WHEATLANDS METROPOLITAN DISTRICT REGULAR MEETING Wheatlands Clubhouse, 6601 S. Wheatlands Parkway, Aurora, Colorado May 11, 2023 at 6:00 p.m. <u>www.wheatlandsmetro.org</u>

Paulette Martin, President	Term to May 2027
Kathy Barela, Treasurer	Term to May 2025
Rodney DeWalt, Assistant Secretary	Term to May 2027
Sameer Bhatnagar, Assistant Treasurer	Term to May 2023
Brooke Holliman, Secretary	Term to May 2025

NOTICE OF REGULAR MEETING AND AGENDA

- 1. Call to Order
- 2. Declaration of Quorum/ Conflict of Interest Disclosures
- 3. Approval of Agenda
- 4. Public Comment Members of the public may express their views to the Board on matters that affect the District. Comments will be limited to three (3) minutes per person. As a general practice, the Board will not discuss/debate these items, nor will the Board make any decisions on items presented during this time, rather it will refer the items for follow up.
- 5. Consent Agenda The items listed below are a group of items to be approved with a single motion and vote by the Board. An item may be removed from the consent agenda to the regular agenda upon request of any Board member.
 - a. Approval of Minutes from April 13, 2023 Meeting
 - b. Ratify Work Order No. 5 to Independent Contractor Agreement with Pool Doctor in the Amount of \$4,395.00 for Pool Leak Repairs
 - c. Ratify Contract with Architectural Engineering Design Group in the Amount of \$5,500.00 for Lighting Design for USP Fields
 - d. Ratify Change Order No. 5 with Richdell Construction, Inc. in the Amount of \$86,782.50 for Soccer Field Sitework
 - e. Ratify Change Order No. 6 with Richdell Construction, Inc. in the Amount of \$1,000.00 for Soccer Field Sleeves
- 6. Covenant Enforcement/Design Review
 - a. Review Architectural Review and Covenant Enforcement Reports
- 7. Financial Matters
 - a. Review Unaudited Financial Statements and Approve Payment of Claims
 - b. Other Financial Matters
- 8. Landscape Maintenance
 - a. Review Landscape Maintenance Report and Status of Approved Work Orders
 - b. Update on Turf Reduction, Rebates and Additional Technology to Reduce Water Usage
 - c. Review and Consider Approval of Work Orders/Proposals
 - i. Estimate #1758 Rejuvenate Corner of Wheatlands Parkway and Harvest (Rolltop Edging) \$1,829.65

- d. Review and Discuss Detention Pond Inspection Report and Maintenance
- e. Discuss Retaining Landscape Architect for Landscape Conversion from Turf
- f. Other Landscape Maintenance Matters
- 9. Legal Matters
 - a. Update on Murphy Creek Trail and City of Aurora Request for Easement to Cross District Property
 - b. Other Legal Matters
- 10. District Management
 - a. Review District Manager's Report
 - b. Discuss Pool Leaks and VGD Installation Progress
 - c. Review Playground Safety Solutions, LLC Report
 - d. District Manger's Monthly Report
 - e. Other Management Items
- 11. Capital Projects
 - a. Urban Soccer Fields Update
- 12. Director's Items
 - a. Wheatlands Park and Recreation Authority Update
 - b. Review and Discuss Board Emails Received (board@wheatlandsmetro.org)
 - c. Other Director Items
- 13. Other Business
- 14. Adjourn

2023 Regular Meetings	Location					
Second Thursday of each month @ 6:00 p.m.	Wheatlands	Clubhouse,	6601	S.	Wheatlands	Parkway,
	Aurora, Colo	orado				-

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS

	OF
	WHEATLANDS METROPOLITAN DISTRICT
	Held: April 13, 2023 at 6:00 p.m., via Zoom teleconference.
Attendance	A regular meeting of the Board of Directors of Wheatlands Metropolitan District was called and held as shown above and in accordance with the applicable statutes of the State of Colorado. The following Directors were in attendance:
	Paulette Martin Kathy Barela Rodney DeWalt Sameer Bhatnagar
	Also present were: Clint C. Waldron, Esq., White Bear Ankele Tanaka & Waldron, District General Counsel; James Shultz, Marchetti and Weaver, District Accountant; Isabell Rodau, YMCA, District Manager; Sharon Sulzle (<i>for a portion of the</i> <i>meeting</i>), AMI HOA; and Kevin Cox, Cox Professional Landscape Services, LLC.
	Director Brooke Holliman was absent and excused.
Call to Order	It was noted that a quorum of the Board was present, and the meeting was called to order at 6:00 p.m.
Disclosure Matters	Mr. Waldron reported that disclosures for those directors that provided White Bear Ankele Tanaka & Waldron with notice of potential or existing conflicts of interest were filed with the Secretary of State's Office and the Board at least 72 hours prior to the meeting, in accordance with Colorado law, and those disclosures were acknowledged by the Board. Mr. Waldron inquired into whether members of the Board had any additional disclosures of potential or existing conflicts of interest with regard to any matters scheduled for discussion at the meeting. No additional disclosures were noted. The participation of the members present was necessary to obtain a quorum or to otherwise enable the Board to act.

Agenda	The Board reviewed the proposed agenda. Following discussion, upon a motion duly made and seconded, the Board unanimously approved the agenda, as presented.
Public Comment	Public Comment was made by Bill O'Connor noting that he appreciates all that the Board does. Mr. O'Connor said he would like to see a telephone conference or Zoom option available to residents to attend meetings.
Consent Agenda	The Board reviewed the items on the consent agenda. Mr. Waldron advised the Board that any item may be removed from the consent agenda to the regular agenda upon the request of any director. Upon a motion duly made and seconded, the following items on the consent agenda were unanimously approved, ratified and adopted:
	a. Minutes from March 9, 2023 and April 5, 2023 Meetings;b. Pay Application #11 from Richdell; andc. Pay Application #12 from Richdell.
Covenant Enforcement/Design Review	
Review Architectural Review and Covenant Enforcement Reports	Ms. Sulzle reviewed the Architectural Review and Covenant Enforcement Reports with the Board. The Board directed her to request a status update from Altitude Law on outstanding violations.
Financial Matters	
Review Unaudited Financial Statements and Approve Payment of Claims	Mr. Shultz reviewed the claims payable with the Board. Following discussion, upon a motion duly made and seconded, the Board unanimously approved the claims. Mr. Shultz reviewed the unaudited financial statements with the Board.
Review and Accept 2022 Draft Audit Report	Mr. Shultz reviewed the 2022 Draft Audit with the Board. Following discussion, upon a motion duly made and seconded, the Board unanimously approved the Audit, subject to final legal review.
Other Financial Matters	None.
Landscape Maintenance	

Review Landscape Maintenance Report and Status of Approved Work Orders

Update on Turf Reduction and Additional Technology to Reduce Water Usage

Review and Consider Approval of Work Orders/Proposals

Review and Discuss Detention Pond Inspection Report and Maintenance

Other Landscape Maintenance Matters

Legal Matters

Update on SB23-110

Mr. Cox reviewed the Landscape Maintenance Report with the Board noting that with little snow removal in March, Cox was able to get ahead of spring maintenance. Mr. Cox informed the Board there is a faucet sticking in the restroom that is being repaired and the mainline is in the process of being filled and checked for leaks. He also noted all snow removal damage has been repaired.

Mr. Cox provided an update on turf reduction and additional technology to reduce water usage to the Board. No action was taken.

Mr. Cox reviewed Estimate #1752 in Area 1 for turf removal and adding rock mulch to the incline between Harvest and Ider on Wheatlands Parkway in the amount of \$41,186.85. The Board directed Mr. Cox to discuss potential turf reduction rebates with the City of Aurora. This matter was deferred.

Mr. Cox reviewed Estimate #1753 in Area 2 for turf removal and adding rock mulch to the corner of Wheatlands Parkway and Powhaton in the amount of \$19,526.95. This matter was deferred.

Mr. Cox reviewed Estimate #1754 in Area 3 for turf removal and adding rock mulch to the corner of Wheatlands Parkway and South Langdale Court in the amount of \$9,468.30. This matter was deferred.

Mr. Cox reviewed Estimate #1740 for the rejuvenation of the annual planting beds in the amount of \$2,290.60 with the Board. Following discussion, upon a motion duly made and seconded, the Board unanimously approved the proposal.

Mr. Cox reviewed Estimate #1758 for the rejuvenation of the corner of Wheatlands Parkway and Harvest in the amount of \$1,829.65 with the Board. This matter was deferred.

Mr. Cox informed the Board he has not yet seen the inspection report. Mr. Waldron will forward the report to him.

Director Bhatnager mentioned there was a tree hit on Powhaton. Ms. Rodau will request a copy of the police report.

Other Legal Matters	Mr. Waldon provided an update on SB23-110 with the Board.		
District Management	Mr. Waldron provided a brief update on SARIA discussions.		
Review District Manager's Report			
Update on Pool Cover Repair	Ms. Rodau reviewed the District Manager's Report with the Board.		
and Consider Approval of Proposal from Pool Doctor in the amount of \$18,167.88	Ms. Rodau provided an update on the pool cover repair and replacement. Ms. Rodau reviewed the proposal from Pool Doctor in the amount of \$18,167.88 with the Board. Following		
Review Playground Safety	discussion, upon a motion duly made and seconded, the Board unanimously approved the proposal.		
Other Management Items	Ms. Rodau reviewed the report from Playground Safety Solutions, LLC with the Board.		
	Ms. Rodau noted a resident has made a traffic calming request which has been submitted to the City of Aurora.		
Capital Projects	Ms. Rodau informed the Board that Bell Plumbing didn't do a great job winterizing the restrooms and winter freezing caused water breaks and damage. Ms. Rodau has requested reimbursement from Bell Plumbing.		
Urban Soccer Fields Update			
	Ms. Rodau provided an update on the urban soccer fields noting that the electrical, grading and storm water management are all under discussion.		
Director's Items			
Wheatlands Park and Recreation Authority Update	It was noted that A&P is working on the establishment of native grasses and the YMCA is still waiting on the proposal from the bank.		
Review and Discuss Board Emails Receives (board@wheatlandsmetro.or g)	None.		
Other Director Items	None.		
Other Business	The Board discussed potential revisions to the Clubhouse Policy. No action was taken.		

AdjournThere being no further business to come before the Board, upon
motion, second and unanimous vote, the meeting was adjourned.

The foregoing constitutes a true and correct copy of the minutes of the above-referenced meeting.

Secretary for the Meeting

The foregoing minutes were approved the 11th day of May, 2023.

POOL	Q	DOCTOR
------	---	--------

QUOTE

QUOTE#

0000041306

CUST #

DATE 5/3/2023

0001356

Pool Doctor PO Box 150301 Lakewood CO 80215 Phone: 303-232-8600 Fax: 303-675-8280

BILL TO:

Wheatlands Metro Dist (YMCA) c/o Marchetti & Weaver LLC 245 Century Cir Ste 103 Lousiville CO 80027

SHIP TO:

Wheatlands Metro Dist (YMCA) 6601 S Wheatlands Pkwy Aurora CO 80016

	P.O. NUMBER	TE	RMS	S	ALES PER	SON
	YMCA	Ν	IET 30		Scott	
QTY		DESCRIPTION		P	RICE EA	AMOUNT
1.00	Activity pool buried pipe repair - T We have located a leak in the retu There were a couple of other spots	his estimate/invoice creat rn line for the activity poo s in the return line that cou	ed by Scott I right out side of the pump ro uld be possible leaks but we	om.		
1.00	won't know for sure until we fix the other leaks are present at that time	leak outside of the pump e a change order will be s	room and pressure test again ubmitted.	n. lf		0.005.00
1.00	(no Color) Patch) 2' X 2'	vcut, Concrete Removal, I	Excavation, Backtill, Concrete	e 3,8	935.00000	3,935.00
1.00	Pressure Test - Up To 30'x60' Rec Cut To Perform Pressure Test Add	tangle (1800 Sq Ft). If Ci litional Charges Will Appl	rculation Piping Needs To Be y.	y 2	460.00000	460.00
W Au ap	ork Order No. 5 to Independe igust 19, 2022 (the "Agreemer ply to this Scope of Services se	ent Contractor Agreen nt"). The Parties agree et forth in the Work (ment for Pool Maintenar e that all terms and cond Order.	nce and l itions of	Repair Ser the Agree	vices dated ement shall
Co	ontractor:	Date		_		
Di	strict Tauletto Martin	Dat	_{te:} May 4, 2023	_		
	TOTAL					\$4,395.00
<i>Estima</i> Custom services plus inte	tes good for 30 days only. er hereby acknowledges and ag s. Customer agrees to pay all co erest - theron at 18% per annum	rees that any account ourt & reasonable attorn on all such amounts ou	that becomes delinquent w ney fees for collection of a utstanding.	vill be sut Il past du	oject to col e amounts	lection owed
Work	approved: Customer Signa	iture	Print Name			Date
						8

WHEATLANDS METROPOLITAN DISTRICT CONTRACT

Name of Contractor/Provider/Consultant: Architectural Engineering Design Group, Inc. d/b/a AE Design

Title of Agreement/Contract: Electrical engineering, lighting design, and construction administration services for Wheatlands YMCA Field

Agreement/Contract Date: April 19, 2023

This Contract ("Agreement") is made by and between Wheatlands Metropolitan District, a quasimunicipal corporation and political subdivision of the State of Colorado (the "District") and the above-referenced contractor, provider, or other consultant (the "Contractor").

Introduction. The District and the Contractor desire to enter into this Contract to be effective the date above.

1. <u>Scope of Services</u>. The Contractor shall perform the services set forth in **Exhibit A** (the "**Services**"): (a) in a first-class manner, to the satisfaction of the District, using the degree of skill and knowledge customarily employed by other professionals performing similar services; (b) within the time period specified in the Agreement; (c) in such a manner as to minimize any annoyance, interference, or disruption to the residents, tenants, occupants, and invitees within the District; and (d) in compliance with all applicable federal, state, county, and local or municipal statutes, ordinances, and regulations.

2. <u>Compensation of Services</u>. Compensation for the Services provided under this Agreement shall be provided in accordance with the compensation schedule attached hereto as **Exhibit A**. The Contractor shall be responsible for all expenses it incurs in performance of this Agreement and shall not be entitled to any reimbursement or compensation except as provided herein, unless said reimbursement or compensation is approved in writing by the District in advance of incurring such expenses. Exhibit A may take any form. In the event of any conflict between terms set forth in the body of this Agreement and terms set forth in Exhibit A, the terms in the body of this Agreement shall govern.

3. <u>Repairs/Claims</u>. The Contractor shall notify the District immediately, in writing, of any and all incidents/accidents which result in injury or property damage. The Contractor will promptly repair or, at the District's option, reimburse the District for the repair of any damage to District property caused by the Contractor or its employees, agents, or equipment.

4. <u>Independent Contractor</u>. The Contractor is an independent contractor and nothing herein shall constitute or designate the Contractor or any of its employees or agents as employees or agents of the District. The Contractor is not entitled to workers' compensation benefits or unemployment insurance benefits and the District will not provide any insurance coverage or employment benefits of any kind or type to or for the Contractor or its employees, sub-consultants, contractors, agents, or representatives. The Contractor shall have full power and authority to select the means, manner, and method of performing its duties under this Agreement, without detailed control or direction from the District, and shall be responsible for supervising its own employees or subcontractors. The District is concerned only with the results to be obtained.

5. <u>Warranty and Permits</u>. The Contractor shall and does by this Agreement guarantee and warrant that all workmanship, materials, and equipment furnished, installed, or performed for the accomplishment of the Services (collectively, the "**Work**") will be of good quality and new, unless otherwise required or permitted by this Agreement. The Contractor further warrants that the Work will conform to all requirements of this Agreement and the applicable building code and all other applicable laws, ordinances, codes, rules, and regulations of any governmental authorities having jurisdiction over the Work. The Contractor hereby warrants the Work for a period of one (1) year from the date of completion and initial acceptance of the Work. The Contractor will immediately correct or replace any Work that is defective or not conforming to this Agreement at its sole expense to the reasonable satisfaction of the District. The Contractor's guarantees and warranties shall

in all cases survive termination of this Agreement. This warranty shall be enforceable by the District, its successors and assigns.

6. Contractor's Insurance. The Contractor shall acquire and maintain, at its sole cost and expense, during the entire term of the Agreement, the following insurance coverage: (i) Standard worker's compensation and employer's liability insurance covering all employees of Contractor involved with the performance of the services, with policy amounts and coverage in compliance with law; (ii) Commercial General Liability Insurance with minimum limits of liability of not less than \$2,000,000 per occurrence for bodily injury and property damage liability; \$2,000,000 general aggregate (iii) Comprehensive Automobile Liability Insurance covering all owned, non-owned, and hired automobiles used in connection with the performance of the services, with limits of liability of not less than \$1,000,000 combined single limit bodily injury and property damage, and (iv) any other insurance commonly used by contractors for services of the type to be performed pursuant to this Agreement. All coverage provided pursuant to this Agreement shall be written as primary policies, not contributing with and not supplemental to any coverage that the District may carry, and any insurance maintained by the District shall be considered excess. The Commercial General Liability and Comprehensive Automobile Liability Insurance policies will be endorsed to name the District as an additional insured. The Contractor's failure to purchase the required insurance shall not serve to release it from any obligations; nor shall the purchase of the required insurance serve to limit the Contractor's liability. The Contractor shall be responsible for the payment of any deductibles on issued policies.

7. <u>Indemnification</u>. The Contractor shall defend, indemnify, and hold harmless the District and each of its directors, officers, contractors, employees, agents, and consultants, from and against any and all claims, demands, losses, liabilities, actions, lawsuits, damages, and expenses, including legal expenses and attorneys' fees, arising directly or indirectly out of the errors or omissions, negligence, willful misconduct, or any criminal or tortious act or omission of the Contractor or any of its subcontractors, officers, agents, or employees. The Contractor is not obligated to indemnify the District for the District's own negligence. This indemnification obligation will not be limited in any way by any limitation on the amount or types of damages, compensation, or benefits payable by or for the Contractor under worker's compensation acts, disability acts, or other employee benefit acts. Such indemnity shall survive the expiration or termination of this Agreement. To the extent the District is or may be obligated to indemnify, defend, or hold Contractor harmless under the terms of the Agreement, any such indemnification obligation shall arise only to the extent permitted by applicable law and shall be limited solely to sums lawfully appropriated for such purpose in accordance with this Agreement.

8. <u>Termination</u>. This Agreement may be terminated by either party for cause or for convenience upon ten (10) days' prior written notice to the other party. If the Agreement is terminated, the Contractor shall be paid for all Services satisfactorily performed prior to the designated termination date, including reimbursable expenses due. Said payment shall be made in the normal course of business.

9. <u>Governing Law / Disputes</u>. This Agreement and all claims or controversies arising out of or relating to this Agreement shall be governed and construed in accordance with the law of the State of Colorado, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Colorado. Venue for all actions shall be in the District Court in and for the county in which the District is located.

10. <u>Subject to Annual Appropriation and Budget</u>. The District does not intend hereby to create a multiple-fiscal year direct or indirect debt or other financial obligation whatsoever. The obligations of the District under this Agreement is subject to annual budgeting and appropriations, and the Contractor expressly understands and agrees that the decision whether or not to budget and appropriate funds is within the discretion of District's governing body, and the obligations of the District shall extend only to monies appropriated for the purposes of this Agreement and shall not constitute a mandatory charge, requirement or liability in any ensuing fiscal year beyond the then-current fiscal year. The District and Contractor understand and intend that the District's

obligation to make payments and pay other amounts due under the Agreement shall constitute a current expense and shall not in any way be construed to be a debt in contravention of any applicable constitutional or statutory limitations or requirements.

11. <u>Governmental Immunity</u>. Nothing in this Agreement shall be construed to waive, limit, or otherwise modify, in whole or in part, any governmental immunity that may be available by law to the District, its respective officials, employees, contractors, or agents, or any other person acting on behalf of the District and, in particular, governmental immunity afforded or available to the District pursuant to the §§ 24-10-101, *et seq.*, C.R.S.

12. <u>Remedies</u>. To the extent the Contractor's remedies for a District default under the Agreement include any right to accelerate amounts to become due under the Agreement, such acceleration shall be limited solely to sums lawfully appropriated for such purpose and shall further be limited to amounts to become due during the District's then-current fiscal period.

13. <u>Negotiated Provisions</u>. This Agreement shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared by counsel for one of the parties, it being acknowledged that each party has contributed substantially and materially to the preparation of this Agreement.

14. <u>Severability</u>. If any portion of this Agreement is declared by any court of competent jurisdiction to be void or unenforceable, such decision shall not affect the validity of any remaining portion, which shall remain in full force and effect. In addition, in lieu of such void or unenforceable provision, there shall automatically be added as part of this Agreement a provision similar in terms to such illegal, invalid, or unenforceable provision so that the resulting reformed provision is legal, valid, and enforceable.

15. <u>Miscellaneous</u>. This Agreement constitutes the entire agreement between the parties with respect to the matters addressed herein, and shall supersede all prior oral or written negotiations, understandings, and commitments.

16. <u>Counterpart Execution</u>. This Agreement may be executed in several counterparts, each of which may be deemed an original, but all of which together shall constitute one and the same instrument. Executed copies hereof may be delivered by facsimile or email of a PDF document, and, upon receipt, shall be deemed originals and binding upon the signatories hereto, and shall have the full force and effect of the original for all purposes, including the rules of evidence applicable to court proceedings.

By the signature of its representative below, each party affirms that it has taken all necessary action to authorize said representative to execute this Agreement.

District:	Contractor:
By: Pauletto Martin	By:
Name: Paulette Martin	Name: Jon Brooks
Title: President	Title:Principal

Exhibit A Scope of Services/Compensation Schedule



Integrated Lighting, Technology, and Electrical Solutions

April 19, 2023

Kim Armitage YMCA of Metropolitan Denver 2625 S. Colorado Blvd. Denver, Co 80222

RE: Wheatlands YMCA Field Wheatlands, CO

Dear Kim:

In response to your request, we submit this Agreement for professional engineering services for your consideration. Our services included in this Agreement are defined as indicated below.

DESCRIPTION OF WORK

Provide electrical engineering, lighting design, and construction administration services for the above referenced project. A brief description of the project is as follows:

A new exterior sports field is planned to be built at the existing Wheatlands YMCA facility. The new sports field shall include a new lighting system, as designed by others. AE Design's scope shall include the electrical engineering design and services to connect the new sport field lighting system to the existing electrical infrastructure at the building. No other site power or lighting improvements are included in this scope of work.

SCOPE OF WORK

Upon execution of this Agreement, the Consultant will provide the following design services:

- A. Inclusions:
 - 1. Preparation of construction/permit documents for electrical/lighting systems including:
 - a. Power plans indicating electrical equipment locations and owner provided equipment locations and circuiting information.
 - b. Energy compliance documents, ComCheck.
 - c. One-line diagram, panel board schedules, and load calculations. It is anticipated that the existing electrical service to the building is adequate to service the needs of this design. No building electrical service or panel board upgrades are included in the basic design services.
 - d. Response to City plan review comments as related to the electrical/lighting engineering documents.
 - 2. Construction administration, will be performed on an as-requested basis and billed hourly, including:
 - a. Review of submittal drawings presented by the Contractor(s).
 - Response to RFI questions and preparation of addendum drawings as required.
 - c. Site Observations at the substantial complete level, including written report/punch list.

B. Exclusions:

aedesign-inc.co

1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034



- 1. Sports Field lighting design.
- 2. 3. Fire alarm system design

 - Design of Technology / Low-Voltage Systems including but not limited to: a. Tele/Data/CATV structured cabling and cabling management systems. Security systems. b.
 - Life safety communication systems. c.
 - d. Paging/Intercom/Bell Tone system.
 - e.
 - Audio-visual (AV) systems. Theatrical lighting and rigging systems. f.
 - Low-voltage cabling or cable management design
- 4. 5. Life cycle cost or other computer simulated energy modeling.
- 6. LEED or other green building certification design, document completion and submission
- 7. Preparation of electronic record documents, based on significant changes in the work made during construction.
- 8. Any other design service not specifically listed as an inclusion.

FEES

Α.	Fixed fee for base design phase services:	
	Base Design Fee:	\$5,500.00
	Construction Administration:	Hourly, as requested
	Estimate of reimbursable expenses:	\$100.00, estimated for drawings plot & delivery

Β. Hourly Rates:

Any service in addition to those specified above, shall be authorized in writing prior to commencing work, and shall be compensated on the hourly basis at the following rates:

Standard hourly rates, effective January 1, 2023		
Principal	\$ 265.00 / hr	
Director of Operations	\$ 245.00 / hr	
Senior Project Manager	\$ 235.00 / hr	
Project Manager	\$ 225.00 / hr	
Senior Lighting Project Manager	\$ 225.00 / hr	
Senior Lighting Designer	\$ 225.00 / hr	
Senior Project Engineer	\$ 225.00 / hr	
Project Engineer	\$ 205.00 / hr	
Senior Project Designer	\$ 190.00 / hr	
BIM Manager	\$ 190.00 / hr	
Lighting Designer	\$ 165.00 / hr	
Project Designer	\$ 165.00 / hr	
Intern Designer	\$ 105.00 / hr	
CAD/Revit Technician	\$ 105.00 / hr	
Administrative	\$ 125.00 / hr	

aedesign-inc.com

1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034

Wheatlands YMCA Field Wheatlands, CO P2/3



Thank you for the opportunity to provide you with this agreement for the project and we look forward to working with you and your firm.

Sincerely,

AE Design

Jon Brooks, P.E. Principal

By signing below, $\underline{\textbf{YMCA of Metropolitan Denver}}$ agrees to the scope of work and fee as noted above.

Signature

Date

aedesign-inc.con

1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034

Wheatlands YMCA Field Wheatlands, CO P3/3



March 16, 2023

YMCA of Metropolitan Denver 2625 S. Colorado Blvd. Denver, CO 80222

Attn: Isabell Rodau

Ref: YMCA of Metropolitan Denver

Isabell

Below is pricing you requested for the YMCA:

Mobilization/General Conditions	\$ 3,000.00
Earthwork	\$ 3,500.00
Drainage (230 LF 6" Pipe)	\$ 6,500.00
4" Concrete Flatwork (7300 SF)	\$69,500.00
Restoration	\$ 3,000.00
Performance/Payment/Warranty Bonds	\$ 1,282.50

Total

Conditions:

Earthwork is limited to concrete prep; excess dirt to be lost onsite and seeded; permits are not included; testing not included; construction fence not included; no irrigation work included; footers are excluded; concrete does not include any rebar but does include fiber mesh and 4500 psi concrete.

Sincerely,

(ric Sperry

Eric Sperry Project Manager

\$86,782.50

CHANGE ORDER NO.: 5

Owner:	Wheatlands Metropolitan Dis	strict	Owner's Project No.:	
Engineer:	Elevation Consulting Group, L	.td.	Engineer's Project No	0.:
Contractor:	Richdell Construction, Inc.		Contractor's Project	No.:
Project:	Phase II Park Improvements			
Contract Name:	AGREEMENT BETWEEN CONT	RACTOR FOR CO	NSTRUCTION CONTRA	ACT (STIPULATED PRICE)
Date Issued:	April 14, 2023	Effective Date of	f Change Order:	April 14, 2023

The Contract is modified as follows upon execution of this Change Order:

Description:

Additional Work for Soccer Fields Installation: (see attached proposal)

Elevation Consulting Group, Ltd., will serve in the role of the Engineer for this portion of the Project.

Contractor will provide updated Performance, Payment, and Warranty Bonds for this portion of the Project.

Attachments:

The following Contract Documents are appended to the Contract:

Change in Contract Price

- 1. Drawings: WHEATLANDS YMCA FIELDS CD SET and Wheatlands YMCA fields civil plan revisions
- 2. Soil report bearing the following general titles: Wheatlands YMCA Geotech.

(Aj	opropriations have been made and are available for this Change Order)	Change in Con State Contract Times as ei number o	tract Times ither a specific date or a f days]
Or	ginal Contract Price:	Original Contract Times:	
		Substantial Completion:	150
\$	1,648,000.00	Ready for final payment:	Not provided
Inc	rease from previously approved Change Orders	Revision from previously app	proved Change Orders
No	. 2 to No. 4 :	No.1 to No. 1 :	
		Substantial Completion:	150
\$	33,614.56	Ready for final payment:	169
Со	ntract Price prior to this Change Order:	Contract Times prior to this (Change Order:
		Substantial Completion:	150
\$	1,681,614.56	Ready for final payment:	169
Inc	rease this Change Order:	Increase this Change Order:	
		Substantial Completion:	458
\$	86,782.50	Ready for final payment:	458
Со	ntract Price incorporating this Change Order:	Contract Times with all appro	oved Change Orders:
		Substantial Completion:	458
Ś	1.768.397.06	Ready for final payment:	458

Authorized by Owner

Tauletto Martin By: President Title:

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Page 1 of 2

SECTION 941

Date:	Apr 14, 2023
	Contractor
By:	
Title:	
Date:	

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LINE	LENGTH	BEARING
L1	19.27	N45 ° 40'03"E
L2	41.00	N22°00'21"E
L3	19.00	S67 * 59'39"E
L4	6.00	N22 ° 00'21"E
L5	13.00	S67 * 59'39"E
L6	90.00	N22°00'21"E
L7	13.00	N67 * 59'39"W
L8	1.00	N22 ° 00'21"E
L9	13.00	S67 * 59'39"E
L10	90.00	N22°00'21"E
L11	13.00	N67 * 59'39"W
L12	1.00	N22 ° 00'21"E
L13	13.00	S67 * 59'39"E
L14	90.00	N22°00'21"E
L15	13.00	N67 * 59'39"W
L16	1.00	N22 ° 00'21"E
L19	17.38	N45°40'03"E
L20	45.32	N22°00'21"E
L21	9.00	N67 * 59'39"W
L22	8.91	S67 * 59'39"E
L23	14.95	N67 * 59'39"W
L24	171.00	N22 ° 00'21"E
L25	17.00	S67 * 59'39"E
L26	3.23	N22 ° 00'21"E
L27	3.03	N22 ° 00'21"E
L28	30.00	S67 * 59'39"E
L29	1.00	N22°00'21"E
L30	30.00	N67 * 59'39"W
L31	1.00	S22°00'21"W
L32	30.00	S67 * 59'39"E
L33	1.00	N22 ° 00'21"E
L34	30.00	N67 * 59'39"W
L35	1.00	S22*00'21"W
L36	30.00	S67 * 59'39"E
L37	1.00	N22°00'21"E
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	LINE T	ABLE
LINE	LENGTH	BEARING
L38	30.00	N67 * 59'39"W
L39	1.00	S22°00'21"W
L40	30.00	S67 * 59'39"E
L41	1.00	N22°00'21"E
L42	30.00	N67 * 59'39"W
L43	1.00	S22*00'21"W
L44	13.00	S67 * 59'39"E
L45	1.00	N22 ° 00'21"E
L46	13.00	N67 * 59'39"W
L47	9.00	S22°00'21"W
L48	29.20	N22 ° 00'21"E
L49	12.41	N33°23'46"E
L50	60.67	N72 ° 45 ' 14"E
L51	14.24	N33°23'46"E
L52	13.08	N34°09'25"W
L53	65.42	N72 ° 45 ' 14"E
L54	17.00	S17°14'46"E
L55	46.40	N72 ° 45'14"E
L56	28.54	S17°14'46"E
L57	14.99	N72 * 36'46"E
L58	65.42	N72 ° 45'14"E
L59	92.88	N21 ° 40'14"E
L60	161.94	N19 ° 09'10"E
L61	3.76	N66°42'51"E
L62	67.50	N71°01'11"W
L63	79.25	N71 ° 01'11"W
L64	153.21	N77 ° 04'48"W
L65	38.00	N22°00'21"E
L66	29.50	N22 ° 00'21"E
L67	23.00	N67 * 59'39"W
L68	113.30	S22*00'21"W
L69	27.84	N22°00'17"E
L70	22.00	N67 * 59'43"W
L71	27.84	S22°00'00"W
L72	53.35	N67 * 59'39"W



BENCHMARK:

L78

43.00

L79 10.00 N22°00'21"E

L80 105.50 N67*59'39"W

L81 90.00 N22*00'21"E

L82 130.00 S67*****59'39**"**E

L85 2.50 N67*****59'39"W

L86 25.45 S22°00'21"W

L87 19.50 N67*****59'39"W

L88 38.71 S22*00'21"W

L83 43.23

L84

S67*****59'39"E

S22°00'21"W

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2.50 S67*****59'39"E

CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM BRASS CAP (STAMPED COA BM, 23-121.8, 2005) CENTERED ON THE BACK OF A CURB OPENING INLET STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD. & S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).

BASIS OF BEARING:

BASIS OF BEARING FOR THIS PROJECT IS RANGE LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.

	CURVE	E TABI	.E
CURVE	LENGTH	RADIUS	DELTA
C1	30.83	20.00	88 ° 19'56"
C2	74.42	180.00	23•41'23"
C3	31.42	20.00	90°00'00"
C4	34.56	22.00	90 ° 00'00"
C5	6.28	4.00	90°00'00"
C6	6.28	4.00	90°00'00"
C7	6.28	4.00	90°00'00"
C8	6.28	4.00	90°00'00"
00	0.00	4.00	

C10

C11

	CURV	E TAB	LE		CURVE	E TABI	E
CURVE	LENGTH	RADIUS	DELTA	CURVE	LENGTH	RADIUS	DELTA
C12	64.84	157.00	23 ° 39'43"	C23	6.28	4.00	90'00'00
C13	31.42	20.00	90°00'00"	C24	6.28	4.00	90'00'00
C14	29.76	20.00	85 ° 15'47"	C25	6.28	4.00	90 ° 00'00
C15	6.61	4.00	94 • 44'13"	C26	6.28	4.00	89*59'55
C16	3.14	2.00	90°00'00"	C27	6.28	4.00	90'00'00
C17	5.96	5.00	68 ° 20'12"	C28	6.28	4.00	90'00'00
C18	107.34	45.00	136•40'25"	C29	6.28	4.00	90'00'00
C19	5.96	5.00	68 ° 20'12"	C30	6.28	4.00	89*59'5
C20	6.28	4.00	90°00'00"	C31	6.28	4.00	90°00'00
C21	6.28	4.00	90°00'00"	C32	6.28	4.00	90 ° 00'00
C22	6.28	4.00	89 * 59'55"	C33	6.28	4.00	90'00'00

	CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA		
C34	6.28	4.00	89 * 59'55"		
C35	6.28	4.00	90°00'00"		
C36	6.28	4.00	90°00'00"		
C37	6.28	4.00	90°00'00"		
C38	7.25	3.00	138 ° 25'24"		
C39	36.28	25.00	83 ° 09'12"		
C40	7.25	3.00	138 ° 25'24"		
C41	30.79	20.00	88 ° 13'05"		
C42	50.83	74.00	39 ° 21'29"		
C43	29.12	29.00	57 • 31'37"		
C44	29.63	20.00	84 * 53'22"		

	CURVE	e tabl	.E
CURVE	LENGTH	RADIUS	DELTA
C45	34.16	97.00	20 ° 10'38"
C46	6.12	4.00	87 • 43'49"
C47	33.65	114.00	16 ° 54'40"
C48	6.29	4.00	90 ° 08'29"
C49	12.27	175.00	4 ° 00'59"
C50	32.47	97.00	19 ° 10'52"
C51	15.66	20.35	44 ° 05'44"
C52	27.83	113.09	14 ° 06'03"
C53	89.40	202.48	25 ° 17'53"
C54	89.11	65.00	78•32'41"
C55	33.39	232.34	8*14'01"

	CURVE	e tabl	
CURVE	LENGTH	RADIUS	
C56	31.42	190.00	
C57	21.15	200.00	
C58	42.93	200.00	
C59	91.07	125.01	
C60	21.99	14.00	
C61	45.55	29.00	
C62	99.12	175.50	
C63	92.28	197.50	
C64	30.47	29.50	
C65	141.79	175.00	
666	3313	108.00	

	LINE T	ABLE
LINE	LENGTH	BEARING
L1	19.27	N45°40'03"E
L2	41.00	N22 ° 00'21"E
L3	19.00	S67 * 59'39"E
L4	6.00	N22°00'21"E
L5	13.00	S67 * 59'39"E
L6	90.00	N22°00'21"E
L7	13.00	N67 ° 59'39"W
L8	1.00	N22°00'21"E
L9	13.00	S67 * 59'39"E
L10	90.00	N22°00'21"E
L11	13.00	N67 ° 59'39"W
L12	1.00	N22°00'21"E
L13	13.00	S67 * 59'39"E
L14	90.00	N22°00'21"E
L15	13.00	N67 * 59'39"W
L16	1.00	N22°00'21"E
L19	17.38	N45 * 40'03"E
L20	45.32	N22°00'21"E
L21	9.00	N67 ° 59'39"W
L22	8.91	S67 * 59'39"E
L23	14.95	N67 * 59'39"W
L24	171.00	N22°00'21"E
L25	17.00	S67 * 59'39"E
L26	3.23	N22°00'21"E
L27	3.03	N22°00'21"E
L28	30.00	S67 * 59'39"E
L29	1.00	N22°00'21"E
L30	30.00	N67 ° 59'39"W
L31	1.00	S22°00'21"W
L32	30.00	S67 * 59'39"E
L33	1.00	N22°00'21"E
L34	30.00	N67 * 59'39"W
L35	1.00	S22°00'21"W
L36	30.00	S67 * 59'39"E
L37	1.00	N22 ° 00'21"E

l	LINE T	ABLE
LINE	LENGTH	BEARING
L38	30.00	N67 * 59'39"W
L39	1.00	S22*00'21"W
L40	30.00	S67 * 59'39"E
L41	1.00	N22°00'21"E
L42	30.00	N67 * 59'39"W
L43	1.00	S22*00'21"W
L44	13.00	S67 * 59'39"E
L45	1.00	N22°00'21"E
L46	13.00	N67 * 59'39"W
L47	9.00	S22*00'21"W
L48	29.20	N22°00'21"E
L49	12.41	N33°23'46"E
L50	60.67	N72 ° 45'14"E
L51	14.24	N33°23'46"E
L52	13.08	N34°09'25"W
L53	65.42	N72 ° 45'14"E
L54	17.00	S17°14'46"E
L55	46.40	N72 ° 45'14"E
L56	28.54	S17°14'46"E
L57	14.99	N72 * 36'46"E
L58	65.42	N72 ° 45'14"E
L59	92.88	N21°40'14"E
L60	161.94	N19°09'10"E
L61	3.76	N66 ° 42'51"E
L62	67.50	N71°01'11"W
L63	79.25	N71°01'11"W
L64	153.21	N77 ° 04'48"W
L65	38.00	N22°00'21"E
L66	29.50	N22°00'21"E
L67	23.00	N67 * 59'39"W
L68	113.30	S22*00'21"W
L69	27.84	N22 ° 00'17"E
L70	22.00	N67 * 59'43"W
L71	27.84	S22*00'00"W
L72	53.35	N67 * 59'39"W



LINE TABLE			
LINE	LENGTH	BEARING	
L73	31.13	N17 ° 14'46"W	
L74	10.26	N67 * 59'39"W	
L75	28.71	S22°00'21"W	
L76	43.00	N67 * 59'39"W	
L77	63.00	N22°00'21"E	
L89	4.78	S67 * 59'39"E	
L90	31.88	S17°14'46"E	

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BENCHMARK:

CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM BRASS CAP (STAMPED COA BM, 23-121.8, 2005) CENTERED ON THE BACK OF A CURB OPENING INLET STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD. & S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).

BASIS OF BEARING:

BASIS OF BEARING FOR THIS PROJECT IS RANGE LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.

CURVE TABLE							
CURVE	LENGTH	RADIUS	DELTA				
C1	30.83	20.00	88"19'56"				
C2	74.42	180.00	23•41'23"				
C3	31.42	20.00	90 ° 00'00"				
C4	34.56	22.00	90°00'00"				
C5	6.28	4.00	90°00'00" 90°00'00"				
C6	6.28	4.00					
C7	6.28	4.00	90 ° 00'00"				
C8	6.28	4.00	90 ° 00'00"				
C9	6.28	4.00	90 ° 00'00"				
C10	6.28	4.00	90 ° 00'00"				
C11	32.07	20.00	91 ° 53'02"				

	CURV	E TAB	LE		CURVE	e tabi	E
CURVE	LENGTH	ENGTH RADIUS DELTA		CURVE	LENGTH	RADIUS	DELTA
C12	64.84	157.00	23 ° 39'43"	C23	6.28	4.00	90'00'00
C13	31.42	20.00	90°00'00"	C24	6.28	4.00	90°00'00'
C14	29.76	20.00	85 ° 15'47"	C25	6.28	4.00	90°00'00'
C15	6.61	4.00	94 ° 44'13"	C26	6.28	4.00	89 * 59'55'
C16	3.14	2.00	90°00'00"	C27	6.28	4.00	90°00'00'
C17	5.96	5.00	68 ° 20'12"	C28	6.28	4.00	90°00'00'
C18	107.34	45.00	136•40'25"	C29	6.28	4.00	90°00'00'
C19	5.96	5.00	68 ° 20'12"	C30	6.28	4.00	89 * 59'55'
C20	6.28	4.00	90°00'00"	C31	6.28	4.00	90°00'00'
C21	6.28	4.00	90°00'00"	C32	6.28	4.00	90°00'00'
C22	6.28	4.00	89 * 59'55"	C33	6.28	4.00	90 ° 00'00'

CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA					
C34	6.28	4.00	89 * 59'55"					
C35	6.28	4.00	90 ° 00'00"					
C36	6.28	4.00	90 ° 00'00"					
C37	6.28	4.00	90 ° 00'00"					
C38	7.25	3.00	138 ° 25'24"					
C39	36.28	25.00	83 ° 09'12"					
C40	7.25	3.00	138 ° 25'24"					
C41	30.79	20.00	88°13'05"					
C42	50.83	74.00	39 ° 21'29"					
C43	29.12	29.00	57 * 31'37"					
C44	29.63	20.00	84 ° 53'22"					

CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA					
C45	34.16	97.00	20"10'38"					
C46	6.12	4.00	87 • 43'49"					
C47	33.65	114.00	16 ° 54'40"					
C48	6.29	4.00	90 ° 08'29"					
C49	12.27	175.00	4 ° 00'59"					
C50	32.47	97.00	19 ° 10'52"					
C51	15.66	20.35	44 ° 05'44"					
C52	27.83	113.09	14 ° 06'03"					
C53	89.40	202.48	25 ° 17'53"					
C54	89.11	65.00	78*32'41"					
C55	33.39	232.34	8*14'01"					

CURVE TABLE							
CURVE	LENGTH	RADIUS	DELTA				
C56	31.42	190.00	9 ° 28'30"				
C57	21.15	200.00	6 ° 03'37"				
C58	42.93	200.00	12 ° 17'52"				
C59	91.07	125.01	41 ° 44'12"				
C60	21.99	14.00	90 ° 00'00"				
C61	45.55	29.00	90 ° 00'00"				
C62	99.12	175.50	32 ° 21'39"				
C63	92.28	197.50	26*46'16"				
C64	30.47	29.50	59 ° 10'14"				
C65	141.79	175.00	46°25'21"				
C66	33.13	108.09	17•33'45"				

SHEET 10



GRADING NOTES:

1. ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND FIELD OBSERVATION. ELEVATION CONSULTING DOES NOT GUARANTEE THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO VERIFY UTILITY HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY LINES SHOWN ON THE PLANS AND THOSE UTILITY LINES WHICH MAY NOT BE SHOWN ON THE PLANS.

2. ALL PROPOSED STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED AND SIZED FOR THE 100-YEAR STORM EVENT.

PAVING NOTES:

ASPHALT PAVING WITH RECOMPACTED SUBGRADE – SOIL GROUP E PARKING LOTS: 5.5" FULL DEPTH ACCESS DRIVES AND FIRE LANE: 7" FULL DEPTH

2. THE OWNER/CONTRACTOR MUST OBTAIN A C.D.P.S. STORMWATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, IF REQUIRED.

CONSTRUCTION NOTES:

- (1) PUBLIC CURB RAMP PER DETAIL J ON SHEET C208.
- (2) CONSTRUCT PRIVATE ADA RAMP PER DETAIL C ON SHEET C208.
- (3) CONSTRUCT PRIVATE 6" VERTICAL SPILL CURB (PER COA STD. DETAIL S7.2).
- (4) CONSTRUCT PRIVATE 6" VERTICAL CATCH CURB (PER COA STD DETAIL S7.2).
- 5 CONSTRUCT PRIVATE ADA RAMP PER DETAIL F ON SHEET C208.
- 6 CONSTRUCT PRIVATE 4' WIDE CROSS PAN PER DETAIL D ON SHEET C208.
- 7 private temp. Asphalt curb per detail g on sheet c208.
- 8 CONSTRUCT PRIVATE CURB CHASE PER DETAIL E ON SHEET C208.
- 9 PRIVATE 6" CURB AND GUTTER WITH 2' PAN (PER COA DETAIL S7.1).
- (10) CONSTRUCT PRIVATE FLUSH CURB PER DETAIL H ON SHEET C208..
- (1) CONSTRUCT PRIVATE MOUNTABLE CURB AND GUTTER (PER COA DETAIL S7.1).
- (12) CONSTRUCT PRIVATE FLUSH SPILL CURB PER DETAIL I ON SHEET C208..
- (13) SEE SHEET C401 FOR CURB RAMP AND SIDEWALK REPLACEMENT DETAILS
- (14) PUBLIC 2' SAWCUT AND ASPHALT PATCH.
- (15) CONSTRUCT PUBLIC 8' CROSSPAN (PER COA STD. DETAIL S4.1).
- (16) CONSTRUCT PUBLIC MEDIAN NOSE (PER COA STD. DETAIL S2.4)

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WHEATLANDS YMCA WHEATLANDS SUBDIVISION FILING 6, BLOCK 5, LOT 1

DOCUMENT PACKAGE FOR REGULATORY APPROVAL, PERMITTING, AND CONSTRUCTION

Project Number:	2018.043
Issue:	CONSTRUCTION SET
Date:	09-23-2019
Drawn By:	LJT
Checked By:	LJT
Revisions:	
Rev.	Date:
Add. 01	01/09/2020
CITY SUBMIT	TAL 03/03/2020
ASI 04	03/28/2020
FIELDS	2/17/2023

Sheet title: GRADING PLAN

> C204 SHEET 11

BENCHMARK:

CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM BRASS CAP (STAMPED COA BM, 23-121.8, 2005) CENTERED ON THE BACK OF A CURB OPENING INLET STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD. & S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).

6012

EX. 6' GAS

EASEMENT

- PROPERTY

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EX. 5'

PUBLIC

SIDEWALK

-6021----

-64' R.O.W.-

WAY (

NWO NNO.2

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BASIS OF BEARING:

BASIS OF BEARING FOR THIS PROJECT IS RANGE LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.

GRADING NOTES:

1. ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND FIELD OBSERVATION. ELEVATION CONSULTING DOES NOT GUARANTEE THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO VERIFY UTILITY HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY LINES SHOWN ON THE PLANS AND THOSE UTILITY LINES WHICH MAY NOT BE SHOWN ON THE PLANS.

2. ALL PROPOSED STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED AND SIZED FOR THE 100-YEAR STORM EVENT.

PAVING NOTES:

ASPHALT PAVING WITH RECOMPACTED SUBGRADE - SOIL GROUP E PARKING LOTS: 5.5" FULL DEPTH ACCESS DRIVES AND FIRE LANE: 7" FULL DEPTH

2. THE OWNER/CONTRACTOR MUST OBTAIN A C.D.P.S. STORMWATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, IF REQUIRED.

CONSTRUCTION NOTES:

- (1) PUBLIC CURB RAMP PER DETAIL J ON SHEET C208.
- (2) CONSTRUCT PRIVATE ADA RAMP PER DETAIL C ON SHEET C208
- (3) CONSTRUCT PRIVATE 6" VERTICAL SPILL CURB (PER COA STD. DETAIL S7.2).
- (4) CONSTRUCT PRIVATE 6" VERTICAL CATCH CURB (PER COA STD DETAIL S7.2).
- 5 CONSTRUCT PRIVATE ADA RAMP PER DETAIL F ON SHEET C208.
- 6 CONSTRUCT PRIVATE 4' WIDE CROSS PAN PER DETAIL D ON SHEET C208.
- 7 PRIVATE TEMP. ASPHALT CURB PER DETAIL G ON SHEET C208.
- 8 CONSTRUCT PRIVATE CURB CHASE PER DETAIL E ON SHEET C208.
- (9) PRIVATE 6" CURB AND GUTTER WITH 2' PAN (PER COA DETAIL S7.1).
- (10) CONSTRUCT PRIVATE FLUSH CURB PER DETAIL H ON SHEET C208..
- (11) CONSTRUCT PRIVATE MOUNTABLE CURB AND GUTTER (PER COA DETAIL S7.1).
- (12) CONSTRUCT PRIVATE FLUSH SPILL CURB PER DETAIL I ON SHEET C208..
- (13) SEE SHEET C401 FOR CURB RAMP AND SIDEWALK REPLACEMENT DETAILS
- (14) PUBLIC 2' SAWCUT AND ASPHALT PATCH.
- (15) CONSTRUCT PUBLIC 8' CROSSPAN (PER COA STD. DETAIL S4.1).
- (16) CONSTRUCT PUBLIC MEDIAN NOSE (PER COA STD. DETAIL S2.4)

Know what's below. Call before you dig.

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Ч <u>(</u>) FILING (5, LOT \bigcirc \leq SUBDIVISION F BLOCK **S** 7 WHEATLANDS HΜ

DOCUMENT PACKAGE FOR REGULATORY APPROVAL, PERMITTING, AND CONSTRUCTION

Project Number: Issue: Date:	2018.043 CONSTRUCTION SET 09-23-2019
Drawn By: Checked By:	LJT LJT
Revisions:	
Rev.	Date:
Add.01	01/09/2020
CITY SUBMIT	TAL 03/03/2020
ASI 04	03/28/2020
FIELDS	2/17/2023

Sheet title: GRADING PLAN

SHEET 16

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\int					*		
	LOT 1						
$\langle \rangle$	BLOCK 5	K./					6"/PVC STORM
\ ₩	HEATLANDS FILING NU. 6						LAFT
				The second second			
١	\setminus $///$			The second second			10' /TYPE '
<u>ل</u>	4' DIA MANHOLE		17 2	18" RCP ST	ORM		
	N 1647048.123			* 5' DIA MAN			602
\mathcal{N}	2 32273040333						-18" RCP STORM
Q ~15		\sim					
XX		60					N 1646739.016
	I XIIII		Co		▶)		E 3227649.208
			010				PVC SAIN
	<u> </u>	320.5 U	8" PVC SAN (PRIVATE)				139.0 -
						A	8" WATER
OT M			020				
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			021-				EASEMENT
				│	STORM		23' FIRE LANE
\nearrow		+ ,					EASEMENT OF DECK
				222-	S.		603 DE2.451
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· · · · ·					8" WATER		
· · · · · ·			ERDRAIN 16.26		8" WATER INV=6016.45		
· · · · ·		2 6" UND INV=60	ERDRAIN 16.26		8" WATER INV=6016.45	1 1 1 1 1 1 1 1 1 1	
· · · · ·			ERDRAIN 16.26		8" WATER INV=6016.45	1 1 1 1 1 1 1 1 1 1	
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		2 2 1 5 6" UND INV=60 1 1 1 1 1 1 1 1 1 1 1 1 1	ERDRAIN		8" WATER INV=6016.45		
			ERDRAIN 16.26		8" WATER		
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			ERDRAIN 16.26 		8" WATER		
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		2	ERDRAIN 16.26		8" WATER INV=6016.45		
			ERDRAIN 16.26 		8" WATER INV=6016.45		
			ERDRAIN 16.26		8" WATER INV=6016.45		
			ERDRAIN 16.26 		8" WATER INV=6016.45		
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			ERDRAIN 16.26		8" WATER		
			ERDRAIN 16.26		8" WATER		
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			ERDRAIN 16.26 		8" WATER INV=6016.45	SSMH-B SSM SSMH-B SSMH-B SSMH-B SSMH-B SSMH-B SSMH-B SSMH-B SSMH-B SSMH-	
			ERDRAIN . 16.26		8" WATER	SSMH-B SS	
			ERDRAIN 16.26 		8" WATER 8" WATER NV=6016.45 18" STM 18" STM 19" STM	SSMH-B SS	
			ERDRAIN 16.26 		8" WATER		
			ERDRAIN 16.26		8" WATER		

23' FIRE LANE EASEMENT	STMMH - 1 5' DIA MANHOLE N 1647060.11 E 3227805.34 -8 LE ~ 12" PVC @ 12" STM PLUG N 1647052.54 E 3227802.28	LF 6011 18" RCP 5' DI	STMMH - 2 A MANHOLE 1647036.78 3227967.56 PVC @ 2% 12" STM PLUG N 1647029.16 E 3227964.50	73	1/LF ~ 18" RCP ST 41 LF ~ 18" R STM IMLET 2 5 TYPE "R" INLET N 1646944.42	ER WAIN	6032 6033 6033 6034 5' DIA MANHOLE N 1646981,55 E 3228096.63 6035
	MT 8" PVC WATER M	AIN w	6019		E 3228069.28	MATC	HLINE - SEE
· · · · · · ·						. .	· · · · · · · · · · ·
E AT © OF PI	PE		. .	<td< td=""><td></td><td></td><td>· · · · · · · · · · ·</td></td<>			· · · · · · · · · · ·
							100-YR He Q100=8.9 Cl
	100-YR HGL 0100=8.7. CFS			100-YR HGL 2100=8.8 CFS 164 LF ~ 18"	RCP 2.00% RCP 2.00% 2-YR HGL		131 LF ~ 18"
	168 LF ~ 24" ŘČP 2	63%		. .		(18" · SE) (18" · SE) (12" S) (0 (18" W)	· · · · · · · · · ·
6002.30 (36" 04.30 (24" E) 005.80 (6" S) 111.0 1 (TYPE D INLE	W) SEE STORM SEWER NO	$\widetilde{TE} \stackrel{1}{\underbrace{4}}$	STMMH-1 (5' DIA) $RIM = 6018.1\pm$ INV IN = 6009.52 (18" INV IN = 6010.02 (12" INV OUT = 6008.71 (24) $CUT = 9.4\pm$			STNMH-2 (5° DIA) STNMH-2 (5° DIA) RIM = 6018.2± INV IN = 6013.50 INV IN = 6013.50 INV OUT = 6012.8	· · · · · · · · · · · · · · · · · · ·
	12-	+00	13·	+00	14+	-00	

	6035 _[
STORM SEWER NOTES:	_																				
1. ALL EXISTING UTILITIES SHOWN WERE COMPILED																					
FIELD OBSERVATION. ELEVATION CONSULTING DOES																					
UTILITIES SHOWN HEREON. CONTRACTOR TO VERIFY																					
PRIOR TO CONSTRUCTION. THE CONTRACTOR	6030																				
SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT BE																				1 A I	
OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES DURING									EX. GRAD	EAT€O											
CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY																					
LINES SHOWN ON THE PLANS AND THOSE UTILITY LINES WHICH MAY NOT BE SHOWN ON THE PLANS.									POSED GRADE AT Q	. OF PIPE											
2. ALL PROPOSED STORM SEWER INFRASTRUCTURE	6025											\									
IS PRIVATE, UNLESS OTHERWISE NOTED, AND SIZED										· · · ·		L								1 4 1	
3 CLEANOUTS PER CITY OF ALIRORA DETAIL 301	χ							· · · ·		- — r						· · · · ·					
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	6020	***************************************				******	*******	*****	******			*****		********		****			******		*****
				/	.									100-YR							
				/										Q100=3.6	CFS						·
										· · J	100-YI	R HGL	· · · · · ·		3" WATER INV≠6015.77						•
\mathbf{m}				· · · ·					8" WATER					· · · · · ·							
	6015				••••••				1117-0010.45		INV=601	AIER 6.00 م							••••••		
										4.8		. <u>.</u>									
															- RCP 1.50%						
Know what's below .							· · · · 1	100-YR HG						-73 tF > 10							
Call before you dig.							Q10	00=6.5 CF				18" RCP 1									
	6010	24 F ~ 24" RC	P 5 007-	-		mmm														•••••	
		· · · · · · ·						RCP-1.35%													
						тата			/	3.0'					· · · · · ·						
CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM								2-YR	HGL/		8° E		z ۳۵	(18" (18" (18" (18" (18" (18" (18" (18"							
CENTERED ON THE BACK OF A CURB OPENING INLET				J 					8" SAN	.1	2 (18 12 (1		68 (1	.68 (1.48	.	012.7					
STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD.	6005		<u> </u>) S					TOP=6006.68		011A 01A 10.32 5010.		(5' D 11.0± 5011.0	6011 601		- <u>8</u> = 0 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -					
& S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).				(18"							-5 (5 3021. = 60 11.7±		1 = (5 1 = (5 1 = (5	UT = 0.5							
				.47 (06.97											Fo						
			(5 [,] [10.01 6007 = 60(STI NV CU CU		v œ ≧	0							
			H - 4																- 4 1 4		
LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR			MMTS																		
S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.	6000 4		10+00			11+	00			12+00		Ť	13+00)	<u>†</u>	14	+00	<u> </u>		1	 15+0
									STORM	SEWER	PROFILE										

	Basin Summary Table								
	Basin	Area	Imperviousness	2yr Q	100yr Q				
	J1-1	2.01	16%	1.2	3.9				
	J1-2	0.63	58%	1.2	3.6				
	J2-1	0.98	75%	1.8	5.4				
	J2-2	0.43	93%	1.2	3.4				
	J2-3	0.18	84%	0.5	1.3				
	J2-4	1.98	5%	0.8	2.7				
(J2-6	1.34	21%	1.0	3.0				
)	H7-1	0.55	7%	0.3	0.8				
	H8-1	0.42	5%	0.3	1.0				
	HQ_1	0.41	5%	0.2	0.6				

	Design Deint Summer	Tabla	
	Design Point Summary	Table	
Design Point	Contributing Basins	2yr Q	100yr Q
1	J1-1&J1-2	2.1	6.5
2	J1-1&J1-2	2.0	6.4
3	J2-1&J2-2	2.7	8.0
4	J2-1 - J2-3	3.0	8.9
5	J2-1 -J2-4, J2-6	4.5	13.3

Project Number:	2018.043
Issue:	CONSTRUCTION SET
Date:	09-23-2019
Drawn By:	LJT
Checked By:	LJT
Revisions:	
Rev.	Date:
Add. 01	01/09/2020
CITY SUBMIT	TAL 03/03/2020
ASI 04	03/28/2020
TIELDS	2/17/2023

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		LINE T	ABLE		
	LINE	LENGTH	BEARING		LINE
	L1	19.27	N45 * 40'03"E		L38
	L2	41.00	N22°00'21"E		L39
	L3	19.00	S67 * 59'39"E		L40
	L4	6.00	N22*00'21"E		L41
	L5	13.00	S67 ° 59'39"E		L42
	L6	90.00	N22 ° 00'21"E		L43
	L7	13.00	N67 * 59'39"W		L44
	L8	1.00	N22*00'21"E		L45
	L9	13.00	S67 ° 59'39"E		L46
	L10	90.00	N22*00'21"E		L47
	L11	13.00	N67 * 59'39"W		L48
	L12	1.00	N22*00'21"E		L49
	L13	13.00	S67 * 59'39"E		L50
	L14	90.00	N22°00'21"E		L51
	L15	13.00	N67 * 59'39"W		L52
	L16	1.00	N22°00'21"E		L53
	L19	17.38	N45°40'03"E		L54
	L20	45.32	N22°00'21"E		L55
	L21	9.00	N67 * 59'39"W		L56
	L22	8.91	S67 * 59'39"E		L57
	L23	14.95	N67 * 59'39"W		L58
	L24	171.00	N22°00'21"E		L59
	L25	17.00	S67 * 59'39"E		L60
	L26	3.23	N22°00'21"E		L61
	L27	3.03	N22°00'21"E		L62
	L28	30.00	S67*59'39"E		L63
	L29	1.00	N22°00'21"E		L64
	L30	30.00	N67 * 59'39"W		L65
	L31	1.00	S22*00'21"W		L66
	L32	30.00	S67 * 59'39"E		L67
	L33	1.00	N22°00'21"E		L68
	L34	30.00	N67 * 59'39"W		L69
	L35	1.00	S22°00'21"W		L70
	L36	30.00	S67 * 59'39"E		L71
	L37	1.00	N22 ° 00'21"E		L72
E I	· ·	•••	• • • •		
ζ		LINE T	ABLE	2	
>	LINE	LENGTH	BEARING	5	
ζ	L78	43.00	S67 * 59'39"E		
>	L79	10.00	N22°00'21"E	{	
ζ	L80	105.50	N67 * 59'39"W		
{	L81	90.00	N22°00'21"E	{	
ζ	L82	130.00	S67 * 59'39"E	1	
{	L83	43.23	S22*00'21"W		
ζ	L84	2.50	S67 * 59'39"E	\$	
\	L85	2.50	N67 * 59'39"W		
>	L86	25.45	S22°00'21"W	5	
ζ	L87	19.50	N67 * 59'39"W		
>	L88	38.71	S22°00'21"W	{	
		~~~		$\sum$	2
-	-			•	

	LINE T	ABLE
LINE	LENGTH	BEARING
L38	30.00	N67 <b>*</b> 59'39"W
L39	1.00	S22*00'21"W
L40	30.00	S67 <b>*</b> 59'39"E
L41	1.00	N22°00'21"E
L42	30.00	N67 <b>*</b> 59'39"W
L43	1.00	S22°00'21"W
L44	13.00	S67 <b>*</b> 59'39"E
L45	1.00	N22°00'21"E
L46	13.00	N67 <b>*</b> 59'39"W
L47	9.00	S22*00'21"W
L48	29.20	N22°00'21"E
L49	12.41	N33°23'46"E
L50	60.67	N72 <b>•</b> 45'14"E
L51	14.24	N33°23'46"E
L52	13.08	N34°09'25"W
L53	65.42	N72 <b>°</b> 45'14 <b>"</b> E
L54	17.00	S17 <b>°</b> 14'46"E
L55	46.40	N72 <b>°</b> 45'14"E
L56	28.54	S17 <b>°</b> 14'46"E
L57	14.99	N72 <b>*</b> 36'46"E
L58	65.42	N72 <b>•</b> 45'14"E
L59	92.88	N21°40'14"E
L60	161.94	N19°09'10"E
L61	3.76	N66°42'51"E
L62	67.50	N71°01'11"W
L63	79.25	N71°01'11"W
L64	153.21	N77 <b>°</b> 04'48"W
L65	38.00	N22 <b>°</b> 00'21"E
L66	29.50	N22 <b>°</b> 00'21"E
L67	23.00	N67 <b>*</b> 59'39"W
L68	113.30	S22*00'21"W
L69	27.84	N22 <b>°</b> 00'17 <b>"</b> E
L70	22.00	N67 <b>°</b> 59'43"W
L71	27.84	S22*00'00"W
L72	53.35	N67 <b>*</b> 59'39"W

![](_page_27_Figure_4.jpeg)

## **BENCHMARK:**

CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM BRASS CAP (STAMPED COA BM, 23-121.8, 2005) CENTERED ON THE BACK OF A CURB OPENING INLET STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD. & S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).

#### **BASIS OF BEARING:**

BASIS OF BEARING FOR THIS PROJECT IS RANGE LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.

# REVISED ON 03/06/2023

	CURVE	e tabi	.E
CURVE	LENGTH	RADIUS	DELTA
C1	30.83	20.00	88 19'56"
C2	74.42	180.00	23*41'23"
C3	31.42	20.00	90 <b>°</b> 00'00"
C4	34.56	22.00	90 <b>°</b> 00'00"
C5	6.28	4.00	90 <b>°</b> 00'00"
C6	6.28	4.00	90 <b>°</b> 00'00"
C7	6.28	4.00	90 <b>°</b> 00'00"
C8	6.28	4.00	90°00'00"
C9	6.28	4.00	90 <b>°</b> 00'00"
C10	6.28	4.00	90 <b>°</b> 00'00"
-	70.07		

CURVE TABLE			CURVE	e tabi	.E		
CURVE	LENGTH	RADIUS	DELTA	CURVE	LENGTH	RADIUS	DELTA
C12	64.84	157.00	23 <b>°</b> 39'43"	C23	6.28	4.00	90'00'00
C13	31.42	20.00	90°00'00"	C24	6.28	4.00	90'00'00
C14	29.76	20.00	85 <b>°</b> 15'47"	C25	6.28	4.00	90°00'00
C15	6.61	4.00	94 <b>•</b> 44'13"	C26	6.28	4.00	89 <b>*</b> 59'55
C16	3.14	2.00	90°00'00"	C27	6.28	4.00	90'00'00
C17	5.96	5.00	68 <b>°</b> 20'12"	C28	6.28	4.00	90'00'00
C18	107.34	45.00	136 <b>•</b> 40'25"	C29	6.28	4.00	90'00'00
C19	5.96	5.00	68 <b>°</b> 20'12"	C30	6.28	4.00	89 <b>*</b> 59'55
C20	6.28	4.00	90°00'00"	C31	6.28	4.00	90'00'00
C21	6.28	4.00	90°00'00"	C32	6.28	4.00	90 <b>°</b> 00'00
C22	6.28	4.00	89*59'55"	C33	6.28	4.00	90°00'00

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C34	6.28	4.00	89 <b>*</b> 59'55"
C35	6.28	4.00	90 <b>°</b> 00'00"
C36	6.28	4.00	90 <b>°</b> 00'00"
C37	6.28	4.00	90 <b>°</b> 00'00"
C38	7.25	3.00	138 <b>°</b> 25'24"
C39	36.28	25.00	83 <b>°</b> 09'12"
C40	7.25	3.00	138 <b>°</b> 25'24"
C41	30.79	20.00	88°13'05"
C42	50.83	74.00	39 <b>°</b> 21'29"
C43	29.12	29.00	57 <b>°</b> 31'37"
C44	29.63	20.00	84•53'22"

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	
C45	34.16	97.00	20 <b>°</b> 10'38"	
C46	6.12	4.00	87*43'49"	
C47	33.65	114.00	16 <b>°</b> 54'40"	
C48	6.29	4.00	90°08'29"	
C49	12.27	175.00	4 <b>°</b> 00'59"	
C50	32.47	97.00	19 <b>°</b> 10'52"	
C51	15.66	20.35	44 <b>°</b> 05'44"	
C52	27.83	113.09	14 <b>°</b> 06'03"	
C53	89.40	202.48	25 <b>°</b> 17'53"	
C54	89.11	65.00	78 <b>•</b> 32'41"	
C55	33.39	232.34	8*14'01"	

	CURVE	e tabl	
CURVE	LENGTH	RADIUS	
C56	31.42	190.00	
C57	21.15	200.00	
C58	42.93	200.00	
C59	91.07	125.01	
C60	21.99	14.00	
C61	45.55	29.00	
C62	99.12	175.50	
C63	92.28	197.50	
C64	30.47	29.50	
C65	141.79	175.00	

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	LINE T	ABLE
LINE	LENGTH	BEARING
L1	19.27	N45°40'03"E
L2	41.00	N22°00'21"E
L3	19.00	S67 <b>°</b> 59'39"E
L4	6.00	N22 <b>°</b> 00'21"E
L5	13.00	S67 <b>°</b> 59'39"E
L6	90.00	N22°00'21"E
L7	13.00	N67 <b>*</b> 59'39"W
L8	1.00	N22 <b>°</b> 00'21"E
L9	13.00	S67 <b>°</b> 59'39"E
L10	90.00	N22°00'21"E
L11	13.00	N67 <b>*</b> 59'39"W
L12	1.00	N22°00'21"E
L13	13.00	S67 <b>°</b> 59'39"E
L14	90.00	N22°00'21"E
L15	13.00	N67 <b>*</b> 59'39"W
L16	1.00	N22°00'21"E
L19	17.38	N45°40'03"E
L20	45.32	N22 <b>°</b> 00'21"E
L21	9.00	N67 <b>*</b> 59'39"W
L22	8.91	S67 <b>°</b> 59'39"E
L23	14.95	N67 <b>*</b> 59'39"W
L24	171.00	N22 <b>°</b> 00'21"E
L25	17.00	S67 <b>°</b> 59'39"E
L26	3.23	N22 <b>°</b> 00'21"E
L27	3.03	N22 <b>°</b> 00'21"E
L28	30.00	S67 <b>*</b> 59'39"E
L29	1.00	N22 <b>°</b> 00'21"E
L30	30.00	N67 <b>*</b> 59'39"W
L31	1.00	S22*00'21"W
L32	30.00	S67 <b>*</b> 59'39"E
L33	1.00	N22°00'21"E
L34	30.00	N67 <b>*</b> 59'39"W
L35	1.00	S22 <b>°</b> 00'21"W
L36	30.00	S67 <b>*</b> 59'39 <b>"</b> E
L37	1.00	N22°00'21"E

	LINE T	ABLE
LINE	LENGTH	BEARING
L38	30.00	N67 <b>*</b> 59'39"W
L39	1.00	S22°00'21"W
L40	30.00	S67 <b>*</b> 59'39"E
L41	1.00	N22°00'21"E
L42	30.00	N67 <b>*</b> 59'39"W
L43	1.00	S22*00'21"W
L44	13.00	S67 <b>*</b> 59'39"E
L45	1.00	N22°00'21"E
L46	13.00	N67 <b>*</b> 59'39"W
L47	9.00	S22*00'21"W
L48	29.20	N22°00'21"E
L49	12.41	N33°23'46"E
L50	60.67	N72 <b>°</b> 45'14"E
L51	14.24	N33°23'46"E
L52	13.08	N34°09'25"W
L53	65.42	N72 <b>°</b> 45'14"E
L54	17.00	S17*14'46"E
L55	46.40	N72 <b>°</b> 45'14"E
L56	28.54	S17*14'46"E
L57	14.99	N72 <b>°</b> 36'46"E
L58	65.42	N72 <b>°</b> 45 <b>'</b> 14"E
L59	92.88	N21°40'14"E
L60	161.94	N19°09'10"E
L61	3.76	N66°42'51"E
L62	67.50	N71°01'11"W
L63	79.25	N71°01'11"W
L64	153.21	N77°04'48"W
L65	38.00	N22°00'21"E
L66	29.50	N22°00'21"E
L67	23.00	N67 <b>*</b> 59'39"W
L68	113.30	S22°00'21"W
L69	27.84	N22°00'17"E
L70	22.00	N67 <b>*</b> 59'43"W
L71	27.84	S22*00'00"W
L72	53.35	N67 <b>*</b> 59'39"W

![](_page_28_Figure_4.jpeg)

LINE TABLE				
LINE	LENGTH	BEARING		
L73	31.13	N17 <b>°</b> 14'46"W		
L74	10.26	N67 <b>*</b> 59'39"W		
L75	28.71	S22*00'21"W		
L76	43.00	N67 <b>*</b> 59'39"W		
L77	63.00	N22 <b>°</b> 00'21"E		
L89	4.78	S67 <b>*</b> 59'39"E		
L90	31.88	S17 <b>°</b> 14'46"E		

······

## **BENCHMARK:**

CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM BRASS CAP (STAMPED COA BM, 23-121.8, 2005) CENTERED ON THE BACK OF A CURB OPENING INLET STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD. & S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).

#### **BASIS OF BEARING:**

BASIS OF BEARING FOR THIS PROJECT IS RANGE LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.

CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA					
C1	30.83	20.00	88'19'56"					
C2	74.42	180.00	23*41'23"					
C3	31.42	20.00	90 <b>°</b> 00'00"					
C4	34.56	22.00	90 <b>°</b> 00'00"					
C5	6.28	4.00	90 <b>°</b> 00'00"					
C6	6.28	4.00	90 <b>°</b> 00'00"					
C7	6.28	4.00	90 <b>°</b> 00'00"					
C8	6.28	4.00	90 <b>°</b> 00'00"					
C9	6.28	4.00	90 <b>°</b> 00'00"					
C10	6.28	4.00	90 <b>°</b> 00'00"					
C11	32.07	20.00	91 <b>°</b> 53'02"					

				_				
CURVE TABLE						CURVE	e tabi	E
CURVE	LENGTH	RADIUS	DELTA		CURVE	LENGTH	RADIUS	DELTA
C12	64.84	157.00	23 <b>°</b> 39'43"		C23	6.28	4.00	90'00'00
C13	31.42	20.00	90 <b>°</b> 00'00"		C24	6.28	4.00	90'00'00
C14	29.76	20.00	85 <b>°</b> 15'47"		C25	6.28	4.00	90'00'00
C15	6.61	4.00	94 <b>°</b> 44'13"		C26	6.28	4.00	89 <b>*</b> 59'55
C16	3.14	2.00	90°00'00"		C27	6.28	4.00	90'00'00
C17	5.96	5.00	68 <b>°</b> 20'12"		C28	6.28	4.00	90'00'00
C18	107.34	45.00	136•40'25"		C29	6.28	4.00	90'00'00
C19	5.96	5.00	68 <b>°</b> 20'12"		C30	6.28	4.00	89 <b>*</b> 59'55
C20	6.28	4.00	90°00'00"		C31	6.28	4.00	90'00'00
C21	6.28	4.00	90°00'00"		C32	6.28	4.00	90 <b>°</b> 00'00
C22	6.28	4.00	89 <b>*</b> 59'55"		C33	6.28	4.00	90.00,00

CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA					
C34	6.28	4.00	89 <b>*</b> 59'55"					
C35	6.28	4.00	90 <b>°</b> 00'00"					
C36	6.28	4.00	90 <b>°</b> 00'00"					
C37	6.28	4.00	90 <b>°</b> 00'00"					
C38	7.25	3.00	138 <b>°</b> 25'24"					
C39	36.28	25.00	83 <b>°</b> 09'12"					
C40	7.25	3.00	138•25'24"					
C41	30.79	20.00	88°13'05"					
C42	50.83	74.00	39 <b>°</b> 21'29"					
C43	29.12	29.00	57 <b>°</b> 31'37"					
C44	29.63	20.00	84 <b>°</b> 53'22"					

CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA					
C45	34.16	97.00	20•10'38"					
C46	6.12	4.00	87 <b>*</b> 43'49"					
C47	33.65	114.00	16 <b>°</b> 54'40"					
C48	6.29	4.00	90 <b>°</b> 08'29"					
C49	12.27	175.00	4 <b>°</b> 00'59"					
C50	32.47	97.00	19 <b>°</b> 10'52"					
C51	15.66	20.35	44 <b>°</b> 05'44"					
C52	27.83	113.09	14 <b>°</b> 06'03"					
C53	89.40	202.48	25 <b>°</b> 17'53"					
C54	89.11	65.00	78•32'41"					
C55	33.39	232.34	814'01"					

CURVE TABLE								
CURVE	LENGTH	RADIUS	DELTA					
C56	31.42	190.00	9 <b>°</b> 28'30"					
C57	21.15	200.00	6 <b>°</b> 03'37"					
C58	42.93	200.00	12 <b>°</b> 17'52"					
C59	91.07	125.01	41 <b>°</b> 44'12"					
C60	21.99	14.00	90 <b>°</b> 00'00"					
C61	45.55	29.00	90 <b>°</b> 00'00"					
C62	99.12	175.50	32 <b>°</b> 21'39"					
C63	92.28	197.50	26°46'16"					
C64	30.47	29.50	59 <b>°</b> 10'14"					
C65	141.79	175.00	46 <b>°</b> 25'21"					
C66	33.13	108.09	17•33'45"					

SHEET 10

![](_page_29_Figure_0.jpeg)

![](_page_29_Picture_1.jpeg)

![](_page_29_Figure_3.jpeg)

1. ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO VERIFY CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY LINES SHOWN ON THE PLANS AND THOSE UTILITY LINES WHICH MAY

2. THE OWNER/CONTRACTOR MUST OBTAIN A C.D.P.S. STORMWATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC

![](_page_29_Picture_27.jpeg)

![](_page_29_Picture_28.jpeg)

Ч <del>0</del>, Ч SUBDIVISION FILING 6 BLOCK 5, LOT 2  $\bigcirc$ Σ **S** 7 WHEATLANDS HΜ

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DOCUMENT PACKAGE FOR **REGULATORY APPROVAL,** PERMITTING, AND CONSTRUCTION

Project Number:	2018.043
Issue:	CONSTRUCTION SET
Date:	09-23-2019
Drawn By:	LJT
Checked By:	LJT
Revisions:	
Rev.	Date:
Add.01	01/09/2020
CITY SUBMIT	TAL 03/03/2020
ASI 04	03/28/2020
Fields	2/17/2023

Sheet title:

GRADING PLAN

![](_page_29_Picture_34.jpeg)

## **BENCHMARK:**

CITY OF AURORA BENCHMARK 5S6520NE001, 3" DIAM BRASS CAP (STAMPED COA BM, 23-121.8, 2005) CENTERED ON THE BACK OF A CURB OPENING INLET STRUCTURE AND FACING ON S. LITTLE RIVER PLACE AND BEING AT THE NWLY CORNER OF POWHATON RD. & S. LITTLE RIVER PLACE. AURORA DATUM ELEVATION 6017.33' (NAVD 88).

#### **BASIS OF BEARING:**

BASIS OF BEARING FOR THIS PROJECT IS RANGE LINE WITHIN S. POWHATON ROAD ASSUMED TO BEAR S 71°54'59" E AND MONUMENTED AS SHOWN ON THE SURVEY.

# REVISED ON 03/06/2023

![](_page_30_Figure_6.jpeg)

![](_page_30_Figure_7.jpeg)

## **GRADING NOTES:**

1. ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND FIELD OBSERVATION. ELEVATION CONSULTING DOES NOT GUARANTEE THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO VERIFY UTILITY HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY LINES SHOWN ON THE PLANS AND THOSE UTILITY LINES WHICH MAY NOT BE SHOWN ON THE PLANS.

2. ALL PROPOSED STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED AND SIZED FOR THE 100-YEAR STORM EVENT.

## **PAVING NOTES:**

ASPHALT PAVING WITH RECOMPACTED SUBGRADE - SOIL GROUP E PARKING LOTS: 5.5" FULL DEPTH ACCESS DRIVES AND FIRE LANE: 7" FULL DEPTH

2. THE OWNER/CONTRACTOR MUST OBTAIN A C.D.P.S. STORMWATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, IF REQUIRED.

#### **CONSTRUCTION NOTES:**

- (1) PUBLIC CURB RAMP PER DETAIL J ON SHEET C208.
- (2) CONSTRUCT PRIVATE ADA RAMP PER DETAIL C ON SHEET C208
- (3) CONSTRUCT PRIVATE 6" VERTICAL SPILL CURB (PER COA STD. DETAIL S7.2).
- (4) CONSTRUCT PRIVATE 6" VERTICAL CATCH CURB (PER COA STD DETAIL S7.2).
- 5 CONSTRUCT PRIVATE ADA RAMP PER DETAIL F ON SHEET C208.
- 6 CONSTRUCT PRIVATE 4' WIDE CROSS PAN PER DETAIL D ON SHEET C208.
- 7 PRIVATE TEMP. ASPHALT CURB PER DETAIL G ON SHEET C208.
- 8 CONSTRUCT PRIVATE CURB CHASE PER DETAIL E ON SHEET C208.
- 9 PRIVATE 6" CURB AND GUTTER WITH 2' PAN (PER COA DETAIL S7.1).
- (10) CONSTRUCT PRIVATE FLUSH CURB PER DETAIL H ON SHEET C208..
- (11) CONSTRUCT PRIVATE MOUNTABLE CURB AND GUTTER (PER COA DETAIL S7.1).
- (12) CONSTRUCT PRIVATE FLUSH SPILL CURB PER DETAIL I ON SHEET C208..
- (13) SEE SHEET C401 FOR CURB RAMP AND SIDEWALK REPLACEMENT DETAILS
- (14) PUBLIC 2' SAWCUT AND ASPHALT PATCH.
- (15) CONSTRUCT PUBLIC 8' CROSSPAN (PER COA STD. DETAIL S4.1).
- (16) CONSTRUCT PUBLIC MEDIAN NOSE (PER COA STD. DETAIL S2.4)

![](_page_30_Picture_31.jpeg)

![](_page_30_Picture_32.jpeg)

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

![](_page_30_Picture_34.jpeg)

![](_page_30_Picture_35.jpeg)

Ь Ó FILING ( 5, Lot  $\bigcirc$  $\leq$ SUBDIVISION F BLOCK **S** 7 WHEATLANDS HΜ

DOCUMENT PACKAGE FOR **REGULATORY APPROVAL**, PERMITTING, AND CONSTRUCTION

Project Number:	2018.043					
Issue:	CONSTRUCTION SET					
Date: 09-23-202						
Drawn By:	LJT					
Checked By:	LJT					
Revisions:						
Rev.	Date:					
Add.01	01/09/2020					
CITY SUBMIT	TAL 03/03/2020					
ASI 04	03/28/2020					
FIELDS	2/17/2023					

Sheet title: GRADING PLAN

![](_page_30_Picture_40.jpeg)

REV. 219329

![](_page_31_Figure_2.jpeg)

REVISED ON 03/06/2023

**の** 1932  $\sim$ Ш С

![](_page_32_Figure_1.jpeg)

![](_page_33_Picture_2.jpeg)

					***			
	LOT 1 BLOCK 5						6"/PV	C STORM
W	HEATLANDS FILING NO. 6						w	
بەرم	4' DIA MANHOLE		* 15 S	18" RCP ST	ORM HOLE		T-A-	-10'/TYPE
	N 164/048.123 E 3227564355			S DIA MAIN		15	-18" RCP STORM	90
							-4' DA MANHOLE N 1646739.016 E 3227649.208	
		320.5 LP	8" PVC SAN (PRIVATE)	-6020			139.8 LF/8"	PVC SAN
01							8" WATER	
			21				- 16' UTIL EASEMENT	
				18" RCP	STORM		23' FIRE LANE EASEMENT	6000 06.064
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			8" SDR-26 @ 4.741					
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![](_page_33_Figure_5.jpeg)

		— śī <u>—</u>	ST EX. 24" RCP		- st	st\	EX. STREET LIGHT	T (TYP.)				
	L=39.27, R=25.00 =90°00'00"			PERTY LINE	\		L=18.71	, R=281.00		<b>. POWHA</b>	FON RD.	- ST
		· · · ·							↓EXELE_C \	(R.O.W	VARIES)	
				234.50'							L=21.24, R=	=319.00 3°48'51"
			EX. STORM IMPROVEMENT TO BE REMOVED	S	4, UTI					N68: 06' 09		
Windowski       Windowski       Windowski       Windowski       Windowski         Windowski       Windowski       Windowski       Windowski       Windowski <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>N71</td></td<>												N71
					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	_ <u>&lt; </u>					I-F	
	81 LF ~	36" RCP						16			H + F = f	602 603 603
Number of the state of the				4" RCP	ST.	TA		18" RCP	STMMH - 2	13	1/LF/~/18" RCPST	6032 6033. 6034
			STM INLET 1	T				5	N 1647036.73 E 3227967,56			
Image: state stat		36" 6014	W/ CLOSE MESH GI N 1647121.23	RATE			5' DIA MANHOLE N 1647060.11	8 LF ~ 12	2" PVC @ 2%		41 LF ~ 18" RCP	STMMH - 3 5' DIA MANHOLE
			E 322/648.73		λ	-8	LE ~ 12" PVC @ 2%	- 6018	N 1647029.16			N 1646981,55 E 3228086.63
NUMER DN 00/00/2023		C) 6016	$_{6}$ -70 LF ~ 6" SOLID W	ALL PVC @ 7.57%	3	23' FIRE LANE	2" STM PLUG 1647052.54 3227802.28		E 3227964.50		5 TYPE/"R" INLET	NIV 6035
SIGN SERVER VALUE AND	02, 01, 02, 00 S		6" CLEANOUT RIM = 6014.6	<u>}</u>	16' UTILITY EASEMENT		5227602.20				E 3228069.28	MARE WITH A
COM STATE Image: Company of the com			N: 1647055.6 F: 3227622 2		DT 1 DCK 5		$\mathbf{X}^{-\prime}$		6019-		157 LP ~ 18" RCP	
		601	70/1F ~ 6" SOUD WAL			16 WILL ESMT						
VALUE 4 VE - 557		I I I I I I I I I I I I I I I I I I I					8" PVC WATER MAIN W		·			
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 A DATE OF THE PARTY AND A DATE OF THE PAR	STORM SEWER NOTES:	6035										
Image: Solution of Light of the Solution of The	1. ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND											
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August def ten using 43 August def ten	UTILITY HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR											
	DAMAGES AND COSTS WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE	6030										
US All AND THE VERY ADDRESS 1 US AND THE VERY ADDRESS <td>AND PRESERVE ANY AND ALL UTILITIES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY</td> <td></td> <td>· · · · · · · · · · ·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>· · · · · · · · · ·</td> <td></td> <td></td>	AND PRESERVE ANY AND ALL UTILITIES DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING UTILITY		· · · · · · · · · · ·							· · · · · · · · · ·		
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0. 3. 2010 20200000 Comparison 1. Catalognet and the same first state in comparison and the same first state in comp	2. ALL PROPOSED STORM SEWER INFRASTRUCTURE IS PRIVATE, UNLESS OTHERWISE NOTED, AND SIZED											
A Sold AL & D TI A So	FOR THE 100-YEAR STORM EVENT.	6025										
All de Fu Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registration Horsel Dolla de la registratit	4. CONNECTION SHALL BE CORED INTO EXISTING					EX. GRADE AT & OF PIPE-						
Image: Section Contraction of the section Contraction Cont	AROUND PVC.				PROPOSED (GRADE AT & OF PIPE						
Image: State Stat		6020										
Image: Strate of the strate							\					
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LUDIT TRUE REL FOR WIT SERVICES FOR CLICE OF THE SPOLICE IS RAVE IN CLICE OF THE SPOLICE IS RAVE	Lini hons Date 2/20/23	6015					<u></u>					
We when a show the sh	Lincoln J. Tillomas, P.E.				· · /· · · · · · · · · · · · · · · · ·		·			100-YR HGL		131 LF ~ 10
WITE REPORT SPORT RANK SUSCENDENT SPORT RANK AND RANK SUSCENDENT RANK AND RANK SUSCENDENT RANK SUSCENDENT SPORT RANK AND RANK SUSCENDENT RANK SUSCE			· · · · · · · · · · ·		$\begin{array}{cccccccccccccccccccccccccccccccccccc$					Q100=8.8 CFS		
Since which is blow, and which which as submit with a show which which as show which with a show with with a s				/	/ / · · · · · · · ·	/	100-YR HGI			164 LF ~ 18"	RCP 2.00%	
With Streams FOR THIS PROKENT IN STREAMS OF SUBJECT IS SUBJECT OF SUBJECT SUBJECT SUBJECT OF SUBJECT SU		6010		/			0100=8.7 CFS				2-YR HGL	
Bill F - x8 RCP 567 00-15 RCB OUT OF AUROPA BENCHMARK 55520MEDD J. 3' DIAM BRASS CAP (STAMPE) COARER 27			· · · · · · · · · · ·									· · · · · · · · · · · · · · · ·
Norwind's below. Callbefore you dig. 600 100-133 GSL			81 LF ~ 36" RCP 5.6	67% / / / / / / / / / / / / / / / /		NTITITITITITI	24" RCP 2.63%					
Call before you dig. 6005 OTT OF AURORA BENOMARK 5585204001, 3' DIAM BRASS CAP (STAMED COA BM, 23-1218, 2005) CENTERED ON NON SUITE RIVER PLACE AND BEING AT FAINT ON SUITE RIVER PLACE AURORAD DATUM BASS OF BEARING FOR THIS PROJECT IS RANGE ILLE WITH OF SOUND AND ASSUMED TO BEAR ST 775/59' E AND MONUMENTED AS SHOWN ON HE SURVEY. DH-00 11+00 10+00 11+00 12+00 13+00 14+00 REVUISED ON 03/06/2023	Know what's below			Q100-	−YR HGL 13.3 CFS−,		168 LF					
CITY OF AURORA BENCHMARK 555520NE001, 3" DIAM BRASS OF BEARING FOR THIS PROJECT IS RANCE LEVATION 6017.33" (MAU 88). BASS OF BEARING FOR THIS PROJECT IS RANCE 10: W V N = 5997.73 (36" V) HE SURVEY.	Call before you dig.	6005										SSE)
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1	B	asin Summary Table		
Basin	Area	Imperviousness	2yr Q	100yr Q
J1-1	2.01	16%	1.2	3.9
J1-2	0.63	58%	1.2	3.6
J2-1	0.98	75%	1.8	5.4
J2-2	0.43	93%	1.2	3.4
J2-3	0.18	84%	0.5	1.3
J2-4	1.98	5%	5% 0.8	
J2-6	1.34	21%	1.0	3.0
H7-1	0.55	7%	0.3	0.8
H8-1	0.42	5%	0.3	1.0
H9-1	0.41	5%	0.2	0.6

Design Point Summary Table				
Design Point	2yr Q	100yr Q		
1	J1-1&J1-2	2.1	6.5	
2	J1-1&J1-2	2.0	6.4	
3	J2-1&J2-2	2.7	8.0	
4	J2-1 - J2-3	3.0	8.9	
5	J2-1 - J2-4, J2-6	4.5	13.3	

Project Number:	2018.043
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Date:	09-23-2019
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SCOPE

This report presents the results of our Geotechnical Investigation for the new Wheatlands YMCA Recreation Center planned southwest of South Powhaton Road and South Wheatlands Parkway in Aurora, Colorado (Fig. 1). The purpose of our investigation was to evaluate the subsurface conditions and provide geotechnical design criteria for the building and pavements. The scope was described in a Service Agreement (DN 18-0292R2) dated July 23, 2018. Evaluation of the property for the possible presence of potentially hazardous materials (Environmental Site Assessment) was not included in our scope.

This report is based on conditions found in our exploratory borings, results of field and laboratory tests, engineering analysis of field and laboratory data, and our experience with similar projects. The report contains descriptions of the soil and bedrock conditions and groundwater levels found in the exploratory borings, discussion of foundation, floor and pavement support alternatives, and recommended design and construction criteria for site development, excavations, foundations, floor systems, pavements, retaining walls, and surface and subsurface drainage. The recommendations presented in the report are based on the construction as currently planned. Revisions to the planned construction could affect our recommendations. If the construction will differ from the descriptions herein, we should be contacted to review our recommendations and determine if revisions are needed. A brief summary of our conclusions and recommendations follows, with more detailed discussion and design criteria presented in the report.

SUMMARY OF CONCLUSIONS

1. Strata found in our borings consisted of nil to about 17 feet of sandy, silty clay underlain by weathered and comparatively unweathered claystone and sandstone bedrock to the maximum explored depth of 30 feet. Thin layers of clayey sand were found within the sandy clay in two



borings. Testing indicates the clay and claystone are expansive and we judge the sand and sandstone as non-expansive.

- 2. Groundwater was not encountered during drilling. When checked two days after drilling on August 3, 2018, water was measured in three holes at depths of about 18.5 to 20 feet and the remaining holes were dry. Planned floor levels should not be compromised by existing groundwater levels. Groundwater may be encountered during installation of drilled piers. Water levels may fluctuate seasonally and rise in response to precipitation and landscape irrigation.
- 3. The presence of expansive soil and bedrock constitutes a geologic hazard. There is risk that foundations and surface improvements will experience heave and subsequent damage. We believe the recommendations presented in this report will help to control risk of damage; they will not eliminate the risk. Surface improvements and, in some instances, foundations may be damaged by swelling soil and bedrock.
- 4. Our investigation revealed expansive soil and bedrock at depths likely to influence performance of foundations and slabs-on-grade. We estimated up to about 3.5 inches of potential heave at the proposed lower level with normal post-construction wetting. We recommend the building be supported by drilled piers bottomed in bedrock. Design and construction criteria are presented in the report.
- 5. Slab-on-grade floors are suitable for the lower level provided subexcavation is performed to a depth of at least 5-feet below bottom of slab elevation. We estimate potential movements will be reduced to about an inch or less after sub-excavation. A structurally supported floor should be used if movement is not tolerable.
- 6. Pavement subgrade is likely to consist of sandy clay. Automobile parking areas can be paved using at least 5.5 inches of hot-mix asphalt. Access drives/fire lanes should have at least 7 inches of asphalt or 6 inches of concrete. Equivalent composite sections and pavement alternatives are presented in the report.
- 7. Surface drainage should be designed and maintained to provide for the rapid removal of runoff away from the proposed building and off flatwork and pavements to reduce potential subsurface wetting. Water should not be allowed to pond adjacent to the building or in flatwork and pavement areas. The site soils and bedrock are sensitive to moisture changes and conservative irrigation practices should be employed to avoid excessive subsurface wetting. A foundation drain is recommended around the below-grade areas of the building.



8. The design and construction criteria for foundations and floor systems in this report were compiled with the expectation that all other recommendations presented related to surface drainage, landscaping irrigation, backfill compaction, etc. will be incorporated into the project and that owners/property managers will maintain the structure and positive surface drainage, and use prudent irrigation practices. It is critical that all recommendations in this report are followed.

SITE CONDITIONS

The new Wheatlands YMCA recreation center will be located southwest of South Powhaton Road and South Wheatlands Parkway in Aurora, Colorado (Photo 1 and Fig. 1). The site contains about 10-acres and is located within a single-family residential development. The property is bordered by South Powhaton Road to the north, South Wheatlands Parkway to the east, South Kewaunee Way to the south, and South Jamestown Way to the west. The site slopes gently to the north-northwest with overall relief of about 50 feet. Ground cover consists of grasses, weeds, and scattered bushes. A neighborhood park is located about 50 feet south. A drainage is about ½-mile west and Aurora Reservoir is ½-mile east.

As part of our investigation, we reviewed historical aerial photographs to evaluate previous site uses and their potential impacts. The earliest photos date back to 1937. The site appears to have previously been vacant or used as farmland up until March of 2006. Small check dams appear within a drainage on the site in a 1993 photo. In April of 2006 some grading of the site occurs in conjunction with the surrounding Wheatlands development. The small drainages on the site were obliterated or filled. Although not encountered in our borings, some fill may be present along the northern portion of the site where a drainage was filled to construct South Powhaton Road.





Photo 1 – Google Earth[©] Aerial Site Photo, 6/2017

PROPOSED CONSTRUCTION

We understand the recreation center will consist of a 68,000 square foot twolevel facility with a below grade level that will "walk-out" to the west. The building will include indoor aquatics, fitness areas, multi-use gymnasiums, boulder wall, locker rooms, and mechanical and storage areas. We assume the building will have moderate structural loads, with column loads on the order of 150 kips or less. Extensive paved parking lots are planned to the south and east of the facility, with circulation roads leading to entrances off South Kewaunee Way. Preliminary plans indicate the main level will be at EL 6035 feet and the lower level at EL 6019 feet. We understand the project may be constructed in two phases.



Grading plans were not provided, but based on the proposed main floor level, fills up to about 10 feet may be necessary to achieve construction grades. Cuts of up to about 15 feet will be necessary for foundation installation. The deepest cuts will occur along the south and eastern portions of the building.

PREVIOUS INVESTIGATION

We previously performed a Supplemental Preliminary Geotechnical Investigation for Wheatlands PA-1 and PA-2 which included the subject site under our Project No. DN40,656-115 (report dated July 21, 2005). We drilled a total of 50 exploratory borings across PA-1 and PA-2, which included 10 borings on the subject site. Strata encountered in the borings consisted of nil to 9 feet of sandy clay underlain by weathered and comparatively unweathered claystone, sandstone, and interbedded claystone/sandstone bedrock. Groundwater was encountered in one boring at a depth of about 33 feet. The clay, claystone, and interbedded claystone/sandstone bedrock were expansive, and we judged the sandstone as non-expansive. Pertinent data and observations from our previous investigation were considered in preparation of this report.

INVESTIGATION

We investigated subsurface conditions on August 1, 2018 by drilling 11 exploratory borings at the approximate locations shown on Fig. 1. Seven deep borings were drilled within the planned building footprint and 4 shallow borings were in proposed access drives and parking areas. The conceptual site layout changed after drilling had been completed. We surveyed the boring locations using a Leica GS18 GPS unit. Prior to drilling, we contacted the Utility Notification Center of Colorado and local sewer and water districts to identify locations of buried utilities. The borings were drilled to depths of 10 or 30 feet below existing grades using 4-inch diameter, continuous-flight solid-stem auger and truck-mounted BK-51 drill rig.



Samples of the soil and bedrock were obtained at 2 to 5-foot intervals using 2.5-inch diameter (O.D.) modified California barrel samplers driven by blows from a 140-pound hammer falling 30 inches. Bulk samples of the surficial soils within 5 feet of the ground surface were obtained from auger cuttings in the shallow borings. Our field representative was present to observe drilling operations, log the soil and bedrock encountered and obtain samples. Upon completion of drilling, the holes were left open to facilitate a delayed groundwater measurement. Summary logs of the exploratory borings are presented in Appendix A.

Samples were returned to our laboratory where they were examined and testing was assigned. Laboratory tests included moisture content, dry density, percent silt and clay-sized particles (passing No. 200 sieve), Atterberg limits, unconfined compression, swell-consolidation, soil suction, and water-soluble sulfate concentration. Swell-consolidation tests were performed by wetting samples under existing overburden pressures (the pressure exerted by the overlying soil). Swell pressures were approximated from load-back analysis on select samples. Laboratory test results are presented in Appendix B and summarized on Table B-I.

SUBSURFACE CONDITIONS

Strata found in our borings consisted of nil to about 17 feet of sandy, silty clay underlain by weathered and comparatively unweathered claystone and sandstone bedrock to the maximum explored depth of 30 feet. Thin layers of clayey sand were found within the sandy clay in two borings. Some pertinent engineering characteristics of the soil and bedrock are described in the following paragraphs.

Clay and Sand

We found about 2 to 17 feet of sandy, silty clay from the ground surface in eight borings. Relatively thin layers (1 to 3 feet) of clayey sand were encountered within the clay in two borings and from the ground surface at TH-2. The clay was very



medium stiff to very stiff and the sand was medium dense based on field penetration resistance test results. One clay sample compressed slightly, and seven samples swelled 0.2 to 5 percent when wetted. Two samples swelled greater than 2 percent. Three clay samples contained 64 to 73 percent silt and clay-sized particles and exhibited moderate plasticity. Two samples of clayey sand contained 29 and 45 percent silt and clay-sized particles. The latter sample compressed 0.1 percent when wetted and exhibited moderate plasticity. Testing indicates the sandy clay is low to highly expansive and we judge the clayey sand is non-expansive.

Bedrock

Weathered and/or comparatively unweathered claystone and sandstone bedrock was found below the sandy clay in nine borings and from the ground surface in S-2 and S-3. Comparatively unweathered bedrock was encountered in each boring expect for S-4 at depths of about 2 to 22 feet or elevations 6000 to 6032 feet (Fig. 2). The bedrock was higher in elevation in borings drilled in the southern portion of the site and became deeper in the northern portion. The unweathered bedrock was hard to very hard. Eight claystone samples swelled 0.2 to 5.1 percent when wetted. One sample of weathered claystone from S-2 at a depth of 2 feet swelled 11.2 percent when wetted under an applied pressure of 200 psf. Five claystone samples had soil suction values of 3.89 to 4.25 pF and developed load-back swelling pressures of approximately 3,800 to 11,000 psf. Three claystone samples contained 59 to 88 percent silt and clay sized particles with two exhibiting moderate and high plasticity. One sample of claystone had an unconfined compressive strength of about 20,100 psf. Three sandstone samples contained 20 to 47 percent silt and clay-sized particles, with two exhibiting moderate plasticity.

Groundwater

Groundwater was not encountered during drilling. When checked two days after drilling on August 3, 2018, water was measured in three holes at depths of



about 18.5 to 20 feet and the remaining holes were dry. Groundwater should be well below planned floor levels. Groundwater may be encountered during installation of drilled piers. Water levels may fluctuate seasonally and rise in response to precipitation and landscape irrigation.

Seismicity

The soil and bedrock are not expected to respond unusually to seismic activity. According to the 2015 International Building Code (IBC, Standard Penetration Resistance method) and based upon the results of our investigation, we judge the site classifies as Seismic Site Class C.

GEOLOGIC HAZARDS

Colorado is a challenging location to practice geotechnical engineering. The climate is relatively dry and the near-surface soils are typically dry and comparatively stiff. These soils and related sedimentary bedrock formations tend to react to changes in moisture content. Some soils swell as they increase in moisture and are referred to as expansive soils. Other soils can compress significantly upon wetting and are identified as collapsing soils. Most of the land available for development east of the Front Range is underlain by expansive clay or claystone bedrock near the surface. The soils that exhibit collapse are more likely west of the continental divide; however, both types of soils occur throughout the state.

Covering the ground with buildings and pavements, coupled with landscape irrigation and changing drainage patterns leads to an increase in subsurface moisture conditions. As a result, some soil movement is inevitable. It is critical that all recommendations in this report are followed to increase the chance that the foundations and slabs-on-grade will perform satisfactorily. After construction, property owners/managers must assume responsibility for maintaining the structure and use appropriate practices regarding drainage and landscaping.



Expansive soil and bedrock are present at this site, which constitute a geologic hazard. There is risk that ground heave will damage slabs-on-grade, pavements and foundations. The risk of foundation and slab movements can be mitigated, but not eliminated by careful design, construction, and maintenance procedures. We believe the recommendations in this report will help control risk of damage to foundations and surface improvements; they will not eliminate that risk. The owner(s) should understand that surface improvements and, in some instances, foundations may be affected by movement of the subsoils. Proper design, construction and maintenance will be required to control risk.

SITE DEVELOPMENT

Expansive soil and bedrock present risk of damaging differential heave to foundations, floors, pavements, flatwork and other surface improvements. We estimate potential heave at the proposed lower level may range from less than 0.5 to about 3.5 inches considering wetting to depths of 15 to 20 feet. Sub-excavation can be considered as a means to reduce potential heave, provide more uniform support conditions below improvements and may allow use of slab-on-grade floors. Sub-excavation is discussed in this section.

Excavation

We believe the soils and bedrock encountered in our exploratory borings can generally be excavated with conventional, heavy-duty excavation equipment. We recommend the owner and the contractor become familiar with applicable local, state and federal safety regulations, including the current OSHA Excavation and Trench Safety Standards. We believe the clay will classify as Type B soil, the sand as Type C and bedrock as Type A or B. Type A, B and C soils require maximum slope inclinations of ³/₄:1 (horizontal:vertical), 1:1 and 1½:1, respectively, for temporary excavations in dry conditions. Flatter slopes will be required below groundwater or where seepage is present. The contractor's "competent person" is required to review exca-



vation conditions and refer to OSHA Standards when worker exposure is anticipated. Stockpiles and equipment should not be placed within horizontal distance equal to one-half the excavation depth, from the edge of an excavation. A Registered Professional Engineer should design excavations greater than 20 feet deep.

Sub-Excavation

We encountered expansive clay and claystone at depths likely to influence of performance of slab-on-grade floors, pavements, and flatwork. Sub-excavation of one to three feet below pavements, hardscapes and flatwork can be considered to improve performance. If slab-on-grade floors are desired for the lower level, we recommend sub-excavation to a depth of 5-feet below floor.

Sub-excavation fill should be moisture conditioned to between optimum moisture content and 4 percent above optimum and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698). Our field representative should observe and test compaction of fill during placement.

Sub-excavation has been used in the Denver area with satisfactory performance for the large majority of the sites where this ground modification method has been completed. Provided that sub-excavation is successful, we estimate remaining potential movements of about 1 inch or less. Differential movements should also be substantially reduced. We have seen isolated instances where settlement of subexcavation fill has led to damage. In most cases, the settlement was caused by wetting associated with poor surface drainage and/or poorly compacted fill placed at the horizontal limits of the sub-excavation.

The excavation contractor should be chosen based on experience with subexcavation and processing high moisture content clay fills, and has the necessary mixing and compaction equipment. The contractor should provide a construction disc to break down fill materials and anticipate use of push-pull scraper operations and



dozer assistance. The operation will be relatively slow. Soils and bedrock chunks should be broken down to 3 inches and less. Special attention should be paid to compaction in the corners and along the edges of the excavation, as large equipment cannot easily access these areas. In order for the procedure to perform properly, strict control of fill placement to specifications is required.

Sub-excavation slopes should meet OSHA, state, and local safety standards. We anticipate the sub-excavation can be performed without necessitating the use of shoring/bracing for a majority of the building footprint. For areas where soil nailing is used to retain the cut, the base of sub-excavation will likely dictate the bottom of wall elevation.

Fill and Backfill

The on-site soils are suitable for reuse as new fill, provided they are free of debris, vegetation/organics and other deleterious materials. Soil particles (e.g., soil and bedrock chunks) larger than 3 inches in diameter should not be used for fill. Imported fill should ideally consist of soil having a maximum particle size of 3 inches, less than 50 percent passing the No. 200 sieve, a liquid limit less than 30 percent and a plasticity index less than 15. Potential fill materials should be submitted to our office for approval prior to importing to the site.

Prior to fill placement, the excavation surface should be scarified to a depth of at least 8 inches, moisture conditioned, and compacted to the criteria below. Subsequent fill should be placed in thin (8 inches or less) loose lifts, moisture conditioned to between optimum moisture content and 4 percent above optimum for clay or within 2 percent of optimum moisture content for sand and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698).

Water and sewer lines are often constructed beneath slabs and pavements. Compaction of utility trench backfill can have a significant effect on the life and



serviceability of floor slabs, pavements and exterior flatwork. We recommend utility trench backfill be placed and compacted as outlined above. Our experience indicates use of self-propelled compactors results in more reliable performance compared to fill compacted by a sheepsfoot wheel attachment on a backhoe or trackhoe. The upper portion of the trenches should be widened to allow the use of a self-propelled compactor. The placement and compaction of utility trench backfill should be observed and tested by a representative of our firm during construction.

Our experience indicates fill and backfill can settle, even if properly compacted to criteria provide above. Factors that influence the amount of settlement are depth of fill, material type, degree of compaction, amount of wetting and time. The degree of compression of fill under its own weight will likely range from low for granular soils (1/2 percent or less), to moderate for clay/sand mixtures (1 to 2 percent), to high for highly plastic clay and claystone (2 percent or more).

Permanent slopes should be stable at inclinations of 3:1 (horizontal to vertical) or flatter. Use of flatter slopes (4:1) is preferable to control erosion. Shallower slopes can decrease erosion from run-off and sheet-flow. Seeding and re-vegetation can also be used to reduce erosion.

FOUNDATIONS

We anticipate moderate foundation loads for the building. We have assumed the maximum tolerable post-construction movement to be about 1 inch with maximum differential movement of about ³/₄-inch between columns. We judge drilled piers bottomed in bedrock are the safest system with respect to potential movement. Fig. 2 presents data that can be used to estimate the elevation of the comparatively unweathered bedrock, which becomes deeper toward the northern portion of the site. Design and construction criteria for drilled piers are presented below.



Drilled Piers Bottomed in Bedrock

- 1. Piers should be designed for a maximum allowable end pressure of 35,000 psf and an allowable skin friction value of 3,500 psf for the portion of the pier in relatively unweathered bedrock. The skin friction should be neglected within 3 feet of foundation walls/grade beams and pier caps.
- 2. Piers should be at least 20 feet long and penetrate at least 8 feet into relatively unweathered bedrock. Longer piers may be required depending upon foundation loads. We recommend piers be drilled with a large, heavy-duty drill rig to facilitate the required bedrock penetration. A minimum diameter of 16 inches is recommended.
- 3. We recommend designing the piers for a minimum deadload pressure of 20,000 psf based on the pier cross-sectional area. If this minimum deadload pressure cannot be achieved, the minimum bedrock penetration <u>and</u> minimum length should be increased to compensate for the deficiency using an allowable skin friction value of 3,500 psf. Axial tension loads can be resisted using the skin friction values provided above for the portion of the pier in bedrock.
- 4. A 4-inch or thicker continuous void should be constructed beneath grade beams, foundation walls and pier caps to concentrate deadload onto the piers.
- 5. Shear rings should be installed in the lower 6 feet of all piers. Shear rings should extend 3 to 4 inches beyond the pier shaft to increase the load transfer through skin friction. These shear rings should be spaced about 2 feet on-center for the design side shear penetration zone.
- 6. Pier drilling should produce shafts with relatively undisturbed bedrock exposed. Excessive remolding and caking of bedrock on pier walls should be removed. The bedrock surface should be rough or roughened. Pier drilling contractors should be required to have properly sized augers. Use of side cutters or teeth to increase the effective diameter should not be allowed.
- 7. Piers should be reinforced their full length and the reinforcement should extend an adequate distance into grade beams, foundation walls, and pier caps. The reinforcement should be a minimum of 0.5 percent of the cross-sectional area of the pier. Grade 60 (or better) steel is recommended. More reinforcement may be required for structural considerations.



- 8. Piers should have a center-to-center spacing of at least three pier diameters when designing for vertical loading conditions, or they should be designed as a group. Piers aligned in the direction of lateral forces should have a center-to-center spacing of at least 6 pier diameters. Reduction factors for closely spaced piers are provided in a following section.
- 9. Pier holes should be cleaned prior to placement of concrete. Concrete should be on-site and placed in the pier holes immediately after the holes are drilled, cleaned and inspected using drill and pour construction procedure. Groundwater may be encountered during installation of drilled piers. If excessive water develops (more than about 3 inches at the time of concrete placement) tremie pipe or pumping may be required for proper dewatering and placement of concrete during pier installation. Concrete should not be placed in pier holes containing more than 3 inches of water.
- Concrete should be on-site and placed in the pier holes immediately after the holes are drilled, cleaned, and observed and reinforcing steel is set. Concrete placed in pier holes should have a slump of 6 inches (± 1 inch) to promote proper consolidation and reduce arching of concrete on the reinforcement, casing and sides of the piers.
- 11. Some movement of drilled pier foundations should be anticipated to mobilize the skin friction. We estimate the movement will be on the order of 1/4 to 1/2-inch. Differential movement between adjacent piers may equal total movement.
- 12. Installation of drilled piers should be observed by a representative of our firm to identify the bearing strata, confirm subsurface conditions are as anticipated from our borings and observe the contractor's installation procedures.

Laterally Loaded Piers

Lateral load analysis of piers can be performed with the software analysis package LPILE by Ensoft, Inc. We believe this method of analysis is appropriate for piers with a pier length to diameter ratio of seven or greater. Suggested criteria for LPILE analysis are presented in the following table.



Soil Type	Fill, Clay and Sand	Bedrock	
Effective Unit Weight (pci)	0.069	0.075	
Cohesive Strength, c (psi)	15	50	
Friction Angle, ø (degree)	-	-	
Soil Strain, ε ₅₀ (in/in)	0.007	0.004	
p-y Modulus, k₅ (pci)	500	2,000	
p-y Modulus, k _c (pci)	200	800	

The ε_{50} represents the strain corresponding to 50 percent of the maximum principal stress difference.

Other procedures require input of a horizontal modulus of subgrade reaction (K_h) . We believe the following formulas are appropriate for calculating horizontal modulus of subgrade reaction (K_h) values.

MODULI OF SUBGRADE REACTION

	Clay	Bedrock
Modulus of Subgrade Reaction, K_h (tcf)	K _h = <u>50</u> d	$K_h = \frac{200}{d}$

Where d = pier diameter (ft).

Closely Spaced Pier Reduction Factors

For axial loading, no reduction is needed for a minimum spacing of three diameters (center to center). At one diameter (piers touching), the skin friction reduction factor for both piers would be 0.5. End pressure values would not be reduced provided the bases of the piers are at similar elevations. Interpolation can be used between one and three diameters.

For lateral loading, no reduction is needed for piers in-line with the direction of lateral loads with a minimum spacing of six diameters (center-to-center) based upon the larger pier. If a closer spacing is required, the modulus of subgrade reaction for



initial and trailing piers should be reduced. At a spacing of three diameters, the effective modulus of subgrade reaction of the first pier can be estimated by multiplying the given modulus by 0.6; for trailing piers in a line at three-diameter spacing, the factor is 0.4. Linear interpolation can be used for spacing between three and six diameters.

Reductions to the modulus of subgrade reaction can be accomplished in LPILE by inputting the appropriate modification factors for p-y curves. Reducing the modulus of subgrade reaction in trailing piers will result in greater computed deflections on these piers. In practice, a grade beam can force deflections of all piers to be equal. Load-deflection graphs can be generated for each pier by using the appropriate p-multiplier values. The sum of the piers lateral load resistance at selected deflections can be used to develop a total lateral load versus deflection graph for the system of piers.

For lateral loads perpendicular to the line of piers, a minimum spacing of three diameters can be used with no capacity reduction. At one diameter (piers touching) the piers should be analyzed as one unit. Interpolation can be used for intermediate conditions.

LATERAL EARTH PRESSURES

Basement Walls

The structure will be below-grade on the south, and eastern sides. The basement walls and other retaining walls should be designed to resist lateral earth pressures. The pressure is a function of the wall height, type of backfill, drainage conditions, slope of the backfill surface, and the allowable rotation of the wall. The building foundation walls will be essentially rigid and unable to rotate to mobilize the strength of the backfill soils. Therefore, they should be designed for an "at rest" earth pressure condition. The recommended earth pressure diagram for below-grade walls under



these conditions is shown at the bottom of Fig. 3. For walls that are free to rotate (e.g., retaining walls not attached to the buildings), an "active" earth pressure resistance can be used, as shown at the top of Fig. 3. A "passive" earth pressure resistance can be used to resist sliding and overturning and a coefficient of friction of 0.40 can be used for concrete in contact with the soils. Passive resistance requires movement to generate the resistance. Passive resistance should only be used when movement is tolerable and the soil is well compacted and will not be removed.

A clean granular material (less than 5 percent passing a No. 200 sieve) or flowable-fill can be used in backfill zones to reduce lateral earth pressures. Use of geofoam block backfill may also be a suitable alternative where large excavations are possible. We have tabulated equivalent fluid density values for site-sourced material and granular backfill for use in lateral earth pressure restraint design below. If flowable-fill is selected, the structural engineer should evaluate fluid forces on the belowgrade walls during placement and after the flowable-fill has cured. Equivalent fluid density values for site-sourced material can also be used for cured flowable-fill. All backfill should be well compacted, as discussed in <u>Fill and Backfill</u>.

Backfill Type	Site Developed Clay Soil	CDOT Class 5 or 6 Aggregate Base Course or Class 1 Structural Fill
Active Equivalent Fluid Density (pcf)	55	35
At Rest Equivalent Fluid Density (pcf)	75	55
Passive Equivalent Fluid Density (pcf)*	300*	425*

*Assumes compacted backfill will never be removed.

Granular backfill can be used to reduce lateral pressures compared to clay. Granular backfill can result in lower settlement, possibly as little as half of the settlement expected with clayey soils. If this material is used, we recommend capping the granular material with a geofabric and at least 2 feet of compacted on-site clay soils at the top to provide a less permeable surface layer to reduce surface water infiltra-



tion where this condition occurs at exterior walls. All backfill should be well compacted, as discussed in <u>Fill and Backfill</u>. The equivalent fluid densities given above do not include allowances for surcharge loads such as sloping backfill, vehicle traffic, tower cranes, or hydrostatic pressure. Fig. 4 presents a method for calculation of surcharge pressure on walls from point or line loads. Traffic loads are modeled as a uniform surcharge pressure in some analyses.

Retaining Walls

Soil Nail Wall

We understand installation of a soil nail wall is being considered along the southern portion of the building where deep foundation walls are planned. We believe soil nailing and a shotcrete facing can be used to retain the cut. The concept involves using the soil nail wall for permanent retention and building the foundation wall for very close. Narrow space backfill can be gravel or another material or may be left open. Lateral earth pressure can be determined once configurations are known. Soil nail walls require some movement of the wall to occur to mobilize the shear strength of the nails. Based on planned excavations, we anticipate retained soil will consist primarily of claystone bedrock. Recommended design parameters for use in soil nail retaining wall design are presented in the table below.

Retained Soil	Friction Angle (degrees)	Cohesion (psf)
Claystone	25	200

RECOMMENDED SOIL NAIL WALL DESIGN PARAMETERS

We believe it is reasonable for the wall designer to use values presented above. If desired, we can perform additional analysis, including direct shear testing, to determine if higher design values are merited. Design of the retaining system is not within the scope of this investigation. We can provide this design if requested.

MSE Walls

We anticipate retaining walls may also be constructed using mechanically stabilized by earth (MSE). MSE retaining walls assume that some movement of the wall will occur to mobilize the shear strength of the soil. We assume retained soil and backfill above the reinforced zone will be on-site soils or similar soils. The on-site soil should not be used in the reinforced zone. We recommend the reinforced zone of the MSE Walls be constructed with imported sand and gravel meeting CDOT Class 5 or 6 Aggregate Road Base Specification (or better). Angular gravel meeting AASHTO No. 57 or 67 Specification may be used for the reinforced soil (if desired) and is recommended for the leveling pad and drainage material. Where multiple walls are closely spaced, the lower wall(s) design should consider surcharge from upper walls. Internal and global stability of the walls should be considered.

Most MSE block retaining wall design programs require input of soil parameters for foundation soil, leveling pad, reinforced soil and retained soil. We recommend the parameters presented below be used for the design of the wall.

Material use	Material Description & Classification	Cohesion (psf)	Internal Friction Angle (degrees)	Unit Weight (pcf)
Foundation Soil	Sandy Clay	200	24	125
Leveling Pad	Gravel (imported) AASHTO #57 or 67 Coarse Concrete Aggregate	0	40	140
Reinforced Soil (import recommended)	Sand, Gravelly, Silty, CDOT Class 6 Road Base (or better)	0	34	140
Retained Soil	Sandy Clay	0	24	125

MSE SOIL INPUT PARAMETERS

Free-draining granular backfill should be used behind the retaining walls to help relieve hydrostatic pressure and provide drainage. We recommend a freedraining gravel material with less than 5 percent fines (passing No. 200 sieve) be used for a zone within at least 1-foot behind the walls. The backfill material should be tested and approved by our firm prior to importing. The free-draining gravel layer



behind the wall should be placed in thin, loose lifts, moisture conditioned within 2 percent of optimum moisture content, and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698) or 70 percent of maximum relative dry density (ASTM D 4253 and ASTM D 4254). Fill should be placed and compacted to the criteria provided in <u>Fill and Backfill</u>. Special precautions should be taken to avoid over-stressing the wall during compaction. We recommend small, hand-operated compactors be used.

We recommend weep holes and/or installation of a drain pipe at the base of the free-draining backfill zone. If a drain is installed, it should consist of a 4-inch perforated rigid PVC pipe encased in free-draining gravel. The drain should slope at least 0.5 percent to a positive gravity outlet or to a sump where water can be removed by pumping. A typical earth retaining wall drain detail is presented on Fig. 5.

FLOOR SYSTEMS

As discussed previously, expansive clay and claystone are present below the planned lower level. With post-construction wetting, expansive soil and bedrock can heave and damage slab-on-grade floors. We estimate up to 3.5 inches of floor heave is possible without sub-excavation. The variably expansive subgrade can result in several inches of differential slab movement across short distances. If floor movement cannot be tolerated, then a structurally supported floor should be used. We understand a structurally supported floor over a 4 to 5-foot-tall crawl space is being considered for the lower level. A minimum clear space of 4 inches should be maintained below structure elements and utilities.

Utility connections should be capable of absorbing some deflection of the floor. Utilities should be hung from the underside of the floor and not lain on the subgrade. If trenching is necessary below utility lines to maintain the clear space the trenches should slope to the foundation drain.



Control of humidity in crawl spaces is important for indoor air quality. We believe the best current practices to control humidity include the use of a vapor retarder or vapor barrier (6 mil min., 10 mil for increased durability) placed on the soils below accessible subfloor areas. The vapor retarder/barrier should be sealed at joints and attached to concrete foundation elements.

Slab-On-Grade Floors

Sub-excavation should reduce the potential floor movement, provide more uniform support conditions and improve performance. We estimate potential movements of about 1 inch or less after performing sub-excavation to a depth of 5-feet below floor slab elevation. If the owner elects to use slab-on-grade construction and accepts the risk of movement and the associated damage, we recommend the following precautions for slab-on-grade construction. These precautions can help reduce, but will not eliminate damage or distress due to slab movement. A supplemental method to mitigate potential heave-related distress in the floor would be to use thicker slabs than typical, for example, 5 inches rather than 4 inches and use of biaxial reinforcement.

Slabs should be separated from exterior walls and interior bearing members with a slip joint that allows free vertical movement of the slabs. This detail can reduce cracking when movement of the slab occurs.

- 1. Slabs should be separated from exterior walls and interior bearing members with a slip joint that allows free vertical movement of the slabs. This detail can reduce cracking when movement of the slab occurs.
- 2. Slabs should be placed directly on properly moisture conditioned, wellcompacted fill. The 2015 International Building Code (IBC) requires a vapor retarder be placed between base course or subgrade soils and the concrete slab-on-grade floor. The merits of installation of a vapor retarder below floor slabs depend on the sensitivity of floor coverings and building use to moisture. A properly installed vapor retarder (6 mil min, 10 mil for increased durability) is more beneficial below concrete slab-



on-grade floors where floor coverings, painted floor surfaces or products stored on the floor will be sensitive to moisture. The vapor retarder is most effective when concrete is placed directly on top of it, rather than placing a sand or gravel leveling course between the vapor retarder and the floor slab. The placement of concrete on the vapor retarder may increase the risk of shrinkage cracking and curling. Use of concrete with reduced shrinkage characteristics including minimized water content, maximized coarse aggregate content, and reasonably low slump will reduce the risk of shrinkage cracking and curling. Considerations and recommendations for the installation of vapor retarders below concrete slabs are outlined in Section 3.2.3 of the 2006 report of American Concrete Institute (ACI) Committee 302, "Guide for Concrete Floor and Slab Construction (ACI 302.R1-04)".

- 3. Slab-bearing partition walls should be designed and constructed to allow up to 2 inches of slab movement. Masonry or other load bearing walls should not be constructed on thickened slab sections; they should be constructed on grade beams or pier caps supported by the foundation system.
- 4. Plumbing and utilities that pass through the slabs should be isolated from the slabs and constructed with flexible couplings. Utilities, as well as electrical and mechanical equipment should be constructed with sufficient flexibility to allow for movement.
- 5. HVAC systems supported by the slabs (if any) should be provided with flexible connections capable of at least 2 inches of movement.
- Exterior flatwork and sidewalks should be separated from the structure. These slabs should be detailed to function as independent units. Movement of these slabs should not be transmitted to the foundations of the structures.
- 7. The American Concrete Institute (ACI) recommends frequent control joints be provided in slabs to reduce problems associated with shrink-age cracking and curling. To reduce curling, the concrete mix should have a high aggregate content and a low slump. If desired, a shrinkage compensating admixture could be added to the concrete to reduce the risk of shrinkage cracking. We can perform a mix design or assist the design team in selecting a pre-existing mix.



Exterior Flatwork

We generally recommend exterior flatwork and sidewalks be separated from a structure to reduce the risk of transferring slab movement to the structure. We recommend constructing the inner edges of the flatwork on haunches or steel angles bolted to the foundation walls and detailing the connections such that movement of the flatwork will not cause distress to the building, rather than tying the flatwork directly into the building foundation. Construction on haunches or steel angles and reinforcing the sidewalks and other exterior flatwork will reduce the potential for differential settlement and allow them to span across wall backfill. The owner should expect maintenance of exterior flatwork and concrete pavements throughout the life of the facility.

SWIMMING POOL AND POOL DECK

We understand an indoor aquatics center with a pool is planned. We anticipate the pool will be cast-in-place concrete or gunite. Concrete or gunite pools are brittle and can crack from shrinkage or heave. Our investigation indicates the pool and pool decks will be constructed on expansive soil and bedrock. It is safest for the pool be designed and reinforced to function as an independent, rigid structure supported by drilled piers and a structural floor/bottom.

The deck and surrounding areas should be sloped to provide positive drainage. We recommend slabs be isolated from the building and pool foundations, and well reinforced to function as independent units. Pool decks are normally constructed as a slab-on-grade. As discussed previously, we estimate potential movements of about 1 inch or less after sub-excavation to 5-feet below bottom of slab elevation. Infiltration of surface water from pool splash can cause moisture seepage through the cracks in the pool deck and the joints between the deck and pool. This wetting causes the underlying soils to swell or settle and results in cracking or distress of the deck. Cracks and joints should be sealed regularly. In our opinion, the hazard can be



reduced, but not prevented, by construction considerations and maintenance. If movement of the pool deck cannot be tolerated, a structurally supported deck should be used.

Cracking of the pool shell and deck will allow water to infiltrate the subgrade soils. This water can affect performance of the subsoils and possibly create a hydrostatic "uplift" force on the pool. A gravel drain should be installed to help capture the water. The drain should be sloped to a gravity outlet or a sump where water can be removed by pumping. In addition, an impermeable membrane consisting of PVC sheeting should be placed between the gravel drain and excavated subgrade. Field joints in the membrane (if necessary) should be sealed. We can aid in the design of a drain once plans for the pool become more final.

SUBSURFACE DRAINAGE

A foundation drain is recommended around the entire perimeter of belowgrade areas or basements. Typical details for crawl space construction are presented on Figs. 6 and 7. High moisture conditions in the natural soils or localized zones of free water could result in moisture transmission through the below-grade walls. If this cannot be tolerated, then some form of moisture retarder or waterproof barrier should be considered. The level of protection desired will depend on the level of performance desired. Building code considerations may control the required level of protection. An exterior drainage board (Mirafi G100N or G200N or equivalent) should be considered on walls exceeding 8 feet high to enhance subsurface drainage.

PAVEMENTS

Our investigation indicates pavement subgrade will likely consist of expansive sandy clay, claystone, or fill derived thereof. Pavements can experience heave due to expansive clay and claystone. Sub-excavation of one to 3-feet below pavements can be considered to reduce risk of distress caused by swelling subgrade. We recom-



mend the pavement subgrade be proof-rolled prior to paving to disclose soft areas. Soft areas should be reworked and compacted. Subgrade areas that pass proof-roll should be stable enough to pave.

We anticipate pavements will be utilized for automobile parking, access drives and fire/truck lanes. We drilled four shallow borings (S-1 to S-4) in pavement areas to evaluate subgrade characteristics. Bulk samples were obtained within the upper 5 feet of each boring. We tested bulk samples to classify the pavement subgrade and evaluate index properties for the soils that will influence pavement design. Bulk samples contained 47 to 73 percent silt and clay-sized particles and had liquid limits of 35 to 50 and plasticity indices of 19 to 29. The samples classify as A-6 to A-7-6 with group indices of 5 to 19 based on criteria established by the American Association of State Highway and Transportation Officials (AASHTO). Clay and claystone subgrade is considered to have poor pavement support characteristics. We recommend the following minimum pavement alternatives. Flexible and rigid pavement materials, construction and maintenance guidelines are presented in Appendix C.

Traffic Classification	Asphalt Concrete (HMA)	Asphalt Concrete & Aggregate Base Course (HMA + ABC)	Portland Cement Concrete (PCC)
Automobile Parking	5.5" HMA	4" HMA + 6" ABC	6" PCC
Access Drives and Fire/Truck Lanes	7" HMA	5" HMA + 8" ABC	6" PCC

MINIMUM PAVEMENT ALTERNATIVES

Our experience indicates problems with asphalt pavements can occur where heavy trucks drive into loading and unloading zones and turn at low speeds. In areas of concentrated loading and turning movements by heavy trucks, such as at entrances and trash collection areas, we recommend a 6-inch or thicker portland cement concrete pad be constructed at loading docks and dumpster locations, or other areas where trucks will stop or turn. The concrete pads should be of sufficient size to accommodate truck turning, trash pickup and delivery/loading areas.



The design of a pavement system is as much a function of paving materials as supporting characteristics of the subgrade. The quality of each construction material is reflected by the strength coefficient used in the calculations. If the pavement system is constructed of inferior materials, the life and serviceability of the pavement will be substantially reduced. We recommend the materials, construction and maintenance methods conform to the requirements of the City of Aurora. Materials planned for construction should be submitted and tested to confirm their compliance with these specifications.

Control joints should separate concrete pavements into panels as recommended by ACI. No de-icing salts should be used on paving concrete for at least one year after placement. Routine maintenance, such as sealing and repair of cracks annually and overlays at 2 to 5-year intervals, are necessary to achieve the long-term life of an asphalt pavement. We recommend application of a rejuvenating sealant such as fog seal after the first year. Deferring maintenance usually results in accelerated deterioration of pavements leading to higher future maintenance costs.

A primary cause of early pavement deterioration is water infiltration into the pavement system. The addition of moisture usually results in heave and/or softening of subgrade and the eventual failure of the pavement. We recommend drainage be designed for rapid removal of surface runoff. Curb and gutter should be backfilled and compacted to reduce ponding adjacent to pavements. Final grading of the subgrade should be carefully controlled so that design cross-slope is maintained and low spots in the subgrade that could trap water are eliminated. Seals should be provided between curb and pavement and at joints to reduce moisture infiltration. Irrigated landscaped areas and detention ponds in pavements should be avoided.

Material, construction and maintenance guidelines for flexible and rigid pavements are provided in Appendix C. These criteria were developed from analysis of the field and laboratory data, our experience and City of Aurora requirements. Their requirements should be reviewed and followed. If materials cannot meet their rec-



ommendations, then the pavement design should be re-evaluated based upon available materials. Materials planned for construction should be submitted and the applicable laboratory tests performed to verify compliance with the specifications.

CONCRETE

Concrete in contact with soil can be subject to sulfate attack. We measured water-soluble sulfate concentrations less than 0.01 percent in three samples from this site. Sulfate concentrations less than 0.1 percent indicate Class 0 exposure to sulfate attack for concrete in contact with the subsoils, according to the American Concrete Institute (ACI) *Guide To Durable Concrete (ACI 201.2R-01)*. For this level of sulfate concentration, ACI indicates any type of cement can be used for concrete in contact with the subsoils. Superficial damage may occur to the exposed surfaces of highly permeable concrete, even though sulfate levels are relatively low. To control this risk and to resist freeze-thaw deterioration, the water-to-cementitious material ratio should not exceed 0.50 for concrete in contact with soils that are likely to stay moist. Concrete should have a total air content of 6 percent \pm 1.5 percent. We advocate all below-grade walls in contact with the subsoils should be damp-proofed.

SURFACE DRAINAGE

Performance of foundations, pavements and flatwork is influenced by the moisture conditions existing within the foundation or subgrade soils. Overall surface drainage should be designed, constructed, and maintained to provide rapid removal of surface water runoff away from the proposed building and off of pavements and flatwork. Final grading of pavement subgrade should be carefully controlled so that the designed slopes are maintained and low spots in the subgrade that could trap water are eliminated. We recommend the following precautions be observed during construction and maintained at all times after construction is completed.



- 1. Wetting or drying of open foundation, utility and earthwork excavations should be avoided.
- 2. Positive drainage should be provided away from the building. We recommend a minimum slope of at least 5 percent in the first 5 to 10 feet away from the foundations in landscaped areas. Paved surfaces should be sloped to drain away from the buildings. A minimum slope of 2 percent is suggested. More slope is desirable. Concrete curbs and sidewalks may "dam" surface runoff adjacent to the building and disrupt proper flow. Use of "chase" drains or weep holes at low points in the curb should be considered to promote proper drainage.
- 3. Backfill around foundations should be moistened and compacted according to criteria presented in <u>Fill and Backfill</u>. Areas behind curb and gutter should be backfilled and well compacted to reduce ponding of surface water. Seals should be provided between the curb and pavement to reduce infiltration.
- 4. Landscaping should be carefully designed to minimize irrigation. Plants used close to foundation walls should be limited to those with low moisture requirements. Irrigation should be limited to the minimum amount sufficient to maintain vegetation. Application of more water will increase likelihood of slab and foundation movements and associated damage. Landscaped areas should be adequately sloped to direct flow away from the building and improvements. Use of area drains can assist draining areas that cannot be provided with adequate slope.
- 5. Impervious plastic membranes should not be used to cover the ground surface immediately surrounding foundations. These membranes tend to trap moisture and prevent normal evaporation from occurring. Geotextile fabrics can be used to control weed growth and allow evaporation.
- 6. Roof drains should be directed away from the building and discharge beyond backfill zones or into appropriate storm sewer or detention area. Downspout extensions and splash blocks should be provided at all discharge points. Roof drains can also be connected to buried, solid pipe out-lets. Roof drains should not be directed below slab-on-grade floors. Roof drain outlets should be maintained.



SUPPLEMENTAL ANALYSIS

The complexity of this project may result in additional questions in both the design and construction phases. We can provide additional analyses or consultation upon request, as necessary.

We would like to have the opportunity to review plans and specifications regarding earthwork, foundations, drains and pavements. By review of these documents prior to beginning construction, we may notice details that should be clarified or added in order to provide better agreement between our recommendations and construction documents.

This project will involve many activities that should be monitored during the construction phase by a geotechnical engineering firm. Placement and compaction of sub-excavation fill and backfill should be observed and tested. Installation of drilled piers should be observed throughout drilling and concrete placement. To provide continuity between design and construction, CTL | Thompson, Inc. should provide these services. If another firm is selected to provide these services, they must accept responsibility to evaluate whether conditions exposed during construction are consistent with findings in this report and whether design recommendations remain appropriate. When construction schedules and quantities are defined, we can work with the owner's representatives to develop an appropriate scope of services and budget for construction observation and materials testing.

GEOTECHNICAL RISK

The concept of risk is an important aspect with any geotechnical evaluation, primarily because the methods used to develop geotechnical recommendations do not comprise an exact science. We never have complete knowledge of subsurface conditions. Our analysis must be tempered with engineering judgment and experience. Therefore, the recommendations presented in any geotechnical evaluation



should not be considered risk-free. Our recommendations represent our judgment of those measures that are necessary to increase the chances that the structure and improvements will perform satisfactorily. It is critical that all recommendations in this report are followed during construction. Owners or property managers must assume responsibility for maintaining the structure and use appropriate practices regarding drainage and landscaping. Improvements after construction should be completed in accordance with recommendations provided in this report and may require additional soil investigation and consultation.

LIMITATIONS

This report has been prepared for the exclusive use of the YMCA of Metro Denver for the purpose of providing geotechnical design and construction criteria for the proposed recreation center. The information, conclusions, and recommendations presented herein are based upon consideration of many factors including, but not limited to, the type of structure proposed, the geologic setting, and the subsurface conditions encountered. The conclusions and recommendations contained in the report are not valid for use by others. Standards of practice evolve in the area of geotechnical engineering. The recommendations provided are appropriate for about three years. If the project is not constructed within about three years, we should be contacted to determine if we should update this report. The recommendations presented in this report are based on the construction as currently planned. Revisions in the planned construction could affect our recommendations. We should be contacted if plans change to review and revise our recommendations, if necessary.

Our borings were spaced to obtain a reasonably accurate picture of subsurface conditions below the proposed facility. The borings are representative of conditions encountered only at the location drilled. Subsurface variations not indicated by our borings are possible.



We believe this investigation was conducted in a manner consistent with that level of care and skill ordinarily used by geotechnical engineers practicing under similar conditions. No warranty, express or implied, is made. If we can be of further service in discussing the contents of this report, or in the analysis of the influence of the subsurface conditions on the design of the building or any other aspect of the proposed construction, please call.

CTL | THOMPSON, INC.

Chris Fitzsimmons, E.I.T. Staff Engineer

Reviewed by:

David A. Glater, P.E., C.P.G. Principal Geological Engineer

CF:DAG/cf/nn

Via e-mail: <u>keithhayes@brsarch.com</u>









LEGEND:

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Locations of **Exploratory Borings** and Conceptual Development Plan Fig.⁷² 1




_EGEND:	
TH—1	APPROXIMATE LOCATION OF EXPLORATORY BORING
S-1 O	APPROXIMATE LOCATION OF SUBGRADE SAMPLE
(2)	INDICATES APPROXIMATE DEPTH TO COMPARATIVELY UN-WEATHERED BEDROCK (FEET)
[6025.5]	INDICATES APPROXIMATE ELEVATION OF COMPARATIVELY UN-WEATHERED BEDROCK (FEET)
6030 ——	INDICATES ESTIMATED UN-WEATHERED BEDROCK SURFACE ELEVATION CONTOUR (FEET)
NOTE:	THIS ESTIMATE WAS BASED UPON A SUBJECTIVE ANALYSIS OF DRILL HOLE DATA AND MAY NOT REFLECT LOCAL VARIATIONS.

Estimated Elevation and Depth to Bedrock Fig.⁷³ 2



YMCA OF METRO DENVER WHEATLANDS YMCA CTL\T Project No. DN49,591-125-R1 Lateral Earth Pressure Distribution Fig. 3 74



- = TOTAL WEIGHT OF OBJECT W
- L or L_1 = LENGTH OF LOAD PARALLEL TO WALL/EXCAVATION
- L_2
- LENGTH OF LOAD PERPENDICULAR TO WALL/EXCAVATION
 DISTANCE FROM EDGE OF WALL/EXCAVATION
 MEASURED TO CENTER OF LOAD
 TOTAL DEPTH OF WALL/EXCAVATION Х
- Н Ζ
- = DEPTH OF WALL/EXCAVATION BELOW GROUND SURFACE





LATERAL PRESSURE AGAINST RIGID WALL DUE TO A LINE LOAD

q = LINE LOAD (plf)
q =
$$\frac{W}{L}$$

 O_h = LATERAL EARTH PRESSURE AT
DEPTH Z DUE TO LINE LOAD q
FOR m \leq 0.4:
 $O_h = \frac{q}{H} \times \frac{0.203n}{(0.16+n^2)^2}$
FOR m > 0.4:

$$\overline{Oh} = \frac{4q}{\pi H} \times \frac{m^2 n}{(m^2 + n^2)^2}$$

LATERAL PRESSURE AGAINST RIGID WALL DUE TO A POINT LOAD

V = POINT LOAD (Ib) $\vee = W$

FOR
$$m \le 0.4$$
:
 $Oh = \frac{0.28V}{H^2} \times \frac{n^2}{(0.16+n^2)^3}$

FOR m > 0.4:

$$Oh = \frac{1.77V}{H^2} \times \frac{m^2n^2}{(m^2+n^2)^3}$$

q = STRIP
q =
$$\frac{W}{L_1L_2}$$

н

$$Oh = \frac{2q}{q}$$
 (

YMCA OF METRO DENVER WHEATLANDS YMCA CTL\T Project No. DN49,591-125-R1





LATERAL PRESSURE AGAINST RIGID WALL DUE TO A STRIP LOAD

LOAD (psf)

```
O_h = LATERAL EARTH PRESSURE AT
       DEPTH Z DUE TO STRIP LOAD q
       \frac{2q}{\pi} (β-sinβcos2α)
```

Surcharge Loads



NOTE: DRAIN PIPE TO GRAVITY OUTLET OR WEEP HOLES MAY BE USED.

YMCA OF METRO DENVER WHEATLANDS YMCA CTL\T Project No. DN49,591-125-R1 **Typical Earth** Retaining Wall Drain

Fig. 765



NOTE:

THE BOTTOM OF THE DRAIN SHOULD BE AT LEAST 4 INCHES BELOW BOTTOM OF VOID AT THE HIGHEST POINT AND SLOPE DOWNWARD TO A POSITIVE GRAVITY OUTLET OR TO A SUMP WHERE WATER CAN BE REMOVED BY PUMPING.

YMCA OF METRO DENVER WHEATLANDS YMCA CTL\T Project No. DN49,591-125-R1 Exterior **Foundation** Wall Drain Fig. 6



NOTES:

- 1) THE BOTTOM OF THE DRAIN SHOULD BE AT LEAST 4 INCHES BELOW BOTTOM OF VOID AT THE HIGHEST POINT AND SLOPE DOWNWARD TO A POSITIVE GRAVITY OUTLET OR TO A SUMP WHERE WATER CAN BE REMOVED BY PUMPING.
- 2) TO HELP CONTROL THE HUMIDITY IN THE CRAWL SPACE, A MINIMUM 6-MIL POLYETHYLENE VAPOR RETARDER SHOULD BE PLACED OVER THE CRAWL SPACE SOILS. THE RETARDER SHOULD BE ATTACHED TO CONCRETE FOUNDATION ELEMENTS AND EXTEND UP FOUNDATION WALLS AT LEAST 8 INCHES ABOVE TOP OF VOID. OVERLAP JOINTS 3 FEET AND SEAL.

YMCA OF METRO DENVER WHEATLANDS YMCA CTL\T Project No. DN49,591-125-R1 Interior Foundation Wall Drain

Fig. 7



APPENDIX A SUMMARY LOGS OF EXPLORATORY BORINGS



TH-2 EL. 6031.3

TH-3 EL. 6025.1

TH-4 EL. 6022.0















NOTES:

- 1. THE BORINGS WERE DRILLED ON AUGUST 1, 2018 USING 4-INCH DIAMETER, CONTINUOUS-FLIGHT SOLID-STEM AUGER AND A TRUCK-MOUNTED BK-51 DRILL RIG.
- 2. BORING LOCATIONS AND ELEVATIONS ARE APPROXIMATE AND WERE SURVEYED BY A REPRESENTATIVE OF OUR FIRM USING A LEICA GS18 GPS UNIT AND ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- 3. WC INDICATES MOISTURE CONTENT (%).
 - DD INDICATES DRY DENSITY (PCF).

 - LL INDICATES LIQUID LIMIT.
 - PI INDICATES PLASTICITY INDEX.
 - -200 INDICATES PASSING NO. 200 SIEVE (%).
- UC INDICATES UNCONFINED COMPRESSIVE STRENGTH (psf). SS - INDICATES WATER-SOLUBLE SULFATE CONTENT (%).
- pF INDICATES SOIL SUCTION VALUE (pF).
- 4. THESE LOGS ARE SUBJECT TO THE EXPLANATIONS, LIMITATIONS AND CONCLUSIONS CONTAINED IN THIS REPORT.



SW - INDICATES SWELL WHEN WETTED UNDER APPROXIMATE OVERBURDEN PRESSURE (%). COM- INDICATES COMPRESSION WHEN WETTED UNDER APPROXIMATE OVERBURDEN PRESSURE (%).



APPENDIX B LABORATORY TEST RESULTS



Swell Consolidation Test Results



Swell Consolidation Test Results



Swell Consolidation Test Results FIG.



FIG. B-4

Test Results



Swell Consolidation Test Results



Swell Consolidation Test Results FIG



Swell Consolidation Test Results



Swell Consolidation Test Results

FIG. B-8



Swell Consolidation Test Results FIG. B-9

92



Swell Consolidation Test Results



Swell Consolidation Test Results

TABLE B - I

SUMMARY OF LABORATORY TEST RESULTS

					SWELL TE	EST DATA		SOIL	ATTERB	ERG LIMITS	UNCONFINED	SOLUBLE	PASSING	
BORING	DEPTH	MOISTURE	DRY	SWELL	COMPRESSION	APPLIED	SWELL	SUCTION	LIQUID	PLASTICITY	COMPRESSIVE	SULFATE	NO. 200	SOIL TYPE
		CONTENT	DENSITY			PRESSURE	PRESSURE	VALUE	LIMIT	INDEX	STRENGTH	CONTENT	SIEVE	
	(ft)	(%)	(pcf)	(%)	(%)	(psf)	(psf)	(pF)			(psf)	(%)	(%)	
TH-1	9	24.8	99	1.5		1,100						<0.01		WEATHERED CLAYSTONE
TH-1	14	17.4	113						53	31	20,100		88	CLAYSTONE
TH-1	24	15.8	117	1.4		3,000								CLAYSTONE
TH-2	4	19.2	110	5.1		500	9,100	4.20						CLAYSTONE
TH-2	9	15.9	115	0.8		1,100	3,800	3.89						CLAYSTONE
TH-2	14	19.3	112	2.3		1,800	11,000	4.00						CLAYSTONE
TH-2	19	22.0	103	0.8		2,400	6,200	3.98						CLAYSTONE
TH-2	24	17.3	110	0.2		3,000	4,000	4.25						CLAYSTONE
TH-3	4	7.8	125	5.0		500								CLAY, SANDY (CL)
TH-3	9	15.0	112						39	23			64	CLAY, SANDY (CL)
TH-3	19	13.6	113										20	SANDSTONE
TH-4	9	10.1	104	0.2		1,100						<0.01		CLAY, SANDY (CL)
TH-4	14	25.5	102	1.9		1,800								CLAY, SANDY (CL)
TH-5	4	16.1	114	1.9		500								CLAY, SANDY (CL)
TH-5	9	15.5	112		0.2	1,100			37	21			45	SAND, CLAYEY (SC)
TH-5	19	15.0	119										59	CLAYSTONE
TH-6	4	12.7	118										29	SAND, CLAYEY (SC)
TH-6	9	13.0	112		0.1	1,100								CLAY, SANDY (CL)
TH-6	14	10.9	117						35	20			36	WEATHERED SANDSTONE
TH-7	4	19.5	108	3.7		500						<0.01		CLAY, SANDY (CL)
TH-7	14	20.5	109	3.6		1,800								WEATHERED CLAYSTONE
S-1	0-5	15.6							44	24			73	CLAY, SANDY (CL)
S-1	1	17.8	103	1.0		200								CLAY, SANDY (CL)
S-2	0-5	16.6							47	27			73	WEATHERED CLAYSTONE
S-2	1	15.4	112	11.9		200								WEATHERED CLAYSTONE
S-3	0-5	15.1							35	19			47	WEATHERED SANDSTONE
S-4	0-5	17.2							50	29			65	CLAY, SANDY (CL)
S-4	1	19.2	99	1.1		200								CLAY, SANDY (CL)



APPENDIX C

FLEXIBLE AND RIGID PAVEMENT MATERIALS, CONSTRUCTION AND MAINTENANCE GUIDELINES



MATERIAL GUIDELINES FOR FLEXIBLE AND RIGID PAVEMENTS

Aggregate Base Course (ABC)

- 1. A Class 5 or 6 Colorado Department of Transportation (CDOT) specified aggregate base course should be used. A recycled concrete alternative which meets the Class 5 or 6 designation is also acceptable.
- 2. Aggregate base course should have a minimum Hveem stabilometer value of 84. Aggregate base course or recycled concrete material must be moisture stable. The change in R-value from 300 psi to 100 psi exudation pressure should be 12 points or less.
- Aggregate base course or recycled concrete should be laid in thin lifts not to exceed 6 inches, moisture treated to within 2 percent of optimum moisture content, and compacted to at least 95 percent of maximum modified Proctor dry density (ASTM D 1557, AASHTO T 180). The material should be placed without segregation.
- 4. Placement and compaction of aggregate base course or recycled concrete should be observed and tested by a representative of our firm. Placement should not commence until the underlying subgrade is properly prepared and tested.

Hot-Mix Asphalt (HMA)

- 1. HMA should be composed of a mixture of aggregate, filler, hydrated lime and asphalt cement. Mixes shall be designed with 1 percent lime. Some mixes may require polymer modified asphalt cement, or make use of up to 20 percent reclaimed asphalt pavement (RAP). <u>A project mix design is recommended and periodic checks on the project site should be made to verify compliance with specifications</u>.
- 2. HMA should be relatively impermeable to moisture and should be designed with crushed aggregates that have a minimum of 80 percent of the aggregate retained on the No. 4 sieve with two mechanically fractured faces.
- 3. Gradations that approach the maximum density line (within 5 percent between the No. 4 and 50 sieves) should be avoided. A gradation with a nominal maximum size of 1 or 2 inches developed on the fine side of the maximum density line should be used.
- 4. Total void content, voids in the mineral aggregate (VMA) and voids filled should be considered in the selection of the optimum asphalt cement content. The optimum asphalt content should be selected at a total air void content of about 4 percent. The mixture should have a minimum VMA of 14 percent and between 65 percent and 80 percent of voids filled.
- 5. Asphalt cement should meet the requirements of the Superpave Performance Graded (PG) Binders. The minimum performing asphalt cement should be PG 64-22 for use along the Front Range. The use of PG 58-28 or PG 58-22 asphalt



cement has been known to cause tenderness in pavements in the Front Range area and should be avoided.

- 6. Hydrated lime should be added at the rate of 1 percent by dry weight of the aggregate and should be included in the amount passing the No. 200 sieve. Hydrated lime for aggregate pretreatment should conform to the requirements of ASTM C 207, Type N.
- 7. Paving should only be performed when subgrade temperatures are above 40°F and air temperature is at least 40°F and rising.
- HMA should not be placed at a temperature lower than 245°F for mixes containing PG 64-22 asphalt, and 290°F for mixes containing polymer modified asphalt. The breakdown compaction should be completed before the mixture temperature drops 20°F.
- 9. The maximum compacted lift should be 3 inches and joints should be staggered. No joints should be placed within wheel paths.
- 10. HMA should be compacted to between 92 and 96 percent of Maximum Theoretical Density. The surface shall be sealed with a finish roller before the mix cools to 185°F.
- 11. Placement and compaction of HMA should be observed and tested by a representative of our firm. Placement should not commence until the subgrade is properly prepared, tested and proof-rolled.

Portland Cement Concrete (PCC)

- 1. Portland cement concrete should meet CDOT Class P concrete and have a minimum compressive strength of 4,200 psi at 28 days and a minimum modulus of rupture (flexural strength) of 650 psi. <u>A job mix design is recommended and periodic checks on the job site should be made to verify compliance with specifications</u>.
- 2. Portland cement should be Type II "low alkali" and should conform to ASTM C 150. Portland cement should conform to ASTM C 150.
- 3. Portland cement concrete should not be placed when the subgrade or air temperature is below 40°F.
- 4. Free water should not be finished into the concrete surface. Atomizing nozzle pressure sprayers for applying finishing compounds are recommended whenever the concrete surface becomes difficult to finish.
- 5. Curing of the portland cement concrete should be accomplished by the use of a curing compound. The curing compound should be applied in accordance with manufacturer recommendations.



- 6. Curing procedures should be implemented, as necessary, to protect the pavement against moisture loss, rapid temperature change, freezing, and mechanical injury.
- 7. Construction joints, including longitudinal joints and transverse joints, should be formed during construction or sawed after the concrete has begun to set, but prior to uncontrolled cracking.
- 8. All joints should be properly sealed using a rod back-up and approved epoxy sealant.
- 9. Traffic should not be allowed on the pavement until it has properly cured and achieved at least 80 percent of the design strength, with saw joints already cut.
- 10. Placement of portland cement concrete should be observed and tested by a representative of our firm. Placement should not commence until the subgrade is properly prepared and tested.



FLEXIBLE PAVEMENT CONSTRUCTION GUIDELINES

Experience has shown that construction methods can significantly affect the life and serviceability of a pavement system. A site-specific mix design is recommended and periodic checks during the project should be made to verify compliance with specifications. We recommend the proposed pavement be constructed in the following manner:

- The subgrade should be stripped of organic matter, scarified, moisture conditioned and compacted. Clay subgrade soils should be moisture conditioned to between optimum and 4 percent above optimum moisture content and compacted to at least 95 percent of maximum standard Proctor dry density (ASTM D 698, AASHTO T 99). Sand soils should be moisture conditioned to within 2 percent of optimum moisture content and compacted similarly.
- 2. Utility trenches and all subsequently placed fill should be moisture conditioned, compacted, and tested prior to paving. As a minimum, fill should be compacted to 95 percent of maximum standard Proctor dry density.
- 3. After final subgrade elevation has been reached and the subgrade compacted, the resulting subgrade should be checked for uniformity and all soft or yielding materials should be replaced prior to paving. Concrete should not be placed on soft, spongy, frozen, or otherwise unsuitable subgrade.
- 4. If areas of soft or wet subgrade are encountered, the material should be subexcavated and replaced with properly compacted structural backfill. Where extensively soft, yielding subgrade is encountered, we recommend the excavation be inspected by a representative of our office.
- 5. Aggregate base course should be laid in thin, loose lifts no more than 6 inches, moisture treated to within 2 percent of optimum moisture content, and compacted to at least 95 percent of modified Proctor maximum dry density (ASTM D 1557, AASHTO T 180).
- 6. Asphaltic concrete should be hot plant-mixed material compacted to between 92 and 96 percent of maximum Theoretical density. The temperature at laydown time should be at least 245°F. The surface shall be sealed with a finish roller prior to the mix cooling to 185°F.
- 7. The maximum compacted lift should be 3 inches and joints should be staggered. No joints should be within wheel paths.
- 8. Paving should only be performed when subgrade temperatures are above 40°F and air temperature is at least 40°F and rising.
- 9. Subgrade preparation and placement and compaction of all pavement material should be observed and tested. Compaction criteria should be met prior to the placement of the next paving lift. The additional requirements of the City of Aurora should apply.



RIGID PAVEMENT CONSTRUCTION GUIDELINES

Rigid pavement sections are not as sensitive to subgrade support characteristics as flexible pavement. Due to the strength of the concrete, wheel loads from traffic are distributed over a large area and the resulting subgrade stresses are relatively low. The critical factors affecting the performance of a rigid pavement are the strength and quality of the concrete, and the uniformity of the subgrade. We recommend subgrade preparation and construction of the rigid pavement section be completed in accordance with the following recommendations:

- The subgrade should be stripped of organic matter, scarified, moisture conditioned and compacted. Clay subgrade soils should be moisture conditioned to between optimum and 4 percent above optimum moisture content and compacted to at least 95 percent of standard Proctor maximum dry density (ASTM D 698, AASHTO T 99). Sand soils should be moisture conditioned to within 2 percent of optimum and compacted similarly.
- 2. After final subgrade elevation has been reached and the subgrade compacted, the resulting subgrade should be checked for uniformity and all soft or yielding materials should be replaced prior to paving. Concrete should not be placed on soft, spongy, frozen, or otherwise unsuitable subgrade.
- 3. The subgrade should be kept moist prior to paving.
- 4. Curing procedures should protect the concrete against moisture loss, rapid temperature change, freezing, and mechanical injury for at least 3 days after placement. Traffic should not be allowed on the pavement for at least one week.
- 5. Curing of the portland cement concrete should be accomplished by use of a curing compound in accordance with manufacturer recommendations.
- 6. Construction joints, including longitudinal joints and transverse joints, should be formed during construction or should be sawed shortly after the concrete has begun to set, but prior to uncontrolled cracking. All joints should be sealed.
- 7. Construction control and inspection should be performed during the subgrade preparation and paving procedures. Concrete should be carefully monitored for quality control. The additional requirements of the City of Aurora should apply.

The design sections are based upon 10-year and 20-year periods. Experience in the Denver area indicates virtually no maintenance or overlays are necessary for a 20-year design period. We believe some maintenance and sealing of concrete joints will help pavement performance by helping to keep surface moisture from wetting and softening or heaving subgrade. To avoid problems associated with scaling and to continue the strength gain, we recommend deicing salts not be used for the first year after placement.



MAINTENANCE GUIDELINES FOR FLEXIBLE PAVEMENTS

A primary cause for deterioration of pavements is oxidative aging resulting in brittle pavements. Tire loads from traffic are necessary to "work" or knead the asphalt concrete to keep it flexible and rejuvenated. Preventive maintenance treatments will typically preserve the original or existing pavement by providing a protective seal or rejuvenating the asphalt binder to extend pavement life.

Annual Preventive Maintenance

- Visual pavement evaluations should be performed each year.
- Reports documenting the progress of distress should be kept current to provide information on effective times to apply preventive maintenance treatments.
- Crack sealing should be performed annually as new cracks appear.

3 to 5-Year Preventive Maintenance

• The owner should budget for a preventive treatment (e.g. chip seal, fog seal, slurry seal) at approximate intervals of 3 to 5 years to reduce oxidative embrit-tlement problems.

5 to 10-Year Corrective Maintenance

• Corrective maintenance (e.g. full-depth patching, milling and overlay) may be necessary, as dictated by the pavement condition, to correct rutting, cracking and structurally failed areas.



MAINTENANCE GUIDELINES FOR RIGID PAVEMENTS

High traffic volumes create pavement rutting and smooth, polished surfaces. Preventive maintenance treatments will typically preserve the original or existing pavement by providing a protective seal and improving skid resistance through a new wearing course.

Annual Preventive Maintenance

- Visual pavement evaluations should be performed each spring or fall.
- Reports documenting the progress of distress should be kept current to provide information of effective times to apply preventive maintenance.
- Crack sealing should be performed annually as new cracks appear.

4 to 8 Year Preventive Maintenance

- The owner should budget for a preventive treatment at approximate intervals of 4 to 8 years to reduce joint deterioration.
- Typical preventive maintenance for rigid pavements includes patching, crack sealing and joint cleaning and sealing.
- Where joint sealants are missing or distressed, resealing is mandatory.

15 to 20 Year Corrective Maintenance

- Corrective maintenance for rigid pavements includes patching and slab replacement to correct subgrade failures, edge damage and material failure.
- Asphalt concrete overlays may be required at 15 to 20-year intervals to improve the structural capacity of the pavement.

CHANGE ORDER NO. 6:

Owner:	Wheatlands Metropolitan Dis	strict Owner's Project I	No.:		
Engineer:	Elevation Consulting Group, I	Ltd. Engineer's Projec	Engineer's Project No.:		
Contractor:	Richdell Construction, Inc.	Contractor's Proj	ect No.:		
Project:	Phase II Park Improvements				
Contract Name:	AGREEMENT BETWEEN CON	TRACTOR FOR CONSTRUCTION CON	NTRACT (STIPULATED PRICE)		
Date Issued:	May 3, 2023	Effective Date of Change Order:	May 3, 2023		

The Contract is modified as follows upon execution of this Change Order:

Description:

Additional Work for Soccer Fields Installation: supply and install two 2" sleeves at a depth of 24" for \$1000.00. Richdell excludes all other electrical work. Two sleeve locations are per the drawing attached.

Attachments:

The following Contract Document is appended to the Contract:

1. Drawings: 6300.00 Wheatlands YMCA Field – Electrical Site Markups_20230502

Change in Contract Price (Appropriations have been made and are available for this Change Order)

Original Contract Price:

\$ 1,648,000.00

Increase from previously approved Change Orders No. 2 to No. 5:

\$ 120,397.06

Contract Price prior to this Change Order:

\$ 1,768,397.06

Increase this Change Order:

\$ 1,000.00

Contract Price incorporating this Change Order:

\$ 1,769,397.06

Authorized by Owner

By: Pauletto Martin

Title: President

Date: May 4, 2023

Contractor

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SECTION 941

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Page 2 of 2



	Basin Summary Table								
	Basin	Area	Imperviousness	2yr Q	100yr Q				
	J1-1	2.01	16%	1.2	3.9				
	J1-2	0.63	58%	1.2	3.6				
	J2-1	0.98	75%	1.8	5.4				
	J2-2	0.43	93%	1.2	3.4				
	J2-3	0.18	84%	0.5	1.3				
	J2-4	1.98	5%	0.8	2.7				
$\left \right $	J2-6	1.34	21%	1.0	3.0				
	H7-1	0.55	7%	0.3	0.8				
	H8-1	0.42	5%	0.3	1.0				
	H9_1	0 41	5%	0.2	0.6				

Design Point Summary Table						
Design Point	Contributing Basins	2yr Q	100yr Q			
1	J1-1&J1-2	2.1	6.5			
2	J1-1&J1-2	2.0	6.4			
3	J2-1&J2-2	2.7	8.0			
4	J2-1 - J2-3	3.0	8.9			
5	J2-1 -J2-4, J2-6	4.5	13.3			

Issue: CO	CONSTRUCTION SET		
Date:	09-23-2019		
Drawn By:	LJT		
Checked By:	LJT		
Revisions:			
Rev.	Date:		
Add.01	01/09/2020		
CITY SUBMITTAL	03/03/2020		
ASI 04	03/28/2020		
^	2/17/2023		



WORKING SESSION

EXECUTIVE SUMMARY

4/13/2023

Number of open violations: 59

Last Inspection dates: April 5th, 2023 and April 19th, 2023 Next Inspection dates: May 10th, 2023 and May 26th, 2023

Violations by type:

Basketball Hoops - 0 Boat- 0 Business – 0 **Commercial Vehicle-0** Common Area Dumping- 0 Dead Tree Backyard- 0 Dead Tree Front/Side Yard –19 Exterior Damage -1 Fence -Paint/Stain - 3 Fence Repair – 5 Holiday Lights- 5 Inoperable Vehicle-1 Items Stored - 1 Landscape Maint - 2 Lawn Care -Weeds- 2 Lawn Care- Watering – 0 Lawn in need of mowing - 0 Total- 59

Lawn in Poor Condition – 5 Livestock- 0 Maintenance - 0 Missing Tree Front Yard - 2 Nusiance - 0 Paint – 5 RV/Camper - 0 Shutters Missing – 1 Signs- 0 Trailer - 0 Trash Cans - 3 Tree Care- 0 Tree Under Caliper- 1 Vehicle Repair -0 Unauthorized Change - 4 Unsightly Conditions - 1 Window Units- 0

Wheatlands Metropolitan District

April 1, 2023 - May 8, 2023

*By Status displays the combined count of all current and past instances for each status assigned during the selected time period.

	Request Status:	Approved	
		Approved With Conditions	1
		Cancelled	
		Completed	11
		Completed	
Architectural Control		Denied	
Architectural control		More Info Requested	
		New Request	
		Under Review	
	Total		
	Correspondence:	Emails	
		US Mails	
	Open:	Carried Over	
	- 1	Created	10
	Total	oroutou	29
	By Status*:	1st Notice	q
	y	2nd Notice	2
Violations		3rd Notice	3
		6th Notice	3
		Resolved	30
	Total	Received	47
	Average Days To		49 9
	Total Fines Assessed		\$100.00
			φ100.00
Wheatlands Metropolitan District Payment of Claims Month of April 2023

Payee	Description	Total Amount
GENERAL FUND PAYMENTS TO BE RAT	LIFIED:	
*Waste Management (Clubhouse)	April 2023 Trash Service	70.10
*Waste Management (Residential)	April 2023 Trash Service	13,100.57
*Wells Fargo Card Services - Business	April 2023 Credit Card Payment	17.46
*XCEL Energy	March 2023 Electric & Gas Utilities	891.76
Altitude Community Law P.C.	March 2023 Legal Services for Collections	1,330.00
American Conservation & Billing Solutions	April 2023 Billing Services	3,417.00
American Mechanical Services of Denver, L	Thermostat Troubleshooting & Repair	675.58
	April 2023 HVAC Maintenance	185.00
AMI-Advanced Management, LLC	April 2023 Covenant Enforcement	3,605.00
C .	Postage and Supplies through 03/31/2023	173.80
Apex Plumbing	Installation of WPRA Tap	37,370.00
Architerra Group Inc.	Park Site Visits & Completion Walk Through	795.63
Around the Corner Handyman LLC	Purchase and Installation of Towel Bar in Park Restroom	228.01
	Repair work for Water Damage Due to Pipe Burst on April 15th	906.65
Colorado Lighting, Inc.	February 2023 Inspection Fees	50.00
	March 2023 Inspection Fees & Bulb Replacement	362.81
Courtesy Plumbing & Heating	Pre-season Maintenance and Repairs to Pool Restrooms	1,197.60
Cox Professional Landscape Services, LLC	March 27th WPRA Snow Removal	201.25
	March 27th Snow Removal	110.00
	Rerouting of water lines for irrigation from building to meter	14,658.77
	Purchase and Installation of Annuals	8,594.50
	April 2023 Commercial Maintenance	14,698.50
	March 25th WPRA Snow Removal	570.00
	March 25th Snow Removal	110.00
	Clean & Stocking of Park Restrooms	270.00
	Removal of Items and Transport to Dump	610.00
	Snow Removal & Supplies - WPRA	602.50
	Snow Removal Supplies	47.50
Elevation Consulting Group, LTD	Soccer Field Work	1,000.00
IDEA Law Group, LLC	February 2023 Litigation Fees Matter 48048248	150.00
	March 2023 Litigation Fees Matter 48048247	90.00
Juana Saquimux	March 2023 Cleaning Service for Clubhouse	760.00
Marchetti & Weaver, LLC	March 2023 Accounting Services	7,893.63
Playground Safety Solutions, LLC	Q1 2023 Playground Maintenance	375.00
Richdell Construction, Inc.	Park Phase II Work through October 2022 - Short Paid in Error	19.01
	Park Phase II Work through March 2023	2,693.25
	Partial Payout of Retainage	44,080.73
Stewart Oxygen Service, Inc.	O2 Inhalator Service 5/1/2023 - 07/31/2023	75.00
Storm Water Asset Protection, LLC	Inspection of Detention Ponds	5,126.45
Terminix	January 2023 Regular Inspection Service - Rec'd 04/20/2023	92.00
	October 2022 Regular Inspection Service - Rec'd 04/20/2023	87.00
	November 2022 Regular Inspection Service - Rec'd 04/20/2023	87.00
	Feb 2023 Regular Inspection Service - Rec'd 04/20/2023	92.00
	March 2023 Regular Inspection Service - Rec'd 04/20/2023	92.00
	December 2022 Regular Inspection Service - Rec'd 04/20/2023	87.00
White Bear Ankele P.C.	March 2023 Legal Services	13,385.73
YMCA of Metropolitan Denver	March 2023 Management Services & Expense Reimbursement	21,951.84
Zions Bancorporation, NA	April 2023 WPRA District Fee	40,803.75
TOTAL TO BE RATIFIED & APPROVED		243.791.38

Wheatlands Metropolitan District

Statement of Net Position	March 31, 2023						
				Special			
		Debt	Special	Revenue	Special		
		Service	Revenue ARI	Operations	Revenue Park	Fixed Assets	
	General Fund	Fund	Fund	Fund	Fund	& LTD	TOTAL
ASSETS CASH CSAFF	2 523 982						2,523,982
Wells Fargo Wells Fargo-Merchant Software	218,319 205						218,319 205
CSB&T - Series 2015 Bond Fund Pooled Cash Allocation	- (502,564)	909,625 -	-	- 355,221	- 147,344		909,625 -
TOTAL CASH	2,239,941	909,625	-	355,221	147,344	-	3,652,130
OTHER CURRENT ASSETS Due from County Treasurer	-	-	-				-
Accounts Receivable Accounts Receivable - Builder	-		-	9,781 -	22,007		31,787 -
Accounts Receivable - Other Property Taxes Receivable Prepaid Expenses	1,108,536	772,664	31,875	-	- 5.258		- 1,913,075 5.258
TOTAL OTHER CURRENT ASSETS	1,108,536	772,664	31,875	9,781	27,265	-	1,950,120
FIXED & OTHER NON-CURRENT ASSET Construction In Progress	S					638,275	638,275
Capital Assets, Net of Depreciation Prepaid Bond Insur-Net of Amortization						5,881,607 165,608	5,881,607 165,608
TOTAL FIXED ASSETS	-	-	-	-	-	6,685,489	6,685,489
TOTAL ASSETS	3,348,476	1,682,288	31,875	365,001	174,608	6,685,489	12,287,739
LIABILITIES & DEFERED INFLOWS CURRENT LIABILITIES Accounts Payable Wells Fargo Credit Card	161,851 -						161,851 -
WPRA Fee Payable Retainage Payable					- 39,999		- 39,999
Accrued Expenses Director's Fees Payable Payroll Liabilities	-	-	-	-	-		-
Century Communities Deposit Prepaid Fees				15,382	34,609		- 49,991
TOTAL CURRENT LIABILITIES	161,851	-	-	15,382	74,608	-	251,841
DEFERRED INFLOWS Deferred Property Taxes	1,108,536	772,664	31,875	-	-		1,913,075
TOTAL DEFERRED INFLOWS	1,108,536	772,664	31,875	-	-	-	1,913,075
LONG-TERM LIABILITIES Accrued Interest Bonds Payable - Series 2015 Bond Premium, Net of Amortization						79,298 22,660,000 309,984	79,298 22,660,000 309,984
TOTAL LONG-TERM LIABILITIES	-	· ·	-	-	-	23,049,282	23,049,282
TOTAL LIAB & DEF INFLOWS	1,270,387	772,664	31,875	15,382	74,608	23,049,282	25,214,198
		,	,	,		, ,	
Net Investment in Capital Assets Amount to be Provided for Debt Nonspendable	-				5,258	6,519,881 (22,883,674)	6,519,881 (22,883,674) 5,258
Restricted For Debt Restricted For Emergencies	61,100	909,625		9,000	21,400		909,625 91,500
Restricted For ARI Assigned for Capital Replacements Assigned for Next Year Budget Deficit	1,230,000		-				- 1,230,000 -
	786,990			340,619	73,342	//	1,200,951
I OTAL NET POSITION	2,078,090	909,625		349,619 =	100,000	(16,363,793) =	(12,926,459) =

Wheatlands Metropolitan District Statement of Revenues, Expenditures, & Changes In Fund Balance For the Period Indicated						Print Date:)ate: 5/4/2023	
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)	
PROPERTY TAXES								
Assessed Valuation	47,276,236	45,956,955	-	45,956,955				
Mill Levy General Fund Debt Service Fund SARIA Fund	36.602 27.755 1.110	39.820 27.755 1.145	(3) - (0)	36.602 27.755 1.110				
Total mill levy Property Taxes Levied General Fund Debt Service Fund SARIA Fund Less Provision For Uncollectible General Fund	65.467 1,730,405 1,312,152 52,477 3,095,033	68.720 1,830,006 1,275,535 52,621 3,158,162	(3) (147,889) (1,608) (149,498)	65.467 1,682,116 1,275,535 51,012 3,008,664				
Debt Service Fund SARIA Fund	-	-		-				
Budgeted Property Taxes General Fund Debt Service Fund SARIA Fund	1,730,405 1,312,152 52,477 3,095,033	1,830,006 1,275,535 52,621 3,158,162	-	1,682,116 1,275,535 51,012 3,008,664				
BUILDOUT & SALES Vacant Lots Beginning of Period New Sold / Now a Residential Unit Richmond Sold / Now a Residential Unit Elacora								
End of Period Residential Units Beginning of Period New - Richmond New - Elacora	1,053 - -	- 1,053 - -	- - -	- 1,053 - -				
New - Lokal (31 bldgs./93 units planned) Other	-		-	-				
Apartments Beginning of Period Additions Other	338	338	-	338				
End of Period Sales	338	338		338				
Re-sale	60 60	60 60		60 60				
FEES Operations Fee - Monthly / Unit Houses Apartments Park Fee - Monthly / Unit		\$ 20.00 \$ -		\$ 20.00 \$ -				
Houses Apartments WPRA Fee		\$ 45.00 \$ 20.00		\$ 45.00 \$ 20.00				
Membership Debt Reserve		\$ 30.00 \$ 5.00		\$ 32.73 \$ 5.00				

Wheatlands Metropolitan District Statement of Revenues, Expenditures, a For the Period Indicated	& Changes In Fund	Balance			Modified Accrual Basis	Print Date:	5/4/2023
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
COMBINED FUNDS							
REVENUE							
Property Taxes	3,095,033	3,158,162	-	3,158,162	1,245,087	1,220,701	24,386
Specific Ownership Taxes	195,395	190,907	-	190,907	32,046	31,818	228
Interest & other income	72,308	9,000	98,000	107,000	28,038	768	27,269
Operations fees	253,180	252,720	-	252,720	63,160	63,180	(20)
Fines & penalties	36,753	23,350	-	23,350	3,493	5,838	(2,345)
Working capital fees	8,850	9,000	-	9,000	2,400	450	1,950
Design review	-	-	-	-	-	-	-
Clubhouse rental fees	30,755	25,000	-	25,000	4,458	3,694	763
Park fees	649,890	649,740	-	649,740	162,390	162,435	(45)
Bond/Loan proceeds	-	-	-	-	-	-	-
Other Income	20,442	8,500	14,500	23,000	21,052	-	21,052
Sale of Assets	-	-	-	-	-	-	-
TOTAL REVENUE	4,362,607	4,326,379	112,500	4,438,879	1,562,123	1,488,883	73,240
	=	=	=	=	=	=	=

Wheatlands Metropolitan District Statement of Revenues, Expenditures, & Ch For the Period Indicated	anges In Fund	Balance			Modified Accrual Basis	Print Date:	5/4/2023
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
COMBINED FUNDS (Continued)							
EXPENDITURES							
General Operating:							
Accounting - contract	81,670	92,600	-	92,600	23,199	23,150	(49)
Accounting - special projects	20,539	15,600	-	15,600	582	4,500	3,918
Audit	5,000	5,800	-	5,800	-	-	-
County Treasurer's fees	46,438	47,372	-	47,372	18,676	18,310	(366)
Director's tees	7,105	12,000	-	12,000	-	-	-
Election	1,204	2,500	32 000	2,500	2 056	26 250	2/ 10/
Insurance & bonds	38 847	44 700	(10,361)	55 061	2,000 55.061	20,230 44 700	(10 361)
l egal - contract	87 051	99,500	(10,501)	99,500	22 768	24 875	2 107
Legal - special projects	19.452	19.600	-	19,600	6.601	4,900	(1,701)
Bank Charges	3.194	4.200	-	4.200	882	1.050	168
Miscellaneous	117	-	-	-	-	-	-
Contingency	-	32,500	2,500	30,000	-	-	-
Website	616	1,000	-	1,000	-	500	500
Debt Service:							
Interest	968,981	951,581	-	951,581	-	-	-
Principal	435,000	450,000	-	450,000	-	-	-
Paying agent / trustee fees / legal	1,000	1,000	-	1,000	-	-	-
Bond/Loan issuance expense	-			-	-	-	-
Contingency	-	5,000	5,000	-	-	-	-
Community Operations							
Eacilities mant & billing Contract	113 01/	134 300	-	134 300	31 304	33 563	2 250
Facilities mgmt & billing - Spec Projects		15 000		15 000	51,504	3 750	2,259
Covenant Enforcement	44 222	48 000	_	48 000	10 989	12 000	1 011
Legal - collections	13.352	12,000	-	12,000	4,164	3.000	(1,164)
Trash removal-residential pickup	151.117	166.900	-	166,900	38,533	41.725	3.192
Community Activities / Christmas Lights	30,859	22,900	-	22,900	9,418	635	(8,783)
Landscaping	249,497	334,900	-	334,900	44,096	47,900	3,805
WPRA Support	222,626	166,500	-	166,500	67,353	35,460	(31,893)
Snow removal	3,936	17,600	-	17,600	7,660	10,560	2,900
Clubhouse repairs and maintenance	122,340	123,703	(33,275)	156,978	73,506	29,301	(44,206)
Sport Fields	336,308	50,000	-	50,000	18,433	25,000	6,567
Grounds maintenance	75,236	94,900	-	94,900	18,857	23,725	4,868
Pool operations	176,130	208,938	(41,375)	250,313	89,332	67,111	(22,221)
Utilities	207,363	278,100	-	278,100	3,290	6,391	3,101
I ransfer to SARIA Authority	51,689	51,831	-	51,831	20,745	20,034	(711)
Capital outlay	-	-	(76,000)	-	-	-	-
WPPA foo	1,799,730	490.645	(76,000)	70,000	09,959	-	(9,959)
	400,100	169,045	86 106	409,043 83 194		38 750	38 750
		100,000	00,100	00,104		00,700	00,700
	5,816,393	4,204,471	(35,405)	4,239,876	756,651	669,551	(87,100)
CHANGE IN FUND BALANCE	(1,453,787)	121,908	77,095	199,003	805,472	819,333	(13,860)
BEGINNING FUND BALANCE	4,085,648	1,859,740	772,122	2,631,861	2,631,861	1,859,740	772,122
ENDING FUND BALANCE	2,631,861	1,981,648	849,217	2,830,865	3,437,334	2,679,072	758,262
	=	=	=	=	=	=	=
			-				
COMPONENTS OF FUND BALANCE:	0.000	40.005	10 107	00.070	5 0 5 0		
Nonspendable	8,362	46,935	16,137	63,072	5,258		
Restricted - TABOR emergency reserve	207 102	88,483 220 927	3,017	91,000	91,500		
Restricted - SARIA Projects	397,102	320,027	24,028	545,455	909,020		
Assigned - Next Vears Rudget Deficit	-	-	-	-	-		
Assigned - Capital Improv/Replacement	930 000	390 000	- 820 000	1 210 000	1 230 000		
Assigned - Parks & Operations	414 678	347 321	(13 109)	334 213	413 961		
Unassigned	794,920	788.082	(1,457)	786,624	786,990		
TOTAL ENDING FUND BALANCE	2.631.861	1,981,648	849.217	2,830,864	3,437,334		
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Wheatlands Metropolitan District Statement of Revenues, Expenditures, & C For the Period Indicated	hanges In Fund	Balance			Modified Accrual Basis	Print Date:	5/4/2023
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
GENERAL FUND							
DEVENUE							
Property taxes	1 720 405	1 920 006		1 920 006	721 470	707 220	14 122
Abatements	1,730,405	1,030,000	-	1,030,000	721,470	101,559	14,152
Specific ownership taxes	111 128	114 375	-	114 375	18 884	19.063	(179)
Interest income	57 652	3 000	86 000	89,000	24 006	750	23 256
Other income	306	-	-	-	,000	-	
TOTAL REVENUE	1,899,491	1,947,381	86,000	2,033,381	764,360	727,151	37,209
EXDENDITI IDES							
Accounting - contract	65 256	74 100	_	74 100	18 516	18 525	Q
Accounting - contract	16 // 9	12 000		12 000	509	3 000	2 /01
Accounting - special projects	5 000	5 800		5 800	505	5,000	2,431
County treasurer's fees	25,000	27 450		27 450	11 133	10 610	(523)
Director's fees	7 105	12 000	_	12 000	-		(020)
Director expenses and equipment	1 254	2,500	_	2 500	_	-	_
Flection	33 703	35,000	32 000	3 000	2 056	26 250	24 194
Insurance & bonds	5,659	6,500	1.095	5,405	5,405	6.500	1.095
Legal - contract	62,179	73,300	-	73,300	15.893	18.325	2.432
Legal - special projects	2,650	5,000	-	5,000	-	1,250	1,250
Bank Charges	27	500	-	500	-	125	125
Miscellaneous	117		-		-	-	-
Contingency	-	30,000	-	30,000	-	-	-
Website	616	1,000	-	1,000	-	500	500
TOTAL EXPENDITURES	225,979	285,150	33,095	252,055	53,512	85,085	31,573
Excess Revenue Over Expenditures	1,673,512	1,662,231	119,095	1,781,326	710,848	642,066	68,782
OTHER SOURCES (USES)							
Transfers (To)/From Debt Service Fund	-		-	-	-	-	-
Transfers (To)/From SARIA Fund	-		-	-	-	-	
Transfers (To)/From Operations Fund Transfers (To)/From Park Fund	- (3,125,921)	(1,441,296)	(59,000)	- (1,500,296)	- (415,128)	- (316,384)	(98,744)
Total Other Sources / (Uses)	(3,125,921)	(1,441,296)	(59,000)	(1,500,296)	(415,128)	(316,384)	(98,744)
CHANGE IN FUND BALANCE	(1,452,409)	220,935	60,095	281,030	295,720	325,682	(29,962)
BEGINNING FUND BALANCE	3,234,779	1,022,472	759,898	1,782,370	1,782,370	1,022,472	759,898
ENDING FUND BALANCE	1,782,370	1,243,407	819,993	2,063,400	2,078,090	1,348,154	729,935
	=	=	=		=	=	=
COMPONENTS OF FUND BALANCE							
Nonspendable	450	6,825	(1,150)	5,675	-		
Restricted - TABOR emergency reserve	57,000	58,500	2,600	61,100	61,100		
Assigned - Capital Improv/Replacement	930,000	390,000	8∠0,000	1,210,000	1,230,000		
Restricted - Debt Covenants	-	-	-	-	-		
Unassigned	794 920	- 788 082	(1 457)	786 624	786 990		
	4 700 070	4.040.40		0.000,024	. 00,000		
I UTAL ENDING FUND BALANCE	1,782,370	1,243,407	819,993	2,063,400	2,078,090		
	=	=	=	=	=		

Wheatlands Metropolitan District Statement of Revenues, Expenditures, & Changes In Fund Balance For the Period Indicated					Modified Accrual Basis	Print Date: 5/4/2023	
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
DEBT SERVICE FUND							
REVENUE							
Property taxes	1,312,152	1,275,535	-	1,275,535	502,872	493,023	9,849
Abatements	-	-	-	-	-	-	-
Specific ownership taxes	84,267	76,532	-	76,532	13,162	12,755	407
Interest income	14,656	6,000	12,000	18,000	4,032	18	4,013
TOTAL REVENUE	1,411,076	1,358,067	12,000	1,370,067	520,066	505,797	14,269
EXPENDITURES							
Accounting - Special Projects	-	-	-	-	-	-	-
Legal	-	-	-	-	-	-	-
Treasurer's fees	19,688	19,133	-	19,133	7,543	7,395	(148)
Bond interest - Series 2015	968,981	951,581	-	951,581	-	-	-
Bond principal - Series 2015	435,000	450,000	-	450,000	-	-	-
Bond interest - Series 2005	-	-	-	-	-	-	-
Bond principal - Series 2005	-	-	-	-	-	-	-
Bond Interest - Series 2008	-	-	-	-	-	-	-
Bond principal - Series 2008	1 000	1 000	-	1 000	-	-	-
Contingency	1,000	5,000	5 000	1,000	-	-	-
	1 424 669	1 426 714	5 000	1 421 714	7 543	7 395	(148)
	1,121,000	.,	0,000	.,,	1,010	1,000	(140)
Excess Revenue Over Expenditures	(13,593)	(68,647)	17,000	(51,647)	512,523	498,402	14,121
OTHER SOURCES / (USES)							
Transfers (To)/From Other Funds	-	-	-	-	-	-	-
Bond proceeds	-	-	-	-	-	-	-
Bond premium	-	-	-	-	-	-	-
Total Other Sources / (Uses)	-	-	-	-	-	-	-
CHANGE IN FUND BALANCE	(13,593)	(68,647)	17,000	(51,647)	512,523	498,402	14,121
BEGINNING FUND BALANCE	410,695	389,474	7,628	397,102	397,102	389,474	7,628
ENDING FUND BALANCE	397,102	320,827	24,628	345,455	909,625	887,876	21,749
	=	=	=		=	=	=

Wheatlands Metropolitan District Statement of Revenues, Expenditures, & Ch For the Period Indicated	anges In Fund	Balance			Modified Accrual Basis	Print Date:	5/4/2023
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
SARIA FUND							
REVENUE Property taxes Abatements Specific Ownership Tax	52,477	52,621 -	-	52,621	20,745	20,339	406
Interest income Other income	-	2,500	(2,500)	-	-	-	-
TOTAL REVENUE	52,477	55,121	(2,500)	52,621	20,745	20,339	406
EXPENDITURES Legal - contract Legal - special projects Capital outlay District ARI Improvements Contribution to SARIA Authority Treasurer's fee Contingency	- 51,689 787	51,831 789 2,500	- - 2,500 2 500	51,831 789 52,621	20,745	20,034 305 	(711) 305 -
	52,411	55,121	2,500	52,021	20,745	20,333	(400)
Excess Revenue Over Expenditures	-	-	-	-	-	-	-
OTHER SOURCES / (USES) Transfers (To)/From other Funds	-		-	-	-	-	-
Total Other Sources / (Uses)	-	-	-	-	-	-	-
CHANGE IN FUND BALANCE	-	-	-	-	-	-	-
BEGINNING FUND BALANCE	-	-	-	-	-	-	-
ENDING FUND BALANCE	-	-	-	-	-	-	-
	=	=	=	=	=	=	=

Wheatlands Metropolitan District Statement of Revenues, Expenditures, & Cha For the Period Indicated	anges In Fund	Balance			Modified Accrual Basis	Print Date:	5/4/2023
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
OPERATIONS FUND							
REVENUE							
Operations Fees - Houses	253,180	252,720	-	252,720	63,160	63,180	(20)
Warning letter fees	-	-	-	-	-	-	-
Working capital fees	2,950	3,000	-	3,000	800	150	650
Late charges and collection fees	5,685	7,000	-	7,000	1,397	1,750	(353)
Legal - collections	4,416	3,500	-	3,500	(353)	875	(1,228)
Design review	-	-	-	-	-	-	-
Violations / Fines	3,925	3,500	-	3,500	100	875	(775)
Interest income	-	-	-	-	-	-	-
Other income	-	-	-	-	-	-	-
TOTAL REVENUE	270,156	269,720	-	269,720	65,104	66,830	(1,726)
EXPENDITURES							
Accounting - Contract - O&M	4,078	4,600	-	4,600	1,157	1,150	(7)
Accounting - Spec Projects - O&M	1,023	800	-	800	32	333	302
Design review	-	-	-	-	-	-	-
Covenant Compliance	44,222	48,000	-	48,000	10,989	12,000	1,011
Facilities Management - Contract	22,146	25,900	-	25,900	6,481	6,473	(8)
Facilities Management - Spec Projects	-	-	-	-	-	-	-
Billing Service - Late Charges & Collections	1,122	2,500	-	2,500	232	625	393
Billing Service - Base Rate	11,675	12,900	-	12,900	2,919	3,225	306
Legal - Contract	12,436	13,400	-	13,400	3,225	3,350	125
Legal - spec projects	2,674	2,600	-	2,600	1,870	650	(1,220)
Legal - collections	6,244	7,000	-	7,000	2,107	1,750	(357)
Bank Charges	1,204	1,200	-	1,200	330	300	(30)
Trash removal - Residential	151,117	166,900	-	166,900	38,533	41,725	3,192
Contingency		14,300	-	14,300		-	-
TOTAL EXPENDITURES	257,940	300,100	-	300,100	67,874	71,581	3,707
Excess Revenue Over Expenditures	12,216	(30,380)	-	(30,380)	(2,770)	(4,751)	1,981
OTHER SOURCES / (USES) Transfers (To)/From other Funds	-	-	-	-	-	-	-
Total Other Sources / (Uses)	-	-	-	-		-	-
CHANGE IN FUND BALANCE	12,216	(30,380)	•	(30,380)	(2,770)	(4,751)	1,981
BEGINNING FUND BALANCE	340,174	347,794	4,596	352,390	352,390	347,794	4,596
ENDING FUND BALANCE	352,390	317,414	4,596	322,010	349,619	343,043	6,577
	=	=	=		=	=	=
COMPONENTS OF FUND BALANCE Nonspendable	_		-	-	-		
Restricted - TABOR emergency reserve	8,100	9,100	(100)	9,000	9,000		
Assigned - Future Operations	344,290	308,314	4,696	313,010	340,619		
TOTAL ENDING FUND BALANCE	352,390	317,414	4,596	322,010	349,619		
	=	=	=	=	=		

Wheatlands Metropolitan District Statement of Revenues, Expenditures, & Cha For the Period Indicated	anges In Fund	Balance			Modified Accrual Basis	Print Date:	5/4/2023
	2022 Prelim Actual	2023 Adopted Budget	Variance Positive (Negative)	2023 Forecast	YTD Thru 03/31/23 Actual	YTD Thru 03/31/23 Budget	Variance Positive (Negative)
PARK FUND							
REVENUE							
Working capital fees	5,900	6,000	-	6,000	1,600	300	1,300
Clubhouse rental fees	30,755	25,000	-	25,000	4,458	3,694	763
Late charges and collection fees	12,790	5,600	-	5,600	3,143	1,400	1,743
Dark fees Builders Lots	9,937	3,750	-	3,750	(794)	930	(1,732)
Park fees - Residential Units	568 770	568 620		568 620	142 110	142 155	(45)
Park fees - Apartment Units	81 120	81 120	-	81 120	20 280	20 280	(40)
Grant	7,453	-	-	-			-
Interest income	-	-	-	-	-	-	-
Sport Field Program Revenue			-			-	
Other income	12,682	6,000	17,000	23,000	21,052	-	21,052
TOTAL REVENUE	729,408	696,090	17,000	713,090	191,848	168,767	23,082
EXPENDITURES							
Accounting - Contract	12.336	13.900	-	13.900	3.525	3.475	(50)
Accounting - Special Projects	3,068	2,800	-	2,800	42	1,167	1,125
Facilities Management - Contract	50,179	58,300	-	58,300	14,582	14,564	(17)
Facilities Management - Spec Projects	-	15,000	-	15,000	-	3,750	3,750
Billing Service - Late Charges & Collections	2,523	5,600	-	5,600	523	1,400	877
Billing Service - Base Rate	26,269	29,100	-	29,100	6,567	7,275	708
Community Activities / Christmas Lights	30,859	22,900	-	22,900	9,418	635	(8,783)
	33,187	38,200	(11,456)	49,656	49,656	38,200	(11,456)
Legal - Contract	12,436	12,800	-	12,800	3,649	3,200	(449)
Legal Collections	7 108	5 000	-	5 000	4,730	3,000	(1,730)
Bank Charges	1 963	2 500		2 500	2,007	625	(007)
Proposed Facility & Project Planning	-	2,000	-	2,000			-
Park - Project Costs	1.799.730	-	(76.000)	76.000	69.959	-	(69,959)
Sport Field Improvements	336,308	50,000	-	50,000	18,433	25,000	6,567
Sport Field Program Expenses			-			-	-
Irrigation Repairs & Improvements	45,852	43,300	-	43,300	-	-	-
Landscape Maintenance Contract - WMD	164,945	191,600	-	191,600	44,096	47,900	3,805
Landscape Improvements - WMD	38,700	100,000	-	100,000	-	-	-
Snow Removal	3,936	17,600	-	17,600	7,660	10,560	2,900
Clubhouse Repairs and Maintenance	122,340	117,203	(33,275)	150,478	73,506	29,301	(44,206)
Parking Lot Maintenance	-	6,500	-	6,500	-	-	-
Chomicals & Supplies	20,130	86,000 12,000	-	86,000	10,418	21,500	5,082
Contract / Lifequards	1/2 500	150 338	-	150 338	40.981	39 110	- (1 871)
Equipment Repairs & Replacement	21 784	36 600	(41.375)	77 975	48,351	28 002	(20,349)
Gas and Electric	28,917	28,100	(11,010)	28,100	1,199	3.293	2.094
Telephone/ WiFi / Cable			-		-	-	_,
Water and Sewer	178,446	250,000	-	250,000	2,091	3,098	1,007
Trash Removal - Clubhouse/Non-Res	-	-	-	-	-	-	-
WPRA Fee	468,106	489,645	-	489,645	119,189	122,411	3,222
Community Park Maintenance	19,101	8,900	-	8,900	2,440	2,225	(215)
WPRA Support	222,626	166,500	-	166,500	67,353	35,460	(31,893)
Property Acquisition/Improvements		-	-	-	-	-	-
Contingency		155,000	86,106	68,894		38,750	38,750
TOTAL EXPENDITURES	3,855,328	2,137,386	(76,000)	2,213,386	606,977	485,150	(121,826)
Excess Revenue Over Expenditures	(3,125,921)	(1,441,296)	(59,000)	(1,500,296)	(415,128)	(316,384)	(98,744)
OTHER SOURCES / (USES) Transfers (To)/From other Funds Loan issuance	3,125,921	1,441,296 -	59,000 -	1,500,296	415,128	316,384 -	98,744 -
Proceeds from Sale of Land	-	-	-	-	-	-	-
Total Other Sources / (Uses)	3,125,921	1,441,296	59,000	1,500,296	415,128	316,384	98,744
CHANGE IN FUND BALANCE	-	-	-	-	-	-	(0)
BEGINNING FUND BALANCE	100 000	100 000	-	100 000	100 000	100 000	-
	100,000	100,000		100,000	100,000	100,000	(0)
ENDING FOND BALANCE	100,000	-		-	100,000	-	(0)
COMPONENTS OF FUND BALANCE	=	=	=	=	=	=	=
Nonspendable	7 912	40 110	17 287	57 397	5 258		
Restricted - TABOR emergency reserve	21.700	20,883	517	21.400	21,400		
Restricted - Replacement reserve			-	,	,		
Restricted - Loan reserve & Surplus	-	-	-	-			
Assigned for Parks	70,388	39,007	(17,804)	21,203	73,342		
TOTAL ENDING FUND BALANCE	100,000	100,000		<u>100,000</u>	100,000		
	=	=	=	=	=		



Wheatlands Metropolitan District Total Monthly Usage



Landscape Monthly Status Report

Project Name	Reporting Cadence
Wheatlands Metropolitan District	Monthly (for Board Meetings)
Date	Prepared by:
April 2023	Kevin Cox

III. Lawn Care - Provide updates regarding Mowing/Edging, Fertilization, Weed, Disease and Pest Control – all items listed in contract. Update on any changes, overall maintenance, status and any concerns to be shared with the Board.

-Bi-weekly mowing, trimming and edging of turf areas.

-Spring aeration completed.

-Spring fertilizer application completed.

IV. Shrubs/Plants - Provide update regarding Edging, Pruning, Weed, Disease and Pest Control – all items listed in contract. Update on any changes, overall maintenance, status and any concerns to be shared with the Board.

-Spring pruning of shrubs completed in March.

V. Tree Care - Provide update regarding Pruning, Staking, Insect Control, Tree Wells – all items listed in contract. Update on any changes, overall maintenance, status and any concerns to be shared with the Board.

-Protective tree wrap on new trees removed.

-Watering bag on new trees removed.

Misc items as listed in Contract – Provide update on any changes, overall maintenance, status and any concerns to be shared with the Board.

-Weekly checking and replacement of trash and dog waste bags with Wheatlands Park being checked 3 times per week.

-Park bathroom freeze damage repaired.

-Detention pond inlet/outlet cleaning scheduled for April.

VI. Wood and Rock Mulched Areas-

-Repairs from snow removal are complete.

VII. Native Areas-

-Trash removed.

VII. Irrigation Systems-

-System activated.

-Mainline leaks repaired.

- -Mainline integrity check complete.
- -Irrigation controller weather sync complete.
- -Repairs from snow removal complete.
- -Backflows protected for freeze damage.

IX. Landscape Debris Cleanup-

-Spring leaf and pine needle removal completed.

-Revisits required and completed.

X. Aeration-

-Spring aeration completed.

XI. Winter Services-

-Snow removal services completed on- 11/15; 11/18; 11/29; 12/13; 12/22; 12/29; 1/02; 1/18-1/20; 1/21; 1/29; 1/31; 2/15, 2/16;

XII. Bio Hazards-

XIII. Damages-

-All snow removal damages repaired to landscape irrigation system, landscape beds and turf areas.

Misc. Items -

Estimates-

Special Projects (provide an update to any special funding approved by the Board and their status)

- Pots for around a./c. unit have arrived (4/20) and have been located in appropriate positions at pool. Yet to be plantedscheduled for mid-May,
- Annual flower planting in beds around clubhouse scheduled for mid-May (approximately- dependent on availability and weather).
- Replacement of perennial plantings at monuments (as per Leasanne Dominguez) due to be begin as soon as (a) nurseries begin stocking with plant material and again and (b) weather stabilizes. Monitoring weather and plant availability from nurseries. Still on schedule for early spring planting.
- Kentucky coffee tree (replacement due to car accident) obtained and planted opposite club house on Wheatlands Parkwayplanted 4/19/23. No charge due to overcharge on Invoice #33662
- Invoice 34299 submitted for payment- annual color- on 3/27/2023
- Repair to monument garden bed by Lowes- estimate #1738- (corner of Wheatlands Parkway and Smokey Hill) has been completed. Invoice #34676 emailed to Isabell 4/26/2023
- Estimate #1558 (replacement shrubs for parking lot entrance by clubhouse) scheduled to be completed w./c. 5/1—invoice #34678 submitted to Isabell 5/1/2023 7:13 a.m..
- Estimate #1758 (\$1829.65) for rolltop replacement and rock mulch top-dressing at corner of E. Wheatlands Parkway and S. Harvest street- waiting for approval. Photos supplied- sent Isabell 4/25/2023. Completed. Invoice #34679 sent to Isabell 5/1/23 7:24 a.m.

Cox Professional Landscape Services LLC

14051 E Davies Avenue Unit A Centennial, CO 80112

Estimate

Date	Estimate #
4/5/2023	1758

Name / Address

Wheatlands Metro District 6601 S Wheatlands Parkway Aurora, CO 80016

Ship To			

			Project
			2022 Enhancements
Description	Qty	U/M	Total
Rejuvenate areas at corner of E. Wheatlands Parkway and S. Harvest Street			
Remove and replace existing rusted and damaged rolltop at corner of Wheatlands Parkway and S. Harvest Street	26	ft	256.10
Remove and replace existing rusted and damaged rolltop at corner of Wheatlands Parkway and S. Harvest Street	43	ft	423.55
General Landscape Labor	2.5		187.50
Top-dress rock at corner of Wheatlands Parkway and S. Harvest street- 1.5" Western Tan	5	ton	625.00
General Landscape Labor	4.5		337.50
This proposal/estimate is good for thirty (30) days from the date of issue. Acceptance of Contract By my signature below I do hereby accept this proposal dated as presented. Signature:Date Please Print Name			
	То	otal	\$1,829.65

Phone #

Email: coxoffice@coxprolandscape.com

















WHEATLANDS POND 2

March 1, 2023







Forebay



South Inlet



Concrete Channel



South Inlet



East Inlet



Pond Outlet

WHEATLANDS POND 4

March 1, 2023







South Inlet





Bank Erosion



Northeast Inlet



Concrete Channel



Pond Outlet

WHEATLANDS POND 9

March 1, 2023







East Inlet



Pipe Downstream of East Inlet



South Inlet



East Inlet



Trickle Channel



Pond Outlet



Annual Inspection and Maintenance Reporting Form for Stormwater Facilities

(This form shall be submitted to the City of Aurora prior to May 31 of each year along with the Inspection Forms and Maintenance Forms as required for the property/subdivision)

Date:

To: City of Aurora Water Department Attn: Operations Compliance Division 13646 East Ellsworth Avenue Aurora, CO 80012

Re: Certification of Inspection and Maintenance; Submittal of forms

Property/Subdivision Name: Wheatlands Metropolitan District

Property Address: 6601 E. Wheatlands Parkway Aurora, CO 80016

Contact Name: Paulette Martin, Board President

I verify that the required stormwater facility inspections and required maintenance have been completed in accordance with the Stormwater Facilities Maintenance Agreement, and the Inspection and Maintenance Plan associated with the above referenced property.

The required Stormwater Facility Inspection and Maintenance forms are hereby provided.

Valeria Trevizo, IDES Name of Party Responsible for Inspection

Valería Trevízo

Authorized Signature

Property Owner

Name of Party Responsible for Maintenance

Signature

Authorized Signature

EXTEND	POND 2 DED DETENTION BASIN (EDB) INSPECTION FORM		
(ROS)	Date: 3/1/2023		
Subdivision/Business Name: Wheatlands Subdiv	ision Inspector: Valeria Trevizo		
Subdivision/Business Address: 6601 E Wheatland	s Pkwy		
Weather: Cloudy/Snow Melt Occuring 33 deg	rees		
Date of Last Boinfall: Spowfall on February 22nd	d - 23rd Amount 5 Inchas		
Date of Last Raiman. Onowide on rebracity 2210			
Property Classification: Residentia Mul (Circle One)	Iti Family Commercial Other:		
Reason for Inspection: Routine (Circle One)	Complaint After Significant Rainfall Event		
INSPECTION SCORING - For each facility inspec 0 = No deficiencies identified 1 = Monitor (potential for future problem) N/A = Not ap	ction item, insert one of the following scores: 2 = Routine maintenance required 3 =Immediate repair necessary pplicable		
FEATURES			
1.) Inflow Points	2.) Forebay		
Riprap Displaced	2 Sediment/Debris Accumulation		
2 Erosion Present/Outfall Undercut	O Concrete Cracking/Failing		
2 Sediment Accumulation	0 Drain Pipe/Wier Clogged (not draining)		
0 Structural Damage (pipe, end-section, etc.)	0 Wier/Drain Pipe Damage		
0_Woody Growth/Weeds Present			
3.) Trickle Channel (Low-flow) <u>2</u> Sediment/Debris Accumulation	4.) Bottom Stage (Micro-Pool) <u>2</u> Sediment/Debris Accumulation		
_0_Concrete/Riprap Damage	2_Woody Growth/Weeds Present		
2_Woody Growth/Weeds Present	_0_Bank Erosion		
0 Erosion Outside Channel	_0_Mosquitoes/Algae Treatment _0_Petroleum/Chemical Sheen		
5.) Outlet Works	6.) Emergency Spillway		
2 Trash Rack/Well Screen Clogged	0 Riprap Displaced		
0 Structural Damage (concrete, steel, subgrade	e) 0 Erosion Present		
0 Onflice Plate(s) Missing/Not Secure	0 Woody Growth/Weeds Present		
0 Manhole Access (cover, steps, etc.)	0 Obstruction/Debris		
Woody Growth/Weeds Present			
7.) Upper Stage (Dry Storage)	8.) Miscellaneous		
0 Vegetation Sparse	Encroachment in Easement Area		
0 Woody Growth/Undesirable Vegetation	0 Graffiti/Vandalism		
O Standing Water/Boggy Areas	O_Public Hazards		
O Sediment Accumulation	0_Burrowing Animals/Pests		
D Erosion (banks and bottom)	0 Other		
	iment, trash and debris from concrete channel and forebays dispose of		
	r algae removal along channel. Channel erosion present at east inlet. present adjacent to south inlet. Excess material placed along the properties of the standard and potentially causing retaining		
wall issues o	n south end of the pond. Debris removal from outlet structure trash rac		
OVERALL FACILITY RATING (Circle One)			
0 = No Deficiencies Identified	2= Routine Maintenance Required		
1 = Monitor (potential for future problem exists)	3 = Immediate Repair Necessary		
This inspection form shall be kept indefinitely and m	ade available to the City of Aurora upon request.		

	XTENDED DETEI	NTION BASIN (EDB) ION FORM	POND 4	
- NO		Date: 3/1/2023		
Subdivision/Business Name: Wheatlands	s Subdivision	sion Inspector: Valeria Trevizo		
Subdivision/Business Address: 6601 E Wi	neatlands Pkwy			
Weather: Cloudy/Snow Melt Occuring	. 33 degrees	1		
Date of Last Rainfall: Snowfall on Febr	uary 22nd - 23rd	Amount 5	Inches	
Property Classification: Resident	iaD Multi Family C	ommercial Other:		
(Circle One)				
Reason for Inspection: Routin (Circle One)	Complain	nt After Significa	nt Rainfall Event	
INSPECTION SCORING - For each fa 0 = No deficiencies identified 1 = Monitor (potential for future pr N/	cility inspection item, insert 2 = R oblem) 3 =In A = Not applicable	one of the following scores: Routine maintenance require nmediate repair necessary	ed	
FEATURES				
1.) Inflow Points		2.) Forebay		
0 Riprap Displaced		na Sediment/Debri	Accumulation	
2 Erosion Present/Outfall Undercut		na Concrete Cracki	ng/Failing	
0 Sediment Accumulation		na Drain Pipe/Wier Clogged (not draining)		
0 Structural Damage (pipe, end-see	ction, etc.)	na Wier/Drain Pipe	Damage	
0_Woody Growth/Weeds Present				
3.) Trickle Channel (Low-flow)		4.) Bottom Stage (Mi	cro-Pool)	
Sediment/Debris Accumulation		_2_Sediment/Debris	s Accumulation	
O Concrete/Riprap Damage		0 Point Frederick Present		
Woody Growth/Weeds Present		Bank Erosion		
_0_Erosion Outside Channel		_0_Mosquitoes/Alga _0_Petroleum/Chen	ae Treatment nical Sheen	
5.) Outlet Works		6.) Emergency Spilly	ay	
2 Trash Rack/Well Screen Clogged		0 Riprap Displaced		
0 Structural Damage (concrete.stee	el.suborade)	0 Erosion Present		
0 Onfice Plate(s) Missing/Not Secu	në	0 Woody Growth/	Needs Present	
0 Manhole Access (cover, steps, etc.)		0 Obstruction/Deb	ris	
Woody Growth/Weeds Present				
7.) Upper Stage (Dry Storage)		8.) Miscellaneous		
O_Vegetation Sparse		0 Encroachment i	n Easement Area	
0 Woody Growth/Undesirable Vege	tation	0 Graffiti/Vandalis	m	
O Standing Water/Boggy Areas		Public Hazards		
0 Sediment Accumulation		0 Burrowing Anim	als/Pests	
2 Erosion (banks and bottom)		3 Other (Underdra	ain)	
0 Trash/Debris	mediate renair pooded po	et to portheast inlot underdrai	n exposed and looking	
Maintenance Access Re	e. Remove debris from out	s from concrete channel and c	utlet forebay, dispose of ir bank erosion, seeding	
Inspection Summary / Additional Comments:reu up	commended. Repair erosic stream and downstream s	on adjacent to both inflow pipe	s. Clear vegetation from eam of south inlet.	
OVERALL FACILITY RATING (Circle One)				
0 = No Deficiencies Identified	(2=)	Routine Maintenance Rec	uired	
1 = Monitor (notontial for future problem as	viete)	mmediate Donair Masse	an	
1 - Monitor (potential for future problem ex	(1515) 3=1	mineulate Repair Neces	saly	
This inspection form shall be kept indefinite	ely and made available	to the City of Aurora upo	on request.	

EXTENDE	POND 9 D DETENTION BASIN (EDB) NSPECTION FORM				
ROS	Date: 3/1/2023				
Subdivision/Business Name: Wheatlands Subdivision Inspector: Valeria Tre					
Subdivision/Business Address: 6601 E Wheatlands Pkwy					
Weather: Cloudy/Snow Melt Occuring 33 degree	PS				
Data of Last Deinfall Spowfoll on Echrupry 22nd	23rd Amerunit 5 Jackar				
Date of Last Rainfail Showiail of February 2210	Zord Amount. 5 Inches				
Property Classification: Residential Multi I (Circle One)	Family Commercial Other:				
Reason for Inspection: Routine (Circle One)	Complaint After Significant Rainfall Event				
INSPECTION SCORING - For each facility inspection 0 = No deficiencies identified 1 = Monitor (potential for future problem) N/A = Not appl	on item, insert one of the following scores: 2 = Routine maintenance required 3 =Immediate repair necessary icable				
FEATURES					
1.) Inflow Points	2.) Forebay				
O Riprap Displaced Second Outfall Lindorcut	<u>na</u> Sediment/Debris Accumulation				
2 Sediment Accumulation	na Drain Pine/Wier Clonged (not draining)				
0 Structural Damage (pipe, end-section, etc.)	na Wier/Drain Pide Damage				
2_Woody Growth/Weeds Present	<u>Inc.</u> (university in a cauting of				
3.) Trickle Channel (Low-flow)	4.) Bottom Stage (Micro-Pool)				
2 Sediment/Debris Accumulation	2 Sediment/Debris Accumulation				
O_Concrete/Riprap Damage	0_Woody Growth/Weeds Present				
Woody Growth/Weeds Present	_2_Bank Erosion				
_0_Erosion Outside Channel	0 Mosquitoes/Algae Treatment 0 Petroleum/Chemical Sheen				
5.) Outlet Works	6.) Emergency Spillway				
Trash Rack/Well Screen Clogged	0 Riprap Displaced				
O Structural Damage (concrete, steel, subgrade)	0 Erosion Present				
Onfice Plate(s) Missing/Not Secure	0 Woody Growth/Weeds Present				
0 Manhole Access (cover, steps, etc,) 0 Woody Growth/Weeds Present	_0_Obstruction/Debris				
7.) Upper Stage (Dry Storage)	8.) Miscellaneous				
O Vegetation Sparse	Encroachment in Easement Area				
	0 Graffiti/Vandalism				
O Standing Water/Boggy Areas	Public Hazards				
Sediment Accumulation	Burrowing Animals/Pests				
Erosion (banks and bottom)	O Other				
Trash/Debris Bomovo sodi	mont and dobris from congrete channel and dispess of off				
O Maintenance Access site. Remove scull site. Remove Inspection Summary / Additional Comments: and add rip re	debris from outlet structure trash grate. Regrade inlet area ap so water does not pond and can flow through.				
OVERALL FACILITY RATING (Circle One)					
0 = No Deficiencies Identified	2= Routine Maintenance Required				
1 = Monitor (potential for future problem exists)	3 = Immediate Repair Necessary				
RUR ON	EXTENDED DETE MAINTEN	NTION BASIN (ED) ANCE FORM	POND 2 B)		
--	---	---	---		
ubdivision/Business Name:		Completion Date	e:		
ubdivision/Business Address:		Contact Name:			
Maintenance Category: (Circle All That Apply)	Routine	Restoration	Rehabilitation		
MAINTENANCE ACTIVIT	TIES PERFORME	þ			
ROUTINE WORK MOWING TRASH/DEBRIS R OUTLET WORKS	EMOVAL CLEANING (TRASH F	ACK/WELL SCREEN)			
WEED CONTROL MOSQUITO TREA ALGAE TREATME	(HERBICIDE APPLIC. TMENT INT	ATION)			
RESTORATION WORK		REHABILITATION	WORK		
SEDIMENT REMO FOREE TRICKI INFLOV EROSION REPAIF INFLOV TRICKI VEGETATION REI INFLOV TRICKI UPPER BOTTO REVEGETATION JET-VAC/CLEARIN OUTLE INFLOV	OVAL BAY LE CHANNEL W N POINT LE CHANNEL MOVAL/TREE THINNI W(S) LE CHANNEL & STAGE DM STAGE DM STAGE MS DRAINS BAY ST WORKS WS	SEDIMENT REI BC UF EROSION REP OU NG BC STRUCTURAL INI OU FC TR OTHER	MOVAL (DREDGING) DTTOM STAGE PPER STAGE AIR JTLET WORKS PPER STAGE DTTOM STAGE DTTOM STAGE DILLWAY REPAIR FLOW JTLET WORKS DREBAY BICKLE CHANNEL		
ESTIMATED TOTAL MANHO	URS:				
COMMENTS/ADDITIONAL IN	FO:				
-					

Routine ES PERFORME	Completion Date: Contact Name: Restoration Rehabili	tation
	Contact Name: Restoration Rehabili	tation
	Restoration Rehabili	tation
	D	
101/01		
IEANING (TRASH IERBICIDE APPLIC MENT	RACK/WELL SCREEN) ATION)	
	REHABILITATION WORK	
AL CHANNEL POINT CHANNEL DVAL/TREE THINN S) CHANNEL TAGE STAGE GDRAINS WORKS	SEDIMENT REMOVAL (DREDG BOTTOM STAGE UPPER STAGE EROSION REPAIR OUTLET WORKS BOTTOM STAGE BOTTOM STAGE SPILLWAY STRUCTURAL REPAIR INFLOW OUTLET WORKS FOREBAY TRICKLE CHANNE OTHER	ilng)
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(Alexandre	EXTENDED DETEN MAINTENA	ITION BASIN (E INCE FORM	POND DB)
odivision/Business Name:		Completion D	ate:
division/Business Address:		Contact Nam	e:
Maintenance Category: ircle All That Apply)	Routine	Restoration	Rehabilitation
MAINTENANCE ACT	IVITIES PERFORMED		
ROUTINE WORK MOWING TRASH/DEBRI OUTLET WOR WEED CONTR MOSQUITO TH AL GAF TREAT	S REMOVAL KS CLEANING (TRASH RA ROL (HERBICIDE APPLICA REATMENT IMENT	ACK/WELL SCREEN TION))
RESTORATION WOR	<u>tk</u>	REHABILITATIO	N WORK
SEDIMENT RE FOI INF EROSION REF INF TRI VEGETATION INF BO BO REVEGETATIO JET-VAC/CLE/ FOI UNF	EMOVAL REBAY CKLE CHANNEL LOW PAIR LOW POINT CKLE CHANNEL REMOVAL/TREE THINNIN LOW(S) CKLE CHANNEL PER STAGE TTOM STAGE DN ARING DRAINS REBAY TLET WORKS LOWS		REMOVAL (DREDGING) BOTTOM STAGE UPPER STAGE EPAIR OUTLET WORKS UPPER STAGE BOTTOM STAGE SPILLWAY AL REPAIR INFLOW OUTLET WORKS FOREBAY TRICKLE CHANNEL
ESTIMATED TOTAL MAN	HOURS:		
COMMENTS/ADDITIONAL	UNEO:		









District #2 - can be adjusted off property.





PROPOSED MURPHY TRAIL- OPTION 2 PROFILE STA 10+00.00 TO 29+00.00





35 18 0 35 ORIGINAL SCALE: 1" = 35'

/8	HP STA: 42+2	7.82								-5970
8	VPI STA: 42+2 VPI STA: 42+2 VPI EL: 5957. K: 5.43 50.00' VC	45 9.96 02								-5965
	PC 2 2 2 2 2 2 2 2 2 2 2 2 2 2	EL: 242+24 255.77 EL: 2955.77 EL: 42+24 262 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42+24 2021 EL: 42 2021 EL: 42 20 20 2021 EL: 42 20 20 20 20 2								-5960
4.43g	A.21%	P	PROPOSED G	RADE AT MUF	RPHY TRAIL (-5955
tion 2 PROFILE (2) Station=42+23.83								VPI_STA+_46+88.99		-5950
					-5.00z			VPI EL: 5934.08 K: 8.00 30.00' VC 0 0 0 0 0 0 0 0 0 0 0 0 0		-5945
		SWITCHBACK 2'-4' RETAININ NECESSA	C AREA NG WALLS					VPC STA: 46+ EL: 5934.8 VPT STA: 47+ EL: 5933.9		-5940
								-1.25%		-5935
							Proposed Murphy Trail— O —Station=44+88.49 elev = 5944.100	otion 2 PROFILE (2)		-5930
1+00 4	12+00	43+00	44+	-00	45-	-00	46+00	47+00	48-	-5925 -00

2023 May Agenda

District Business

- Kona Ice Mondays for Wheatlands at 2:30pm June 5th-August 29th?
- Pool preparations and pump room update
- Estimates for projects for landscaping work
- Hacked tree by resident near 6557 S. Kewaunee Way letter sent to Sharon to send to resident update
- Pool deck furniture delivered 5/3/23
- Urban Soccer Field tentative install date is week of May 22nd grading and concrete work completed
- Urban Soccer Field sponsorships (2) wall panel Cox and Garlock Orthodontics
- Authority Update marketing material for May has been sent, waiting on numbers
- Snack shack will be restocked a week prior to opening square has been fixed

Event Recap

- April 29th- Healthy Kids Day at the Aurora YMCA at Wheatlands
- April 29th Strong Society Foundation (Club at Pine Ridge) Community Trash pick-up event @ 2pm

Upcoming Events

- Early summer from Park update Park Grand Opening Event (courts completed) -DATE?
- May 18th Food Truck Night with Magician
- May 27th Pool Opening Day! Free Otter Pops
- June 16-17th Neighborhood Garage Sale
- June 17th Welcome back to summer Event (Face painter, balloon twister and Animal Safari)
- June 22nd Food Truck Night with Madonna Band
- July 4th Celebration 11-2pm
- July 20th Food Truck Night with Face painter (Chawna-from Easter)
- August 17th Food Truck Night with Magician
- September 16th Bunco Night (Exit Realty sponsoring prizes)
- October ?? possible Cook like a Chef Night at the Clubhouse (teaching and tasting style)?
- October 21th Wheatlands Pumpkin Patch
- November 11th Community Wine Tasting Event (different format then last winetasting event)
- December 2nd Wheatlands Santa and Sleigh Ride event 4:30pm-6:30pm

AUR Active Membership Count: 22.12.01TZ

As of 2023-05-04 20:28:26 Mountain Standard Time/MST • Generated by Kimberly Armitage

Filtered By Show: All memberships Membership Status equals Active Record Type equals Standard Membership MT: Location contains aur Membership Type: Membership Report Filter equals Aurora YMCA,Blackstone Membership Type: Membership Type Name does not contain Trial Pass

MT: Location ↑	Membership Type: Membership Type Name ↑	Unique Count of Unique Membership	Record Count
Aurora YMCA (AUR)	Blackstone Resident Couple (AUR)	6	11
	Blackstone Resident Household (AUR)	11	45
	Blackstone Resident Premium Individual (AUR)	3	3
	Blackstone Resident Y-Starter (AUR)	7	7
	Y-Premium Annual Couple (AUR)	18	36
	Y-Premium Annual Household (AUR)	41	172
	Y-Premium Annual Individual (AUR)	10	10
	Y-Premium Couple (AUR)	170	337
	Y-Premium Household (AUR)	390	1641
	Y-Premium Individual (AUR)	135	135
	Y-Starter (AUR)	288	288
	Y-Starter Annual (AUR) - (DO NOT SELL)	3	3
	Y Your Way (AUR)	25	108
Subtotal		1107	2796
Total		1107	2796

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Payment	Rental							
Date	Date	Hours	•	Total	Security	Hours	Т	otal
3-May	12-May	3	\$	135.00	n		\$	-
			\$	-			\$	-
			\$	-			\$	-
			\$	-			\$	-
			\$	-			\$	-
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	TOTAL		\$	-			\$	-

CLUBHOUSE RENTALS