Klos, AIA
MBA Architects, Inc.

THREESIXTY°
REAL ESTATE SOLUTIONS, LLC

City of La Crosse Common Council
c/o Council President Dick Swartz
400 La Crosse Street
La Crosse WI 54601

6/4/2015

Dear Mr. Swartz and Common Council,

Re: Waivers for Aguilera Development

Writing to request four needed waivers for Aguilera LLC Development. The waivers and reason for request are below:

1. Waiver of the commercial off-street parking requirement for the proposed retail space which is a commercial design standard.

   Reason for request:
   Aguilera was designed based on The City of La Crosse comprehensive plan. The site calls for high density mixed use development. A component of high density mixed use development is pedestrian focused uses. In our case, the use is a café focused on serving the immediate neighborhood residents by pedestrian access. We are simply focused on a pedestrian based strong neighborhood as our focus. Furthermore, the café operator will have the burden to bear if the pedestrian concept does not support the economics.

2. Waiver of driveway connection to 13th Street North while having alley access.

   Reason for request:
   Waiver is needed for parking circulation to ensure a safe and effective flow of the enclosed parking facility. This is necessary under the building in the condition space and on the surface lot.

3. Waiver to provide outdoor recreation space at ground level (multifamily standards).

   Reason for request:
   We support the intent of outdoor recreation of multifamily design standards and believe our design complies with the intended purposes. We have created a fitness facility that opens to a community courtyard. The courtyard will include a community grill, gathering spaces and plantings. We simply accommodated this need as a rooftop area versus a ground level area.

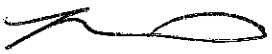
4. Waiver to provide all off street parking lots on the same lot as the principle structure.

   Reason for request:

   We are providing parking in three ways which are under the building, a surface parking lot and by agreement with the University of Wisconsin – La Crosse. All three locations are in the immediate neighborhood and walkable parking solution.

Thank you for your consideration of these waivers. We look forward to developing Aguilera and adding considerable value to the neighborhood and community.

Respectfully,



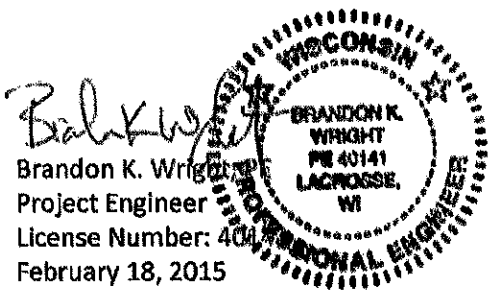
Marvin Wanders

Geotechnical Evaluation Report

Proposed Aguilera Apartments
Badger Street and 13th Street North
La Crosse, Wisconsin

Prepared for

Borton Construction, Inc.



Brandon K. Wright, P.E.
Project Engineer
License Number: 40141
February 18, 2015

Project B1500586

Braun Intertec Corporation

BRAUN INTERTEC
The Science You Build On.

Braun Intertec Corporation
2309 Palace Street
La Crosse, WI 54603

Phone: 608.781.7277
Fax: 608.781.7279
Web: braunintertec.com

February 18, 2015

Project B1500586

Mr. Dan Miller
Borton Construction
2 Copeland Avenue
La Crosse, Wisconsin 54603

Re: Geotechnical Evaluation
Proposed Aguilera Apartments
Badger Street and 13th Street North
La Crosse, Wisconsin

Dear Mr. Miller:

We are pleased to present this Geotechnical Evaluation Report for the proposed Aguilera Apartments on Badger Street and 13th Street North in La Crosse, Wisconsin. A summary of our results, and a summary of our recommendations in light of the geotechnical issues influencing design and construction, are presented below. More detailed information and recommendations follow.

Summary of Results

We drilled four standard penetration test borings across the site. Our borings indicate that the site consists of pavement materials and undocumented fill over alluvial soils. Pavement materials were encountered in two borings. Undocumented fill was present in all borings and extended to depths of 2 to 5 ½ feet. Underneath the undocumented fill, the borings encountered alluvial soils consisting mainly of sand. Groundwater was not observed as our borings were advanced.

Based on penetration resistance testing, the undocumented fill is considered poorly compacted. The alluvial soils are considered locally very loose to medium dense, but loose overall.

Summary of Recommendations

From a design perspective, it is our opinion that the proposed structures can be supported on conventional perimeter wall footings and interior column pads. This is based on the following considerations:

- Demolition of the existing residential homes should include removal of footings, slabs, basements, foundation walls, and underground utilities. These building elements will need to be completely removed and the excavation backfilled with compacted soil.

- We recommend removal of the surficial vegetation, pavement materials and undocumented fill from below the proposed building footprint. These materials are considered unsuitable and should be removed and replaced with compacted granular backfill.

- Because the alluvial soils were noted as being locally loose, provisions should be made to surface compact foundation and slab subgrades, enhancing subgrade uniformity and strength, and limiting the potential for the proposed apartment building to settle.

- Proposed below grade parking walls should be backfilled with imported medium- to coarse-grained granular backfill.

Areas that will be receiving new pavement should be prepared by first removing surficial vegetation and existing pavement. Following those removals, loose alluvial soils and undocumented fill are expected to be present at pavement subgrade elevations. We recommend surface compacting these materials prior to placing new pavement materials.

Remarks

Thank you for making Braun Intertec your geotechnical consultant for this project. If you have questions about this report, or if there are other services that we can provide in support of our work to date, please call Brandon Wright at 608.781.7277.

Sincerely,

BRAUN INTERTEC CORPORATION

Brandon K. Wright, PE
Project Engineer

for:
Ronald A. Shaffer
Senior Reviewer

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Description **Page**

Appendix

A. Introduction

A.1. Project Description

This Geotechnical Evaluation Report addresses the proposed Aguilera Apartments on Badger Street and 13th Street North in La Crosse, Wisconsin. The project will include acquisition and development of multiple, adjoining properties located on Badger Street and 13th Street North. We understand the project will include design of a multi-level, wood-framed apartment building that will be approximately 150 feet wide by 150 feet long and will have below grade parking. The general location of the site with adjacent streets is shown on the Soil Boring Location Sketch in the Appendix.

A.2. Purpose

The purpose of our geotechnical evaluation will be to characterize subsurface geologic conditions at selected exploration locations and evaluate their impact on the design and construction of the proposed footings, ground supported concrete slab, below grade parking walls and underground utilities.

A.3. Site Conditions

The site currently contains multi-story residential properties with basements and adjacent parking areas and garages. The site is partially paved with concrete and partially paved with gravel. There are landscaped areas around the residential properties.

A.4. Scope of Services

Our scope of services for this project was originally submitted as a Proposal to Mr. Dan Miller of Borton Construction. We received authorization to proceed from Ms. Maria Wanders of School House Properties on behalf of Borton Construction, on January 23, 2015. Tasks performed in accordance with our authorized scope of services included:

- Performing a reconnaissance of the site to evaluate equipment access to exploration locations.

- Staking and coordinating the clearance of underground utilities at the boring locations.

- Performing four penetration test borings to a depth of 26 feet.
- Performing laboratory tests including moisture content and mechanical sieve analyses through a number 200 sieve on selected penetration test samples.
- Preparing this report containing a CAD sketch, exploration logs, a summary of the geologic materials encountered, results of laboratory tests, and recommendations for structure subgrade preparation and the design of the proposed footings, ground supported concrete slabs, below grade walls and underground utilities.

We staked the exploration locations by measuring dimensions from nearby buildings or other site features with a tape or surveyor's wheel at approximate right angles from those references. Surface elevations were measured using a surveyor's level. We referenced surface elevations to the top nut of the fire hydrant located on the north east corner of 13th Street and Badger Street, whose elevation was reported to be at elevation of 676.50.

Our scope of services was performed under the terms of our September 1, 2013, General Conditions.

B. Results

B.1. Exploration Logs

B.1.a. Log of Boring Sheets

Log of Boring sheets for our penetration test borings are included in the Appendix. The logs identify and describe the geologic materials that were penetrated, and present the results of penetration resistance and other in-situ tests performed within them, laboratory tests performed on penetration test samples retrieved from them, and groundwater measurements.

Strata boundaries were inferred from changes in the penetration test samples and the auger cuttings. Because sampling was not performed continuously, the strata boundary depths are only approximate. The boundary depths likely vary away from the boring locations, and the boundaries themselves may also occur as gradual rather than abrupt transitions.

B.1.b. Geologic Origins

Geologic origins assigned to the materials shown on the logs and referenced within this report were based on: (1) a review of the background information, (2) visual classification of the various geologic material samples retrieved during the course of our subsurface exploration, (3) penetration resistance and other in-situ testing performed for the project, and (4) available common knowledge of the geologic processes and environments that have impacted the site and surrounding area in the past.

B.2. Geologic Profile

Our borings indicate the site consists of surficial vegetation and pavement materials over undocumented fill and alluvial soils.

B.2.a. Pavement Materials & Undocumented Fill

Boring ST-2 initially encountered about ½-foot of aggregate base. Boring ST-3 initially encountered about ½-foot of concrete pavement. Undocumented fill was present below the pavement materials, and at the ground surface in Borings ST-1 and ST-4. The undocumented fill extended to depths of depth of 2 to 5 ½ feet. The undocumented fill consisted of silty sand (SM) and poorly graded sand with silt (SP-SM) that was brown to dark brown to black and moist.

B.2.b. Alluvial Soils

Below the undocumented fill, the borings encountered alluvial soils that extended to the termination depths of the borings. The alluvial soils consisted of poorly graded sand (SP) and poorly graded sand with silt (SP-SM) and silty sand (SM) that was dark brown to brown to light brown and was moist.

B.2.c. Penetration Resistance Testing

Penetration resistance values recorded in the undocumented fill ranged from 4 to 5 blows per foot (BPF), indicating the fill soils were likely poorly compacted. Penetration resistance values recorded in the alluvial soils ranged from 3 to 18 BPF but generally exceeded 5 BPF, indicating they were locally very loose to medium dense but loose overall.

B.2.d. Groundwater

Groundwater was not observed as our borings were advanced. Based on the moisture contents of the geologic materials encountered, it appears that groundwater was below the depths explored. Seasonal and annual fluctuations of groundwater, however, should be anticipated.

B.3. Laboratory Test Results

Results of our laboratory tests are presented below in Table 1.

Table 1. Laboratory Classification Test Results

Location	Sample Depth (ft)	Classification	Moisture Content (%)	Percent Passing a #200 Sieve
ST-2	2 ½	Poorly Graded Sand (SP)	5	3
ST-3	2 ½	Poorly Graded Sand (SP)	5	1
ST-4	2 ½	FILL: Poorly Graded Sand with Silt (SP-SM)	8	8

C. Basis for Recommendations

C.1. Design Details

C.1.a. Building Structure Loads

We understand the project will include design and construction of a multiple-level, wood-framed apartment building that will be approximately 150 feet wide and 150 feet long with below grade parking. For the basis of this report, we have assumed that wall loads will be less than 8 kips (8,000 pounds) per lineal foot, and, that column loads will be less than 600 kips for a 30-foot by 30-foot bay spacing.

C.1.b. Pavements and Traffic Loads

Light- and heavy-duty pavement areas will have a bituminous section. We have assumed that light-duty pavements will be subjected to no more than 30,000 equivalent 18-kip single axle loads (ESALs) over design life of 20 years. We have assumed that heavy-duty pavements will be subject to more than 300,000 ESALs over a design life of 20 years.

C.1.c. Anticipated Grade Changes

Preliminary plans indicate the proposed apartment complex will have below grade parking. We have assumed the below grade parking will be 5 to 10 feet below existing site grades.

C.1.d. Precautions Regarding Changed Information

We have attempted to describe our understanding of the proposed construction to the extent it was reported to us by others. Depending on the extent of available information, assumptions may have been made based on our experience with similar projects. If we have not correctly recorded or interpreted the project details, we should be notified. New or changed information could require additional evaluation, analyses and/or recommendations.

C.2. Design Considerations

From a design perspective, it is our opinion that the proposed structures can be supported on conventional perimeter and interior wall footings and/or interior column pads. This is based on the following considerations:

- Demolition of the existing residential homes should include removal of footings, slabs including the basement, foundation walls, and underground utilities. These materials will need to be completely removed and the excavation backfilled with compacted soil.

- We recommend removal of the surficial vegetation, pavement materials and undocumented fill from below the proposed building footprint. These materials are considered unsuitable and should be removed and replaced with compacted granular backfill.

- Because the alluvial soils were noted as being locally loose, provisions should be made to surface compact foundation and slab subgrades, enhancing subgrade uniformity and strength, and limiting the potential for the proposed apartment building to settle.

- Proposed below grade parking walls should be backfilled with imported medium- to coarse-grained granular backfill.

Areas that will be receiving new pavement should be prepared by first removing surficial vegetation and existing pavement. Following those removals, loose alluvial soils and undocumented fill is expected to be present at pavement subgrade elevations. We recommend surface compacting these materials prior to placing new pavement materials.

C.3. Construction Considerations

From a construction perspective, the project team should also be aware that:

- A portion of the on-site undocumented fill (quantity unknown) can be considered for re-use as backfill and additional required fill provided debris (if encountered) and organic materials are first removed. The alluvial soils can also be considered for reuse as backfill and additional required fill.

- We recommend that imported material needed to replace excavation spoils or balance cut and fill quantities, consist of sand or gravel having less than 10 percent of the particles by weight passing a #200 sieve.

D. Recommendations

D.1. Earthwork

D.1.a. Demolition

Removal of residential homes will be required to facilitate the proposed development. Considering the homes have basements, we recommend the basement slabs be removed to prevent ponding of subsurface water. Additionally, backfill for the basement should be placed in controlled lifts and compacted appropriately and tested for compaction prior to each additional lift of backfill or placement of structural elements.

Furthermore, remnants of old foundations, slabs and utilities may be encountered during the site grading. These materials will need to be completely removed and the excavation backfilled with compacted soil.

D.1.b. Excavations

We recommend removing the pavement materials, surficail vegetation and undocumented fill from below the proposed building. Fill is also likely present in other areas of the site due to previous site development. Anticipated excavation depths and bottom elevations for each of the borings are shown below in Table 2.

Table 2. Excavation Depths and Bottom Elevations

Location	Surface Elevation	Anticipated Excavation Depth (ft)	Corresponding Bottom Elevation
ST-1	672.2	3	669
ST-2	675.2	2	673
ST-3	674.3	2	672 ½
ST-4	674.2	5 ½	668 ½

Excavation depths will vary between the borings. Portions of the excavations may also be deeper than indicated by the borings. Contractors should also be prepared to extend excavations in wet or fine-grained soils to remove disturbed bottom soils.

To provide lateral support to replacement backfill, additional required fill and the structural loads they will support, we recommend oversizing (widening) the excavations 1 foot horizontally beyond the outer edges of the building perimeter footings, or pavement limits, for each foot the excavations extend below bottom-of-footing or pavement subgrade elevations.

D.1.c. Excavation Support

The undocumented fill and alluvial soils are Type C Soil under OSHA guidelines. Unsupported excavations in the undocumented fill and alluvial soils should therefore be maintained at a gradient no steeper than 1 ½:1 (horizontal: vertical), or be shored.

D.1.d. Surface Compaction

Due to the areas of loose alluvial soils below the proposed structure, we recommend that exposed soils be surface-compacted prior to placing additional required fill and footing and slabs for the proposed structure. We recommend that the excavation bottoms be compacted to a minimum of 98 percent of their standard Proctor maximum dry densities (ASTM International Test Method D 698).

D.1.e. Selecting Excavation Backfill and Additional Required Fill

The on-site undocumented fill can be considered for re-use as backfill and additional required fill provided debris (if encountered) and organic materials are first removed. The alluvial soils can also be considered for reuse as backfill and additional required fill.

We recommend that imported material needed to replace excavation spoils or balance cut and fill quantities, consist of sand or gravel having less than 10 percent of the particles by weight passing a #200 sieve.

D.1.f. Placement and Compaction of Backfill and Fill

We recommend spreading backfill and fill in loose lifts of approximately 12 inches. We recommend compacting backfill and fill in accordance with the criteria presented below in Table 3. The relative compaction of utility backfill should be evaluated based on the structure below which it is installed, and vertical proximity to that structure.

Table 3. Compaction Recommendations Summary

Reference	Relative Compaction, percent (ASTM D 698 – standard Proctor)	Moisture Content Variance from Optimum, percentage points
Below foundations	98	± 3
Below slabs	95	± 3
Below landscaped surfaces	90	± 3

D.2. Spread Footings

D.2.a. Embedment Depth

For frost protection, we recommend embedding perimeter footings 48 inches below the lowest exterior grade. Interior footings may be placed directly below floor slabs. We recommend embedding building footings not heated during winter construction, and other unheated footings associated with canopies, stoops or sidewalks 60 inches below the lowest exterior grade.

D.2.b. Subgrade Improvement

Prior to placing forms or reinforcement, we recommend having a geotechnical engineer evaluate the bearing soils for consistency with hand auger borings and strength testing with a dynamic cone penetrometer. If bearing soils are found to be loose and not capable supporting the design bearing pressure, we recommend the bearing soils be recompacting.

D.2.c. Net Allowable Bearing Pressure

We recommend sizing spread footings to exert a net allowable bearing pressure of 3,000 pounds per square foot (psf), including all transient loads. This value includes a safety factor of at least 3.0 with regard to bearing capacity failure.

D.2.d. Settlement

We estimate that total and differential settlements among the footings will amount to less than 1 and ½ inch, respectively, under the assumed loads.

D.3. Basement Walls

D.3.a. Drainage Control

We recommend installing subdrains behind the retaining walls, adjacent to the wall footings, below the slab elevation. Preferably the subdrains should consist of perforated pipes embedded in washed gravel, which in turn is wrapped in filter fabric. Perforated pipes encased in a filter "sock" and embedded in washed gravel, however, may also be considered.

We recommend routing the subdrains to a sump and pump capable of routing any accumulated groundwater to a storm sewer or other suitable disposal site.

General waterproofing of retaining walls surrounding occupied or potentially occupied areas is recommended even with the use of free-draining backfill because of the potential cost impacts related to seepage after construction is complete.

D.3.b. Selection, Placement and Compaction of Backfill

Unless a drainage composite is placed against the backs of the exterior perimeter below-grade walls, we recommend that backfill placed within 2 horizontal feet of those walls consist of sand having less than 50 percent of the particles by weight passing a #40 sieve and less than 5 percent of the particles by weight passing a #200 sieve. Sand meeting this gradation will need to be imported. We recommend that the balance of the backfill placed against exterior perimeter walls also consist of sand, though it is our opinion that the sand may contain up to 10 percent of the particles by weight passing a #200 sieve.

We recommend a walk behind compactor be used to compact the backfill placed within about 5 feet of the retaining walls. Further away than that, a self-propelled compactor can be used. Compaction criteria for below-grade walls should be determined based on the compaction recommendations provided above in Section D.1.

Exterior backfill not capped with slabs or pavement should be capped with a low-permeability soil to limit the infiltration of surface drainage into the backfill. The finished surface should also be sloped to divert water away from the walls.

D.3.c. Configuring and Resisting Lateral Loads

Below-grade wall design can be based on active earth pressure conditions if the walls are allowed to rotate slightly. If rotation cannot be tolerated, then design should be based on at-rest earth pressure conditions. Rotation up to 0.002 times the wall height is generally required to mobilize active earth pressures when walls are backfilled with sand. For the active case, we recommend designing for an equivalent fluid pressure of 40 pounds per square foot per foot of depth (pcf). For the at-rest case, we recommend designing for an equivalent fluid pressure of 60 pcf.

Our recommended design values are based on a wet unit backfill weight for sand of 120 pcf, an internal friction angle of 30 degrees, and assume a level backfill with no surcharge. Our design values will need to be revised for sloping backfill or other dead or live loads that are placed within a horizontal distance behind the walls that is equal to the height of the walls. Our design values also assume that the walls are drained so that water cannot accumulate behind the walls.

Resistance to lateral earth pressures will be provided by passive resistance against the retaining wall footings, and by sliding resistance along the bottoms of the wall footings. We recommend assuming a passive pressure equal to 360 pcf and a sliding coefficient equal to 0.35. These values are un-factored.

D.4. Interior Slabs

D.4.a. Subgrade Modulus

Assuming slab subgrades are surface compacted, we recommend using a modulus of subgrade reaction, k, of 200 pounds per square inch per inch of deflection (pci) to design the slabs.

D.4.b. Interior Concrete Slabs

If floor coverings or coatings less permeable than the concrete slab will be used, consideration should be given to placing a vapor retarder or vapor barrier immediately beneath the slab. Some contractors prefer to bury the vapor retarder or barrier beneath a layer of sand to reduce curling and shrinkage, but this practice risks trapping water between the slab and vapor retarder or barrier.

Regardless of where the vapor retarder or barrier is placed, floor covering manufacturers should be consulted regarding the appropriate type, use and installation of the vapor retarder or barrier to preserve warranty assurances.

D.4.c. Exterior Concrete Slabs

Exterior slabs will be underlain with non- to only slightly frost-susceptible soils. This being the case, it is our opinion that special subgrade improvements in excess of topsoil stripping in advance of slab construction will not be required. We recommend, however, sloping exterior slabs to drain away from the proposed apartment building.

D.5. Pavements

D.5.a. Pavement Subgrade Preparations

Areas that will be receiving new pavement should be prepared by first removing surficial vegetation and existing pavement. Following those removals, loose alluvial soils and undocumented fill is expected to be present at pavement subgrade elevations. We recommend surface compacting these materials prior to placing new pavement materials.

D.5.b. Subgrade Proof-Roll

Prior to placing aggregate base material, we recommend proof-rolling pavement subgrades to determine if the subgrade materials are loose, soft or weak, and in need of further stabilization, compaction or subexcavation and recompaction or replacement. A second proof-roll should be performed after the aggregate base material is in place, and prior to placing bituminous or concrete pavement.

D.5.c. Design Sections

Laboratory tests to determine a CBR value for pavement design were not included in the scope of this project. Based upon the aforementioned traffic loads and an estimated CBR value of 10, we recommend light- and heavy-duty pavement section as shown in Table 4 below.

Table 4. Bituminous Pavement Thickness

Pavement Material	Light Duty Pavements Thickness/Preparations	Heavy Duty Pavements Thickness/Preparations
Bituminous (in.)	4	4 ½
Aggregate Base (in.)	8	10
Subgrade Compaction	Surface Compaction	

The above pavement designs are based upon a 20-year performance life. This is the amount of time before major reconstruction is anticipated. This performance life assumes maintenance, such as seal coating and crack sealing, is routinely performed. The actual pavement life will vary depending on variations in weather, traffic conditions and maintenance.

D.5.d. Materials and Compaction

We recommend specifying crushed aggregate base meeting the requirements of Wisconsin Department of Transportation (WisDOT) Specification Section 305.2.2.1 for 1 ¼ inch Dense Graded Base. We recommend utilizing an E-1 mixture for the hot mix asphalt meeting the specifications of WisDOT Section 460. We recommend utilizing a nominal 12.5 mm gradation for the base courses and a nominal 9.5 mm gradation for the surface courses as defined in Table 460-1 in Section 460.2.2.3. We recommend the Performance Graded Asphalt cement be a PG 64-28.

We recommend that the aggregate base be compacted to a minimum of 95 percent of its maximum standard Proctor dry density. We recommend that the bituminous pavement be compacted to at least 92 percent of the maximum theoretical density.

D.6. Utilities

D.6.a. Subgrade Stabilization

We anticipate that utilities can be installed per manufacturer bedding requirements. Due to areas of very loose to loose sands, we recommend the sand subgrade in utility trenches be thoroughly compacted prior to placing utilities.

D.6.b. Selection, Placement and Compaction of Backfill

We recommend compacting excavation backfill and additional required fill placed within 3 feet of pavement subgrade elevations to at least 100 percent of their maximum standard Proctor dry densities (ASTM International D 698). Backfill and fill placed more than 3 feet below pavement subgrade elevations should be compacted to at least 95 percent.

D.7. Construction Quality Control

D.7.a. Excavation Observations

We recommend having a geotechnical engineer observe all excavations related to subgrade preparation and spread footing, slab-on-grade and pavement construction. The purpose of the observations is to evaluate the competence of the geologic materials exposed in the excavations, and the adequacy of required excavation oversizing.

D.7.b. Materials Testing

We recommend density tests be taken in excavation backfill and additional required fill placed below spread footings, slab-on-grade construction, beside foundation walls behind basement walls, and below pavements.

We also recommend slump, air content and strength tests of portland cement concrete.

D.7.c. Pavement Subgrade Proof-Roll

We recommend that proof-rolling of the pavement subgrades be observed by a geotechnical engineer to determine if the results of the procedure meet project specifications, or delineate the extent of additional pavement subgrade preparation work.

D.7.d. Cold Weather Precautions

If site grading and construction is anticipated during cold weather, all snow and ice should be removed from cut and fill areas prior to additional grading. No fill should be placed on frozen subgrades. No frozen soils should be used as fill.

Concrete delivered to the site should meet the temperature requirements of ASTM C 94. Concrete should not be placed on frozen subgrades. Concrete should be protected from freezing until the necessary strength is attained. Frost should not be permitted to penetrate below footings.

E. Procedures

E.1. Penetration Test Borings

The penetration test borings were drilled with a truck-mounted core and auger drill equipped with hollow-stem auger. The borings were performed in accordance with ASTM D 1586. Penetration test samples were taken at 2 ½- or 5-foot intervals. Actual sample intervals and corresponding depths are shown on the boring logs.

E.2. Material Classification and Testing

E.2.a. Visual and Manual Classification

The geologic materials encountered were visually and manually classified in accordance with ASTM Standard Practice D 2488. A chart explaining the classification system is attached. Samples were placed in jars or bags and returned to our facility for review and storage.

E.2.b. Laboratory Testing

The results of the laboratory tests performed on geologic material samples are noted on or follow the appropriate attached exploration logs. The tests were performed in accordance with ASTM or AASHTO procedures.

E.3. Groundwater Measurements

The drillers checked for groundwater as the penetration test borings were advanced, and again after auger withdrawal. The boreholes were then backfilled or allowed to remain open for an extended period of observation as noted on the boring logs.

F. Qualifications

F.1. Variations in Subsurface Conditions

F.1.a. Material Strata

Our evaluation, analyses and recommendations were developed from a limited amount of site and subsurface information. It is not standard engineering practice to retrieve material samples from exploration locations continuously with depth, and therefore strata boundaries and thicknesses must be inferred to some extent. Strata boundaries may also be gradual transitions, and can be expected to vary in depth, elevation and thickness away from the exploration locations.

Variations in subsurface conditions present between exploration locations may not be revealed until additional exploration work is completed, or construction commences. If any such variations are revealed, our recommendations should be re-evaluated. Such variations could increase construction costs, and a contingency should be provided to accommodate them.

F.1.b. Groundwater Levels

Groundwater measurements were made under the conditions reported herein and shown on the exploration logs, and interpreted in the text of this report. It should be noted that the observation periods were relatively short, and groundwater can be expected to fluctuate in response to rainfall, flooding, irrigation, seasonal freezing and thawing, surface drainage modifications and other seasonal and annual factors.

F.2. Continuity of Professional Responsibility

F.2.a. Plan Review

This report is based on a limited amount of information, and a number of assumptions were necessary to help us develop our recommendations. It is recommended that our firm review the geotechnical aspects of the designs and specifications, and evaluate whether the design is as expected, if any design changes have affected the validity of our recommendations, and if our recommendations have been correctly interpreted and implemented in the designs and specifications.

F.2.b. Construction Observations and Testing

It is recommended that we be retained to perform observations and tests during construction. This will allow correlation of the subsurface conditions encountered during construction with those encountered by the borings, and provide continuity of professional responsibility.

F.3. Use of Report

This report is for the exclusive use of the parties to which it has been addressed. Without written approval, we assume no responsibility to other parties regarding this report. Our evaluation, analyses and recommendations may not be appropriate for other parties or projects.

F.4. Standard of Care

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

Appendix

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DENOTES APPROXIMATE LOCATION OF STANDARD PENETRATION TEST BORING

25' 0 50'

SCALE: 1"= 50'

Sheet: of

Fig:

Project No:	B1500586
Drawing No:	B1500586
Scale:	1"= 50'
Drawn By:	JAG
Date Drawn:	2/11/15
Checked By:	BW
Last Modified:	2/11/15

SOIL BORING LOCATION SKETCH
GEOTECHNICAL EVALUATION
PROPOSED AGUILERA APARTMENTS
BADGER STREET AND 13TH STREET NO.
LA CROSSE, WISCONSIN

BRAUN INTERTEC
11001 Hampshire Avenue So.
Minneapolis, MN 55438
PH. (952) 995-2000
FAX (952) 995-2020

BRAUN[SM] INTERTEC

LOG OF BORING

Braun Project B15-00586
GEOTECHNICAL EVALUATION
Proposed Aguilera Apartments
Badger Street
La Crosse, Wisconsin

BORING: **ST-1**

LOCATION: See attached Boring Location Sketch.

DRILLER: GDC | METHOD: 3 1/4" HSA, Autohammer | DATE: **2/3/15** | SCALE: **1" = 4'**

Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes
672.2	0.0	FILL	FILL: Silty Sand, with Gravel, fine-grained, trace of roots, black, moist.			
670.2	2.0	FILL	FILL: Poorly Graded Sand with Silt, fine-grained, brown, moist.	5		
669.2	3.0	SM	SILTY SAND, fine-grained, dark brown, moist, very loose to loose. (Alluvium)	3		
665.2	7.0	SP	POORLY GRADED SAND, fine-grained, brown, moist, loose. (Alluvium)	8		
663.2	9.0	SP	POORLY GRADED SAND, fine- to medium-grained, brown, moist, loose. (Alluvium)	6		
				6		
				8		
654.2	18.0	SP	POORLY GRADED SAND, fine-grained, light brown, moist, very loose to medium dense. (Alluvium)	3		
646.2	26.0			18		
			END OF BORING.			
			Water not observed while drilling.			Benchmark (BM): We referenced surface elevations to the top nut of the fire hydrant located on the northeast corner of 13th Street and Badger Street with a reported elevation of 676.5 feet.
			Water not observed to cave-in depth of 13 feet immediately after withdrawal of auger.			
			Boring then grouted.			

(See Descriptive Terminology sheet for explanation of abbreviations)

LOG OF BORING N:\GINT\PROJECTS\LACROSSE\2015\B15-00586.GPJ BRAUN_V8_CURRENT.GDT 2/11/15 14:57

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LOG OF BORING

Braun Project B15-00586
GEOTECHNICAL EVALUATION
Proposed Aguilera Apartments
Badger Street
La Crosse, Wisconsin

BORING: **ST-2**

LOCATION: See attached Boring Location Sketch.

DRILLER: GDC | METHOD: 3 1/4" HSA, Autohammer | DATE: **2/3/15** | SCALE: **1" = 4'**

Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes
675.2	0.0					
674.7	0.5	AGG	6-inches of Aggregate Base.			
		FILL	FILL: Silty Sand, with trace of gravel, fine-grained, black, moist.			
673.2	2.0					
		SP	POORLY GRADED SAND, fine-grained, brown, moist, loose. (Alluvium)	3		MC=5% P200=3%
669.7	5.5			7		
		SP-SM	POORLY GRADED SAND with SILT, fine-grained, brown, moist, loose. (Alluvium)			
668.2	7.0					
		SP	POORLY GRADED SAND, fine- to medium-grained, brown, moist, loose to medium dense. (Alluvium)	8		
				9		
				8		
				9		
				11		
652.2	23.0					
		SP	POORLY GRADED SAND, fine-grained, light brown, moist, loose. (Alluvium)	5		
649.2	26.0					
			END OF BORING.			
			Water not observed while drilling.			
			Water not observed to cave-in depth of 13 feet immediately after withdrawal of auger.			
			Boring then grouted.			

(See Descriptive Terminology sheet for explanation of abbreviations)

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LOG OF BORING

Braun Project B15-00586
GEOTECHNICAL EVALUATION
Proposed Aguilera Apartments
Badger Street
La Crosse, Wisconsin

BORING: **ST-3**

LOCATION: See attached Boring Location Sketch.

DRILLER: GDC | METHOD: 3 1/4" HSA, Autohammer | DATE: **2/3/15** | SCALE: **1" = 4'**

Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes
674.3	0.0					
673.8	0.5	CONC	6-Inches of Concrete.			
		FILL	FILL: Poorly Graded Sand with Silt, trace of gravel, fine- to medium-grained, dark brown, moist.			
672.3	2.0					
		SP	POORLY GRADED SAND, fine-grained, brown, moist, loose. (Alluvium)	4		MC=5% P200=1%
				4		
667.3	7.0					
		SP	POORLY GRADED SAND, fine- to medium-grained, brown to light brown, moist, loose. (Alluvium)	7		
				10		
				6		
				6		
656.3	18.0					
		SP	POORLY GRADED SAND, fine-grained, light brown, moist, loose. (Alluvium)	10		
				5		
648.3	26.0					
			END OF BORING.			
			Water not observed while drilling.			
			Water not observed to cave-in depth of 10 feet immediately after withdrawal of auger.			
			Boring then grouted.			

(See Descriptive Terminology sheet for explanation of abbreviations)

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LOG OF BORING

Braun Project B15-00586
GEOTECHNICAL EVALUATION
Proposed Aguilera Apartments
Badger Street
La Crosse, Wisconsin

BORING: **ST-4**

LOCATION: See attached Boring Location Sketch.

DRILLER: GDC | METHOD: 3 1/4" HSA, Autohammer | DATE: **2/3/15** | SCALE: **1" = 4'**

Elev. feet	Depth feet	Symbol	Description of Materials (Soil-ASTM D2488 or D2487, Rock-USACE EM1110-1-2908)	BPF	WL	Tests or Notes
674.2	0.0	FILL	FILL: Poorly Graded Sand with Silt, trace of roots, black, moist.	4		MC=8% P200=8%
668.7	5.5	SP	POORLY GRADED SAND, fine-grained, brown, moist, loose. (Alluvium)	5		
665.2	9.0	SP	POORLY GRADED SAND, fine- to medium-grained, brown, moist, loose. (Alluvium)	7		
				9		
				8		
				7		
655.2	19.0	SP	POORLY GRADED SAND, fine-grained, light brown to brown, moist, loose to medium dense. (Alluvium)	2		
				14		
648.2	26.0		END OF BORING. Water not observed while drilling. Boring then grouted.			

(See Descriptive Terminology sheet for explanation of abbreviations)

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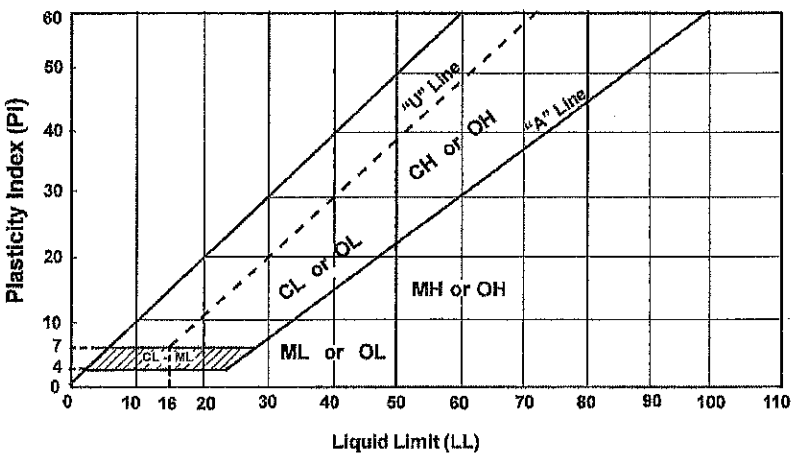
Descriptive Terminology of Soil

Standard D 2487 - 00
Classification of Soils for Engineering Purposes (Unified Soil Classification System)

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [a]				Soils Classification	
				Group Symbol	Group Name [b]
Coarse-grained Soils more than 50% retained on No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels 5% or less fines [e]	$C_u \geq 4$ and $1 \leq C_c \leq 3$ [c]	GW	Well-graded gravel [d]
			$C_u < 4$ and/or $1 > C_c > 3$ [c]	GP	Poorly graded gravel [d]
		Gravels with Fines More than 12% fines [e]	Fines classify as ML or MH	GM	Silty gravel [d f g]
			Fines classify as CL or CH	GC	Clayey gravel [d f g]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands 5% or less fines [i]	$C_u \geq 6$ and $1 \leq C_c \leq 3$ [c]	SW	Well-graded sand [h]
			$C_u < 6$ and/or $1 > C_c > 3$ [c]	SP	Poorly graded sand [h]
		Sands with Fines More than 12% [i]	Fines classify as ML or MH	SM	Silty sand [f g h]
			Fines classify as CL or CH	SC	Clayey sand [f g h]
Fine-grained Soils 50% or more passed the No. 200 sieve	Silts and Clays Liquid limit less than 50	Inorganic	PI > 7 and plots on or above "A" line [j]	CL	Lean clay [k l m]
			PI < 4 or plots below "A" line [j]	ML	Silt [k l m]
		Organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OL	Organic clay [k l m n]
				OL	Organic silt [k l m o]
	Silts and clays Liquid limit 50 or more	Inorganic	PI plots on or above "A" line	CH	Fat clay [k l m]
			PI plots below "A" line	MH	Elastic silt [k l m]
		Organic	Liquid limit - oven dried / Liquid limit - not dried < 0.75	OH	Organic clay [k l m p]
				OH	Organic silt [k l m q]
Highly Organic Soils		Primarily organic matter, dark in color and organic odor		PT	Peat

a. Based on the material passing the 3-in (75mm) sieve.
b. If field sample contained cobbles or boulders, or both, add "with cobbles or boulders or both" to group name.
c. $C_u = D_{60} / D_{10}$ $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
d. If soil contains ≥15% sand, add "with sand" to group name.
e. Gravels with 5 to 12% fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
f. If fines classify as CL-ML, use dual symbol GC-GM or SC-SM.
g. If fines are organic, add "with organic fines" to group name.
h. If soil contains ≥ 15% gravel, add "with gravel" to group name.
i. Sands with 5 to 12% fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay
j. If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
k. If soil contains 10 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
l. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
m. If soil contains ≥ 30% plus No. 200 predominantly gravel, add "gravelly" to group name.
n. PI ≥ 4 and plots on or above "A" line.
o. PI < 4 or plots below "A" line.
p. PI plots on or above "A" line.
q. PI plots below "A" line.



Laboratory Tests

DD	Dry density, pcf	OC	Organic content, %
WD	Wet density, pcf	S	Percent of saturation, %
MC	Natural moisture content, %	SG	Specific gravity
LL	Liquid limit, %	C	Cohesion, psf
PL	Plastic limit, %	∅	Angle of internal friction
PI	Plasticity index, %	qu	Unconfined compressive strength, psf
P200	% passing 200 sieve	qp	Pocket penetrometer strength, tsf

Particle Size Identification

Boulders	over 12"
Cobbles	3" to 12"
Gravel	
Coarse	3/4" to 3"
Fine	No. 4 to 3/4"
Sand	
Coarse	No. 4 to No. 10
Medium	No. 10 to No. 40
Fine	No. 40 to No. 200
Silt	< No. 200, PI < 4 or below "A" line
Clay	< No. 200, PI ≥ 4 and on or above "A" line

Relative Density of Cohesionless Soils

Very loose	0 to 4 BPF
Loose	5 to 10 BPF
Medium dense	11 to 30 BPF
Dense	31 to 50 BPF
Very dense	over 50 BPF

Consistency of Cohesive Soils

Very soft	0 to 1 BPF
Soft	2 to 3 BPF
Rather soft	4 to 5 BPF
Medium	6 to 8 BPF
Rather stiff	9 to 12 BPF
Stiff	13 to 16 BPF
Very stiff	17 to 30 BPF
Hard	over 30 BPF

Drilling Notes

Standard penetration test borings were advanced by 3 1/4" or 6 1/4" ID hollow-stem augers unless noted otherwise, Jetting water was used to clean out auger prior to sampling only where indicated on logs. Standard penetration test borings are designated by the prefix "ST" (Split Tube). All samples were taken with the standard 2" OD split-tube sampler, except where noted.

Power auger borings were advanced by 4" or 6" diameter continuous-flight, solid-stem augers. Soil classifications and strata depths were inferred from disturbed samples augered to the surface and are, therefore, somewhat approximate. Power auger borings are designated by the prefix "B."

Hand auger borings were advanced manually with a 1 1/2" or 3 1/4" diameter auger and were limited to the depth from which the auger could be manually withdrawn. Hand auger borings are indicated by the prefix "H."

BPF: Numbers indicate blows per foot recorded in standard penetration test, also known as "N" value. The sampler was set 6" into undisturbed soil below the hollow-stem auger. Driving resistances were then counted for second and third 6" increments and added to get BPF. Where they differed significantly, they are reported in the following form: 2/12 for the second and third 6" increments, respectively.

WH: WH indicates the sampler penetrated soil under weight of hammer and rods alone; driving not required.

WR: WR indicates the sampler penetrated soil under weight of rods alone; hammer weight and driving not required.

TW indicates thin-walled (undisturbed) tube sample.

Note: All tests were run in general accordance with applicable ASTM standards.