WELCOME
To a Regular Meeting of the
Coeur d'Alene City Council
Held in the Library Community Room
at 6:00 P.M.

AGENDA

VISION STATEMENT

Our vision of Coeur d'Alene is of a beautiful, safe city that promotes a high quality of life and sound economy through excellence in government.

The purpose of the Agenda is to assist the Council and interested citizens in the conduct of the public meeting. Careful review of the Agenda is encouraged. Testimony from the public will be solicited for any item or issue listed under the category of Public Hearings. Any individual who wishes to address the Council on any other subject should plan to speak when **Item F - Public Comments** is identified by the Mayor. The Mayor and Council will not normally allow audience participation at any other time.

October 1, 2019

A. CALL TO ORDER/ROLL CALL - *Including the Honorary Mayor Saydie Green*

B. INVOCATION: Pastor Jeff Smith with Northwest Family Church (PF)

C. PLEDGE OF ALLEGIANCE: Honorary Mayor Saydie Green

D. AMENDMENTS TO THE AGENDA: Any items added less than forty-eight (48) hours prior to the meeting are added by Council motion at this time.

E. PRESENTATIONS:

1. Idaho/Washington Aquifer Collaborative (IWAC) Efficient Irrigation and Landscape Design Guidelines

Presented by: Terry Pickel, Water Superintendent

F. PUBLIC COMMENTS: (Each speaker will be allowed a maximum of 3 minutes to address the City Council on matters that relate to City government business. Please be advised that the City Council can only take official action this evening for those items listed on the agenda.)

G. ANNOUNCEMENTS:
1. **City Council**
2. **Mayor**

*****ITEMS BELOW ARE CONSIDERED TO BE ACTION ITEMS**

H. CONSENT CALENDAR: Being considered routine by the City Council, these items will be enacted by one motion unless requested by a Councilmember that one or more items be removed for later discussion.

1. Approval of Council Minutes for the September 17, 2019 Council Meeting.
2. Approval of Minutes for the September 23, 2019 Public Works Committee Meeting.
3. Approval of Bills as Submitted.
4. Setting of General Services and Public Works Committees meetings for Monday, October 7, 2019 at 12:00 noon and 4:00 p.m. respectively.
5. **Resolution No. 19-044** - Approval of the Declaration of surplus several pieces of equipment and vehicles

As Recommended by the Public Works Committee

I. OTHER BUSINESS:

1. **Resolution No. 19-045** - Approval of a Change Order No. 2 to the Agreement with Apollo, Inc. for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements.

Staff Report by: Mike Anderson, Wastewater Superintendent

2. **Resolution No. 19-046** - Approval of a Memorandum of Understanding with the Fire Department Deputy Chiefs for the term of October 1, 2019 through September 30, 2022.

Staff Report by: Troy Tymesen, City Administrator

3. **Resolution No. 19-047 -** Approval of a Memorandum of Understanding with the Police Captains for the term of October 1, 2019 through September 30, 2021.

Staff Report by: Troy Tymesen, City Administrator

4. **Resolution No. 19-048 -** Rejection of Bid for the public space for the Atlas Waterfront project and authorization for staff to move forward with a negotiated contract.

Staff Report by: Bill Greenwood, Parks Director

J. ADJOURNMENT

This meeting is aired live on CDA TV Spectrum Cable Channel 1301 and on Facebook live through the City's Facebook page.

NOTE: The City will make reasonable accommodations for anyone attending this meeting who require special assistance for hearing, physical or other impairments. Please contact the City Clerk at (208) 769-2231 at least 72 hours in advance of the meeting date and time.

Coeur d'Alene

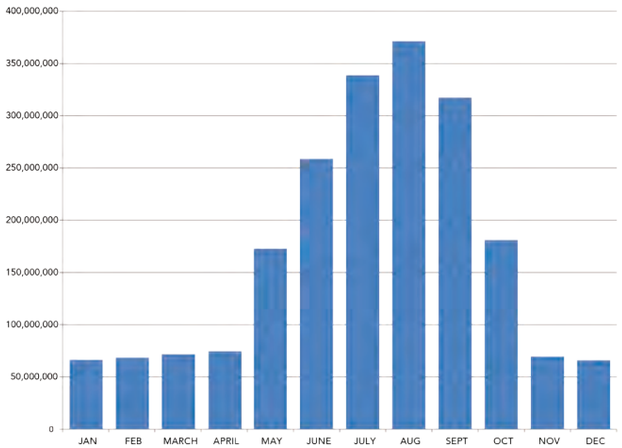
CITY COUNCIL MEETING

October 1, 2019

MEMBERS OF THE CITY COUNCIL:
Steve Widmyer, Mayor
Council Members Edinger, English, Evans, Gookin, McEvers, Miller

PRESENTATIONS

OUR WATER.
OUR FUTURE.



Daily Average Water Use in Spokane County

Why do we need Irrigation and Landscape Standards?

Landscape irrigation is the single largest use of potable water in the U.S. during summer months, outdoor water use creates peak demand on existing water supplies and system capacity.

- Water purveyors must increase supply to meet irrigation needs, sometimes as much as 3-4 times the amount used for domestic needs during the winter.
- Local forecasts show population increases by 31% by 2040 in Spokane County and 81% in Kootenai County by 2045.
- As much as 50% of water used for irrigation is wasted due to evaporation, wind, and overwatering caused by inefficient irrigation methods and systems.

IWAC Members

Avondale Irrigation District
Bar Circle S Water Company
City of Coeur d'Alene Water Department
City of Post Falls Water and Sewer
City of Spokane Water Department
Consolidated Irrigation District No. 19
East Greenacres Irrigation District
Hayden Area Regional Sewer Board
Hayden Lake Irrigation District
Liberty Lake Sewer & Water District No. 1
Millwood Municipal Water District
Model Irrigation District No. 18
Modern Electric Water Company
North Kootenai Water & Sewer District
Spokane Aquifer Joint Board
Spokane County Water District No. 3
Spokane County Environmental Services
Vera Water and Power
Whitworth Water District No. 2

Idaho Washington Aquifer Collaborative
President, Terry Pickel,
Vice President, BiJay Adams,
Secretary, Rob Lindsay
Treasurer, Ron Wilson

www.iwac.us
info@iwac.us

guidelines for

EFFICIENT IRRIGATION & LANDSCAPE DESIGN STANDARDS

IWAC
IDAHO WASHINGTON AQUIFER COLLABORATIVE

OUR WATER.
OUR FUTURE.

A menu of options for preparing and adopting an ordinance or standards.

Idaho Washington Aquifer Collaborative
iwac.us/irrigation-and-landscape-guidelines

IRRIGATION DESIGN

Landscape irrigation industry lacks national or inter-national standards for construction and operation and most jurisdictions in Kootenai and Spokane Counties do not have strong provisions for water efficiency within their landscape codes.

Most water purveyors, drawing water from the SVRP aquifer, have no regulatory authority except for the cost of water.

"This guide provides the recommended elements that an ordinance or design standard should include, to ensure new or rehabilitated landscape projects are designed with water efficiency in mind."

IWAC developed a regional Model Efficient Irrigation and Landscape Design Standards guidance document to provide local jurisdictions, agencies, and water purveyors with an understanding of the importance of designing, installing, and maintaining landscapes.

If irrigation sytem efficiency was doubled, peak demand could be reduced by 30%

Irrigation Design Criteria Distribution Uniformity

Sprinklers are efficient when the spray heads are matched, properly spaced and designed to spray head to head.
Below is an image of poor distribution uniformity. If an irrigation system is 50% efficient (common for most systems) it will take twice as much water to keep a lawn looking green and healthy.

Simple Retrofit Solutions

Traditional Spray Head
Flow (GPM) = 0.1 to 5.52

MP Rotator
Flow (GPM) = 0.17 to 1.01

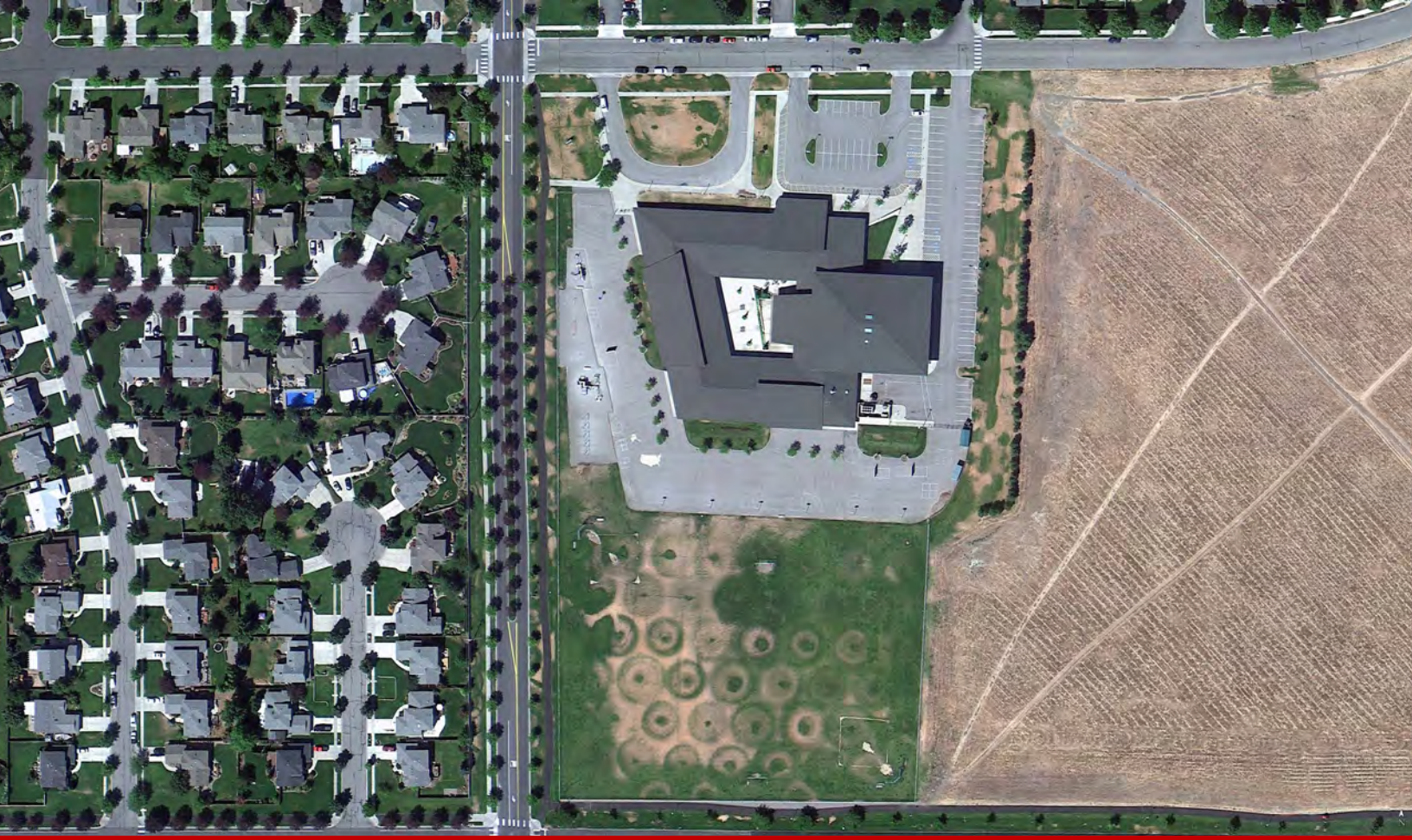
Example:
A 73% reduction in GPM used was achieved by removing traditional spray heads *(1.85 X 20 min = 37 gal)* and retrofitting them with MP Rotator heads *(0.50 X 20 min = 10 gal).*

GPM: gallons per minute.

LANDSCAPE DESIGN

Lawns are thirsty and require a lot of water to grow in our climate and require time- consuming maintenance. Consider installing a water wise landscape to save water, time and money.

- Choose drought tolerant and native plants that thrive in our climate with little to no additional watering.
- Group plants that have similar watering needs together.
- Install a 3" minimum layer of mulch. Mulch keeps soil moisture and temperatures consistent to help keep plant roots healthy. It greatly helps to suppress weeds and will cut down the time you spend maintaining your landscape.



MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN STANDARDS

GUIDELINES FOR PREPARING AND ADOPTING YOUR ORDINANCE OR STANDARDS

IWAC
IDAHO WASHINGTON AQUIFER COLLABORATIVE

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN STANDARDS

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Idaho Washington Aquifer Collaborative

www.iwac.us | info@iwac.us
P.O. Box 1822
Post Falls, ID 83877

Our Water. Our Future.

Dear Commissioners, Council and Board Members, Mayors, Water Purveyors, Administrators, City Planners, Regulators, Landscape Designers, Irrigation System Installers and valued Decision Makers for local jurisdictions and municipalities,

Water and waste water purveyors from Idaho and Washington have teamed up to develop efficient irrigation and landscape design standards. A menu of options will help you implement best practices to conserve water during summer months when demand for outdoor water use can be three to four times higher than the amount used for domestic needs during the winter. Water quality can also be protected by proper installation and maintenance of irrigation systems to reduce runoff and keep pesticides, fertilizers, herbicides and automotive fluids out of storm drains, drywells, the aquifer and river.

These efficient Irrigation and landscape design standards will help support growth, provide confidence to withstand drought conditions and protect the quality of our sole source aquifer. They provide voluntary actions that can have big impacts on conserving and protecting our precious water resources.

As elected and appointed decision makers, our constituents, customers and voters, need your leadership to adopt the design standards that address your unique situation.

Thank you for thoughtfully considering ways to voluntarily implement a few or many of the recommended best practices included in this guidance document for *Model Efficient Irrigation and Landscape Design Standards*.

Sincerely,

Terry Pickel
IWAC President

The Idaho Washington Aquifer Collaborative (IWAC) works to maintain and enhance water quality and quantity for present and future generations by developing management strategies which benefit the Spokane Valley Rathdrum Prairie Aquifer and the Spokane River watersheds.

DEFINITIONS

Adapted Plant: Adapted plants are not native and not invasive but are able to thrive in the local climate and soil conditions. These plants may be native to other regions of the United States, or have been imported from other continents.

Backflow Prevention Device: A backflow prevention device is used to protect potable water supplies from contamination or pollution due to backflow conditions. In water supply systems, water is normally maintained at a significant pressure to enable water to flow from the meter to the sprinkler head. In a backflow condition, higher pressure on the sprinkler side can push contaminated water into the potable water system.

Distribution Uniformity (D.U.): The measure of the uniformity of irrigation water a defined area.

Drip Emitter/Drip Irrigation: Drip irrigation fittings that deliver water slowly at the root zone of the plant, usually measured in gallons per hour.

Drought Tolerant Plant: Plants that have relatively low water requirements, or plants that are well adapted to an arid climate are often described as drought resistant or drought tolerant. Drought tolerant plants are considered adapted or native and able to survive on a region's natural rainfall with very little supplemental irrigation.

Evapotranspiration (ET): The quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time, expressed in inches per day, month or year.

Hydrozone: A portion of the landscaped area having plants with similar water needs, areas with similar microclimate (i.e., slope, exposure, wind, etc.) and soil conditions, and areas that will be similarly irrigated. A landscape hydrozone can be served by one irrigation valve, or a set of valves with the same schedule. A landscape plan prepared with water efficient landscaping in mind should group plantings by hydrozone to minimize irrigation needs. Landscape design plans should prioritize the use of native plant species, and minimize site disturbance where appropriate.

Infiltration Rate: The infiltration rate is the speed at which water enters into the soil. It is usually measured by the depth (in inches) of the water layer that can enter the soil in one hour. An infiltration rate of 1.0 in/hour means that a water layer 1 inch deep on the soil surface will take one hour to infiltrate.

Irrigation Efficiency: The measurement of the amount of water beneficially applied, divided by the total amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system hardware characteristics and management practices.

Irrigation Contractor: A person who has been certified by the Irrigation Association (IA) to install irrigation systems.

Irrigation Designer: A person who has been certified by the IA to prepare irrigation system designs, and/or a Landscape Architect.

Landscape Architect: A person who holds a certificate to practice landscape architecture in the state of Washington/Idaho.

Landscape Irrigation Auditor: A person who has been certified by the IA to conduct a landscape irrigation audit.

Matched Precipitation Rate (MPR): A term used to indicate that the amount of precipitation from sprinklers with MPR in a given area is uniform. MPR sprinklers allow water conservation by limiting dry spots.

Microclimate: The climate of a very small or restricted area, especially when this significantly differs from the climate of the surrounding area. Shaded north sides of buildings have a microclimate compared to areas further from the building that receive more sunlight.

Native Plant: Native plants are defined as the species that exist in a region without human introduction. Native plants in the Spokane region range from desert to alpine environments.

Precipitation Rate: The depth of water applied to a given area, usually measured in inches per hour.

Plant water requirement: The depth (or amount) of water needed to meet a plant's water loss through evapotranspiration. In other words, it is the amount of water needed by the various plants to grow optimally.

Rain Shut-Off Device: A device wired to the automatic controller that shuts off the irrigation system when it rains.

Reference Evapotranspiration Rate or ETO: A standard measurement of environmental parameters that affect the water use of plants. ETO is expressed in inches per day, month or year and is an estimate of the evapotranspiration of a large field of four to seven-inch tall, cool season grass that is well watered.

Runtime: The length of time an irrigation zone needs to water a given area.

Root Zone: In irrigation terms, the depth and spread of a plant's root system.

Soils Report: A report by a soils laboratory indicating soil type(s), soil depth, uniformity, composition, bulk density, infiltration rates, and pH for the topsoil and subsoil for a given site. The soils report also includes recommendations for soil amendments.

Soil Water Holding Capacity: the amount of water that a given soil can hold for plant use. Excess water will infiltrate below the plant root zone and become unusable.

Water Budget Allowance: A water budget is a water management tool used to estimate the amount of water a landscape will require. The water budget takes into account reference evapotranspiration data, plant type(s), purpose and functionality of the landscape, irrigated landscape area, irrigation efficiency, water quality, and rainfall.

INTRODUCTION

Landscape irrigation is the single largest use of potable water in the U.S. During summer months, outdoor water use creates peak demand on existing water supplies and system capacity. Water purveyors and utilities must increase supply to meet irrigation needs, sometimes as much as three to four times the amount used for domestic needs during the winter. Nationwide, landscape irrigation is estimated to account for nearly one-third of all residential water use, totaling nearly 9 billion gallons per day. As much as 50 percent of water used for irrigation is wasted due to evaporation, wind, or runoff caused by inefficient irrigation methods and systems.[1]

Locally, forecasts show water use increasing substantially by 2040 in the Spokane Valley-Rathdrum Prairie (SVRP) aquifer. Water demand in Spokane County is forecasted to increase 31% by 2040. The increase is approximately 156 CFS, which is significant given that the most recent USGS study indicates a close relationship between increases in withdrawal and decreases in Spokane River's flow. The public supply sector and self-supplied residential sectors are projected to increase by 41% and 47% respectively. During the same time frame population is projected to increase by 55% (based on the Washington State Office of Financial Management medium population projection for Spokane County).

In Idaho, approximately two thirds of the total non-agricultural water withdrawn from the SVRP is devoted to landscape irrigation use. The population of Kootenai County living within the SVRP is projected to increase by 81% by 2045. As it exists presently, water purveyors must petition the Idaho Department of Water Resources for additional water rights to serve their growing populations.

Forecasts show that water shortages will be occurring in the SVRP aquifer unless conservation measures are implemented or additional pumping capacity is added. Measures to conserve water should be implemented now, else rate hikes will be necessary in the future as water purveyors are required to install new infrastructure. During the 2015 drought, water sources that typically feed the aquifer ran low. In some cases rivers ran dry and area lakes had water levels lower than had been seen in decades.[2] In contrast, the hot dry summer weather caused homeowners and landscape maintenance staff to dramatically increase watering times in an effort to keep landscapes looking lush. Private well owners in the City of Coeur d'Alene went to the City and other purveyors to purchase water. The City of Airway Heights, which sits adjacent to the SVRP, ran out of water and enacted odd and even day watering. Airway Heights was eventually forced to purchase water from the City of Spokane SVRP system as their wells dried up.

Climate scientists indicate weather models predict more years of drought like 2015 in the future.[3] Warmer winter weather is leading to winter precipitation falling in the mountains as rain instead of snow. With a lower snowpack, this "snow drought" causes rivers and streams feeding the aquifer to run dry earlier in the year. More frequent water shortages combined with increased demand and population growth mandate more efficient use of water withdrawn from the SVRP aquifer.

One way to combat water shortages is to enact water efficient irrigation and landscape requirements for new and rehabilitated landscape projects. Water conservation has not historically been specifically addressed in irrigation and landscape design practices in the region. Due to ever-increasing demands on our limited water resources and inefficient uses of water there is a need for regional irrigation efficiency and design standards. For that purpose, IWAC developed this regional Model Efficient Irrigation and Landscape Design Standards. This guide will aid municipalities and water purveyors to promote water use efficiency of our sole source aquifer.

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[1] EPA Water Sense, Water-Smart Landscapes, 2013

[2] Spokesman-Review, November, 2016, "Lingering drought seen in regions low lakes, waterways", Becky Kramer

[3] Spokesman-Review, November 4, 2016, "Pacific Northwest's 2015 weather likely to be repeated, climate scientists say", Becky Kramer

USING THIS GUIDE

The purpose of this guide is to provide local jurisdictions, agencies, and water purveyors with an understanding of the importance of designing, installing, and maintaining landscapes with water efficiency in mind. Most jurisdictions do not have strong provisions for water efficiency within their landscape codes. Also, the landscape irrigation industry lacks national or international standards for construction and operation. Even absent efficient landscape and irrigation standards, a local jurisdiction may have landscape requirements or public works standards that could conflict with a new ordinance. This guide provides the recommended elements that an ordinance or design standard should include, to ensure landscapes are designed with water efficiency in mind.

Some of the recommended elements contained within this guide may be considered best practices in water efficient design. Others may include recommendations with "ranges" of standards a local jurisdiction can choose from depending on their individual goals. There is not a one size fits all standard and local jurisdictions may choose to alter or apply these standards as they see fit.

If the regulating entity is a water provider but has no land use authority, the regulations could be implemented through their adopted design standards and specifications or through an agreement entered into during the application for water service (e.g. tied to applications for water availability). In this case, references within these guidelines should be updated to reflect the specific permitting procedures of the provider.

This guide is key for both municipalities and water providers alike. Should water conservation efforts be ignored at the permitting agency level, water providers will ultimately be forced to increase water rates in order to meet increased peak demands. Within water providers' design standards for water systems, landscape water efficiency should also be addressed. Water providers should consider requiring a separate meter for outdoor irrigation in an effort to monitor and bring awareness to outdoor water usage and inefficiencies.

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN STANDARDS

The following includes a summary of the recommended elements that may be included within design standards for water efficient landscaping and irrigation systems. A local jurisdiction may choose to alter or amend these standards to comply with their own local goals or vision. Efficient landscapes can still achieve the purposes of their landscape ordinance, not asking people to remove turf, but to use drought tolerant plantings and efficient irrigation systems and watering practices.

1. PURPOSE

Local codes or design standards are crafted to achieve a purpose. Landscape standards may be adopted for many reasons. The original purpose may have been for beautification, or to protect property values. They may serve to minimize erosion on sensitive slopes, or to retain specific locally important plant species. This section of the guidelines provides purpose and goal statements that may be incorporated into a water efficient irrigation and landscape ordinance to respond to the specific goals that would be achieved through the implementation of newly adopted standards for water efficiency in landscape and irrigation design. It is important to note that water conservation is not always in conflict with other landscaping goals. The goals of this chapter should harmonize with other goal statements. Below are several examples of goal statements with a focus on water efficiency. These statements should be crafted with the local jurisdiction in mind.

EXAMPLE LANGUAGE

From the Colorado Model Water-Efficient Landscape Ordinance for Commercial Businesses:

The City Council has found that it is in the public interest to *conserve the public's water resources and to promote water-efficient landscaping. The purpose of this ordinance is to protect and enhance the community's environmental, economic, recreational, and aesthetic resources by promoting efficient use of water in the community's landscapes, reduce water waste and establish a structure for the designing, installing and maintaining of water-efficient landscapes throughout the City.*

The Water-Smart Landscapes publication by the Environmental Protection Agency includes statements that may be a source of inspiration for purpose statements for a water efficient irrigation and landscape ordinance:

- *Reducing outdoor irrigation which can account for up to 60 percent of a household's water use.*
- *Replacing landscapes, which require extensive watering, fertilization, and pesticide application, with drought-tolerant and water-smart landscaping. These landscapes can be designed to be aesthetically pleasing, save water, and protect the environment.*

From the California Model Water Efficient Landscape Ordinance (MWELO):

- *Creating the conditions to support life in the soil by reducing compaction, incorporating organic matter that increases water retention, and promoting productive plant growth that leads to more carbon storage, oxygen production, shade, habitat, and esthetic benefits.*

- *Minimizing energy use by reducing irrigation water requirements, reducing reliance on petroleum based fertilizers and pesticides, and planting climate appropriate shade trees in urban areas.*
- *Conserving water by capturing and reusing rainwater and graywater wherever possible and selecting climate appropriate plants that need minimal supplemental water after establishment.*
- *Protecting air and water quality by reducing power equipment use and landfill disposal trips, selecting recycled and locally sourced materials, and using compost, mulch and efficient irrigation equipment to prevent erosion.*
- *Protecting existing habitat and creating new habitat by choosing local native plants, climate adapted non-natives and avoiding invasive plants. Utilizing integrated pest management with least toxic methods as the first course of action.*

The City of Hayward, CA, has similar goal statements to the California MWELO:

- *Encouraging the use of a watershed approach and reducing compaction, incorporating organic matter that increases water retention, and promoting productive plant growth that leads to more carbon storage, oxygen production, shade, habitat and esthetic benefits.*
- *Establishing provisions for water management practices and water waste prevention for existing landscapes.*
- *Setting a Maximum Applied Water Allowance as an upper limit for water use and reducing water use to the lowest practical amount.*

From the King County, Washington Municipal Code:

The purpose of this chapter is to preserve the aesthetic character of communities; to improve the aesthetic quality of the built environment; to promote retention and protection of existing vegetation; to promote water efficiency; to promote native wildlife; to reduce the impacts of development on drainage systems and natural habitats; and to increase privacy for rural area and residential zones by:

A. Providing visual relief from large expanses of parking areas and reduction of perceived building scale;

B. Providing physical separation between rural area or residential zones and nonresidential zones;

C. Providing visual screens and barriers as a transition between differing land uses;

D. Retaining existing vegetation and significant trees by incorporating them into the site design;

E. Providing increased areas of permeable surfaces to allow for:

1. Infiltration of surface water into groundwater resources;

2. Reduction in the quantity of storm water discharge; and

3. Improvement in the quality of storm water discharge;

F. Encouraging the use of native plant species by their retention or use in the landscape design;

G. Requiring water use efficiency through water budgeting and efficient irrigation design standards;

H. Encouraging the use of a diversity of plant species that promote native wildlife habitat.

2. APPLICABILITY

2.1 THRESHOLDS

Depending on the jurisdiction, landscape applicability standards may already exist that will need to be reviewed in implementing water efficient landscape standards. The applicability section will describe which and what kinds of development actions must comply with the water efficient standards. Consider implementing a structured timeframe that adopts irrigation efficiency applicability for the following types of projects in five-year increments:

- New construction and rehabilitated landscapes of:
  - Public agency projects;
  - Commercial/industrial development;
  - Single-family and multi-family projects by a developer; and
  - Single-family on lots of record.
- Existing landscapes (with criteria for remodels or renovated landscape greater than a minimum area).

The most difficult category of new construction to implement stems from the facts that there are no design standards and that irrigation/landscape plans are not currently required for single-family residences. Residential homes account for the bulk of peak demand water use in summer months. In addition, most residential irrigation systems are poorly designed, installed, and maintained due to the lack of standards. This leads residential systems to have typically less than 40% efficiency in the system's water use.

When adding any of the included sections of this guide to a local ordinance, the implementation procedures should be aligned with the local jurisdiction's existing procedures and regulations. Implementation of a water efficient irrigation and landscape ordinance should occur through the building permit process and there may be a minimum threshold project size for which it applies.

The adopting jurisdiction or agency should evaluate appropriate thresholds for when these standards are triggered. Several local jurisdictions in the SVRP aquifer already specify a minimum size of the landscape area for when the landscape ordinance applies. As a practical matter, this size threshold would only apply generally when development permits or review is required. This means that activities that would not require a development permit are not reviewed under the landscape provisions in many instances.

RANGE OF STANDARDS CURRENTLY EMPLOYED IN THE AREA:

Municipality	Code Reference	Summary of Standards
Airway Heights, WA	AHMC 17.22	Landscaping is not required in the residential zones. Requires water efficient design and irrigation plans on sites over 10,000 sf of irrigated area.
Spokane, WA	SMC 17C.200.110	Landscape plans are not required for a house, an attached houses or a duplex on a lot. For all other types of development on sites, including planned unit developments, of more than seven thousand square feet of lot area must include a landscape plans. No irrigation plans required.

		plan. No irrigation plans required.
Spokane Valley, WA	SVMC 22.70.90	Applies to multifamily and nonresidential projects. No irrigation plans required.
Liberty Lake, WA	Article 10-3C	Applies to all new development except single-family. No irrigation plans required. Must comply with City Water Conservation Ordinances.
Spokane County	SCC 14.806	Applies to all new development except single-family requirements. No irrigation plans required.
Post Falls, ID	PFMC 18.24.080	Applies to all new development except single-family. Irrigation required, but plans for water efficiency are not.
Hayden, ID	Chapter 11-11-11	Applies to all new development except single-family. Irrigation plans are not required for any type of development.
Coeur d'Alene, ID	Chapter 17.06	Does not have any single-family landscape requirements. Irrigation is required for non-residential use only. There is a requirement for documentation to specify the type of irrigation and submit a water spray pattern plan.
Kootenai County, ID	KCC 8.4.6	Does not have any residential landscape requirements, nor does it require irrigation plans for any type of development.

There is no one-size-fits-all approach to applying water efficient landscape standards and the communities adopting them should think about their existing landscaping standards and their applicability. Enacting water efficient requirements for residential development will likely be met with resistance. However, since residential irrigation use accounts for the highest amount of annual water demand, it will be critical to address water efficiency in residential zones in the future.

2.2 EXCEPTIONS

An adopting jurisdiction may choose to exempt some development activities from all or some of the provisions of the efficient irrigation and landscape design standards. An example of some activities that communities may choose to exempt include:

- Existing landscapes (except public landscapes: consider requiring these to be retrofitted)
- Cemeteries (consider requiring any irrigation to use recycled water)
- Registered local, state or federal historic sites.
- Ecological restoration sites.
- Golf courses with actively managed watering systems.

Spokane, WA	SMC 17C.200.110	Landscape plans are not required for a house, an attached houses or a duplex on a lot. For all other types of development on sites, including planned unit developments, of more than seven thousand square feet of lot area must include a landscape

3. LANDSCAPE AND IRRIGATION DOCUMENTATION

3.1 REQUIRED DOCUMENTATION PACKAGE

In order to determine conformance with water-efficient landscape and irrigation design standards, applicants will need to prepare various documentation, including, but not limited to the following:

- Landscape design plan
- Irrigation design plan
- Irrigation water demand calculations and a watering schedule
- Landscape maintenance schedule
- Grading design plan
- Soil analysis
- Reclaimed water use

The adopting jurisdiction may also consider requiring certain elements of this package at different stages of project review. For instance, an irrigation plan may be able to be deferred and efficient landscapes can still achieve the purposes of their landscape ordinance, by not asking people to remove turf but to use native plantings and efficient systems.

3.2 WHAT IS REQUIRED TO BE SHOWN ON A LANDSCAPE PLAN

The adopted water efficient irrigation and landscape ordinance/standards should identify the required items that will be shown on a submitted landscape plan to determine conformance with the water efficient landscape design standards.

The adopting jurisdiction should examine its existing landscape plan requirements to ensure that the plans depict water efficient landscape features such that they can be reviewed for conformance with water efficient landscape standards.

For example, the City of Post Falls, ID requires the following to be shown on a submitted landscape plan. This language is typical of most jurisdictions in the region:

- *Boundaries and dimensions of the site.*
- *Location of existing and proposed streets, curbs, utility lines, sidewalks.*
- *Location of buildings and structures, parking lots, driveways, loading areas, outdoor mechanical equipment, signs, refuse enclosures, overhead utilities, water meter location, grassy swales, parking lot lighting, and any plants or trees that are to remain on site.*
- *The location and design of landscape areas to be landscaped, and plant list to include the location, number, size and type of plant material by botanical and common name.*
- *North arrow and scale.*
- *Proposed irrigation system. All landscaped areas, including adjacent rights of way shall be provided with an underground irrigation system.*
- *Planting details (using Post Falls detail for trees).*
- *Name, address and phone number of the person preparing the plan.*
- *Landscaping calculations in compliance with subsections C5 and D of this section.*

It should be noted that most local jurisdictions require irrigation as shown in Post Fall's ordinance. However, submittals of irrigation plans and calculations are almost never required to ensure water conservation measures are employed.

EXAMPLE LANGUAGE:

The following items could be added or incorporated into landscape plan requirements in order to enforce water efficient landscape design, installation and maintenance practices. These have been adapted from codes and ordinances throughout the Pacific Northwest and arid regions of the western United States.

1) *Landscape Design Plans shall be designed by a licensed Landscape Architect or landscape contractor, or a Certified Master Gardener. Provide the name, address and phone number of preparer, license number, and expiration date.*
2) *The landscape plan submitted to the [agency] shall be drawn on the same base map as the development plans and shall identify the following:*
    a. *Indicate existing and proposed topographic lines and elevations, 100 year floodplain line and riparian or shoreline habitats.*
    b. *The total square footage for each of the following: the site, impervious areas, gross parking area, undisturbed landscape areas, landscaping required, and landscaping provided.*
    c. *Total square footage for each landscaped area separated by service meter. For example: if there are multiple landscape meters, the area served by each meter must be measured (in square feet) and the % of total site determined for each area.*
    d. *Designation of planting hydrozones.*
    e. *A calculation of the estimated applied irrigation water to establish the landscape.*
    f. *A calculation of the estimated applied irrigation water for the landscape at maturity.*
    g. *Graphically show the extent of disturbed/graded areas and all materials and elements provided for the revegetation and/or slope stabilization of these areas.*
3) *A plant list and legend, indicating the scientific (botanical) and common name and total quantity of each plant, planting size, location and symbol, hydrozone/water need.*
4) *Specifications and/or details for plant installation, soil preparation, and mulch.*
5) *When grading plans or a combination paving/grading plan is required, the landscaping plans must be submitted concurrently with the first submittal of the grading plans.*
6) *The proposed landscape plan shall be certified by a Washington state licensed landscape architect.*
    a. *An affidavit signed by the individual specified in subsection 1. of this section, certifying that the landscaping has been installed in compliance with the approved landscaping plan, shall be submitted to the [agency] within thirty days of installation completion, unless the installed landscaping has been inspected and accepted by the [agency].*
7) *A design concept statement, plan notes or sketches that contain:*
    a. *Plant selection. Plant materials with intrusive root systems cannot be placed within drainage basins with engineered bottoms.*
    b. *Irrigation. Groundwater and stormwater runoff detention and use; temporary or permanent systems.*
    c. *Site grading and how it benefits landscaping. Where applicable, specifications for stockpiling and reapplying site topsoil or imported topsoil.*
    d. *Use of groundcover or mulch (both organic and inorganic).*

e. Use or disposal of existing, on-site vegetation.

f. and Address maintenance requirements. Specifically describe the maintenance include a statement assuring the continued maintenance program of the required landscaping and assigning the responsibility of the maintenance to the property owner or agent, a homeowners' association or other liable entity.

3.3 WHAT IS REQUIRED TO BE SHOWN ON AN IRRIGATION PLAN

An irrigation plan, if not already required, should be included in the list of materials submitted required as part of the water-efficient landscape documentation package. The irrigation plan should demonstrate conformance with the nationally recognized irrigation design standards identified in the most recent version of the Irrigation Association's "Landscape Irrigation Best Management Practices".

EXAMPLE LANGUAGE:

The Irrigation Design Plan must meet the irrigation design standards identified in the most recent version of the Irrigation Association's "Landscape Irrigation Best Management Practices".

1) The applicant shall provide the following information:
- *a. Identity of person or entity responsible for maintenance of the irrigation; and*
- *b. Location of shut-off valves.*

2) Irrigation water shall be applied with goals of avoiding runoff, low head drainage, overspray or other similar conditions where water flows onto adjacent property, non-irrigated areas and impervious surfaces by:
- *a. Considering soil type and infiltration rates;*
- *b. Using proper irrigation equipment and schedules, including features such as repeat cycles, to closely match precipitation rates with infiltration rates; and*
- *c. Considering special problems posed by irrigation on slopes and in median strips.*

3) All irrigation water outlets, except those using alternative water sources, shall be downstream of a meter used to measure irrigation water use.

4) Irrigation systems shall be subject to the following additional provisions:
- *a. Systems in landscape strips less than five feet in width shall be designed to ensure that overspray and/or runoff does not occur by use of system design options such as low volume emitters.*
- *b. Systems shall be designed to be consistent with the requirements of the hydrozone in which they are located. Separate valves shall be used to irrigate plants with differing water needs*
- *c. Systems shall be designed with the minimum average irrigation efficiency of 0.625.*
- *d. The use of automatic shutoff or override capabilities using rain shutoffs or moisture sensors is encouraged.*
- *e. Systems shall utilize a central control valve connected to an automatic controller.*
- *f. Systems shall make provisions for winterization either by providing:*
  - *i. manual drains (automatic drain valves are not permitted at all low points), or*
  - *ii. means to blow out lines with pressurized air.*
- *g. Sprinkler heads with matched precipitation rates shall be selected for proper area coverage, operating pressure, and adjustment capability.*
- *h. All irrigation systems must have, at a minimum, a rain/freeze sensor installed.*

5) *The Irrigation Plan design shall be certified by an Irrigation Association (IA)-certified designer or a registered Landscape Architect or professional engineer with irrigation design experience. The Plan shall be drawn on the same base project map at the scale as the Landscape Plan and clearly identify:*
   a. *Location and size of separate water meter(s) for the landscape.*
   b. *The static water pressure in pounds per square inch (p.s.i.), at the point of connection to the public water supply (or to a water well where applicable).*
   c. *Total landscape water demand, effective rainfall, watering window, assumed irrigation system efficiency, and system operation constraints.*
   d. *Layout of the irrigation system, (i.e. backflow prevention device, pump, pressure regulator, automatic controller, main and lateral lines, valves, sprinklers, bubblers, drip emitters, quick couplers, and filters, where applicable)*
   e. *A legend containing a general description of all components of the irrigation system, including: manufacturer's name and model number, operating pressure, manufacturer's irrigation nozzle rating in gallons per minute (g.p.m.) or gallons per hour (g.p.h.), as necessary, spray radius, and calculated precipitation rate per nozzle, based on the Irrigation Design Plan.*
   f. *A critical zone pressure calculation indicating the highest pressure demand to assure adequate operating pressure.*
   g. *A valve chart indicating flow rate (in gallons per minute) and design operating pressure, (p.s.i). for each valve, and precipitation rates in inches per hour.*
   h. *Installation specifications and details for workmanship and installation of irrigation components and requirements for owner/operator training.*
   i. *A calculation of the estimated applied irrigation water to establish the landscape.*
   j. *A calculation of the estimated applied irrigation water for the landscape at maturity.*
6) *The irrigation system must be audited and accepted at the completion of installation by an IA-certified irrigation auditor.*

3.4 WHO IS QUALIFIED TO PREPARE LANDSCAPE AND IRRIGATION DOCUMENTATION

The local jurisdiction should determine who is qualified to prepare landscape and irrigation plans. It is recommended that landscape plans be prepared by a licensed landscape architect, licensed/certified landscape contractor, or any other person authorized to design a landscape.

EXAMPLE LANGUAGE:

From the City of Lakewood, WA Municipal Code:

Persons Qualified to Prepare Landscape Plans. *The landscape plans shall be prepared by a Washington state registered landscape architect, a Washington state certified nurseryman, or a Washington state certified landscaper, except that planting plans for short plats may be prepared by the applicant, subject to approval by the Community Development Director.*

Persons Qualified to Prepare Irrigation Plans. *The irrigation plan shall be prepared by a Washington State registered landscape architect or an Irrigation Association Certified Irrigation Designer, except that irrigation plans for short plats may be prepared by the applicant.*

4. LANDSCAPE DESIGN CRITERIA

This section includes a range of landscape design criteria an adopting jurisdiction may consider as a way of achieving a goal for landscape design. Examples include lists of approved plant species, spacing, quantity, minimum landscape areas, etc. The adopting jurisdiction may already have adopted landscape design criteria. As a part of adopting water efficient landscape standards, the adopting jurisdiction should review their existing codes to identify where existing provisions may conflict with water efficient landscape requirements (such as requiring high water use plants).

4.1 LANDSCAPE DESIGN PACKAGE

A Landscape Design Plan meeting the following requirements must be submitted as part of the Irrigation and Landscape Documentation Package.

EXAMPLE LANGUAGE:

1) *Planting design must be consistent with all requirements of current landscape codes (existing facilities of pre-existing landscaped areas are not subject to landscape code requirements unless the landscape was installed after the effective date of the (jurisdiction/department) landscape ordinance(s), except in areas where there has been a major renovation or expansion to the landscape areas).*
2) *Plant Selection - Plants must be selected from the approved Drought Tolerant/Low Water Use Plant list.*
3) *Plants that are not on the approved Drought Tolerant/Low Water Use Plant list, or that require spray irrigation cannot be used in street medians or public rights of way.*
4) *Plants having similar water use must be grouped together in distinct hydrozones. Consideration must also be given to variations in: exposure (e.g. microclimates); slope; and soil infiltration rates when determining hydrozones.*
5) *Plants must be selected appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the site.*
6) *Landscaping associated with storm drainage facilities shall be integrated into the overall design of the project.*
7) *For projects located at the interface between urban areas and natural open space (non-irrigated), Drought Tolerant/Low Water Use plants shall be selected that will blend with the native vegetation and are fire resistant or fire retardant. Plants with low fuel volume or high moisture content shall be emphasized. Plants that tend to accumulate excessive amount of dead wood or debris shall be avoided.*
8) *A mulch (organic or inorganic) of at least three inches must be applied to all planting areas except turf. Placing non-porous material under the mulch is not allowed.*

4.2 MAINTENANCE

A maintenance schedule should be submitted as part of the required landscape documentation package. Regular maintenance of installed landscapes should include reviewing irrigation systems for water efficiency.

EXAMPLE LANGUAGE

A regular maintenance schedule satisfying the following conditions must be submitted as part of the Irrigation and Landscape Documentation Package:

1) *Maintenance must consist of regular watering, pruning, fertilizing, clearing of debris and weeds, the removal and replacement of dead plants, aerating and de-thatching turf areas; replenishing mulch in all landscaped areas and the repair of architectural features.*
1) *Pruning and thinning of foliage should not be done during hot months since it can increase plant water requirements (i.e. shading of the ground creates microclimates and reduces Eto rates.)*
2) *Landscapes must be maintained to ensure water efficiency, which must include but is not limited to regularly checking, adjusting, repairing and replacing of irrigation equipment. This is particularly important because irrigation scheduling occurs at a time that the system operation is not routinely observed. Schedules should include cleaning of filters and strainers, flushing of drip irrigation lines, adjusting sprinkler patterns to maintain uniformity, and calibrating all sensing and recording equipment. Repair or replacement of irrigation equipment should be done with the originally specified materials or their equivalents in order to meet the original specifications in the approved Irrigation Design Plan.*
3) *Monthly irrigation meter reading to check the landscape water use and necessary adjustment of the automatic controller. In addition, the battery and fuse in the controller should be checked and replaced when necessary.*
4) *Annual backflow assembly testing (test reports are required by the water purveyor).*
5) *Maintenance Assurances: The final approval of any subdivision plat or development plan that includes an approved final Landscaping Design Plan will require covenants or assurances that:*
    a. *Ensure the continued maintenance of required landscaping, buffering and associated irrigation systems; and*
    b. *Assign the responsibility of maintenance to the property owner or agent, homeowners' association or other liable entity.*

5. IRRIGATION DESIGN CRITERIA

This section includes irrigation design criteria for reducing irrigation water use. The standards should be reviewed to ensure compatibility with the water purveyor's existing water system (i.e. requiring a separate meter and backflow prevention device). Similar to the above provisions for landscape design, this section should be reviewed where a local jurisdiction has existing irrigation standards to identify where they may conflict with water efficient irrigation requirements.

Two methods exist for regulators to control irrigation water efficiency: Distribution Uniformity and Water Budget Allowance. The first method targets the design of the system directly through regulation of the Distribution Uniformity of the system. Distribution Uniformity (DU) is a measure of how evenly water is applied across a landscape during irrigation. For example, if one inch of water is applied in one part of a lawn and only half an inch is applied in another part of the lawn, this is considered poor DU. DU is expressed as a percentage between 0 and 100%, although it is virtually impossible to attain 100% in practice. DUs of less than 70% are considered poor, DUs of 70 - 90% are good, and DUs greater than 90% are excellent. Poor DU means that either too much water is applied, costing unnecessary waste, or too little water is applied, causing stress to plants.

A Water Budget Allowance is a tool that allows regulators to verify water efficient measures are being employed during design. Calculations compare a baseline design, typically the entire site in turf with inefficient irrigation, and an efficient design. The water budget is established as an allowable percentage of

the baseline design, or a required amount of water savings in the design case. The two most widely accepted calculations have been provided in the language below.

5.1 DISTRIBUTION UNIFORMITY/IRRIGATION AUDIT

Jurisdictions should consider requiring irrigation systems be designed to a high distribution uniformity. Designers will be forced to create water-efficient designs, but this will then be confirmed after construction with a certified irrigation audit. The audit is a process where the system is turned on and water is captured in measuring devices to calculate uniformity.

EXAMPLE LANGUAGE

An in-depth evaluation of the performance of an irrigation system shall be *conducted by a certified landscape irrigation auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "Watersense" labeled auditing program.*

Sprinkler heads shall be selected based on a distribution uniformity low quarter of 0.65 or higher using the protocol defined in American Society of Agricultural and Biological Engineers'/International Code Council's (ASABE/ICC) 802-2014 "Landscaped Irrigation Sprinkler and Emitter Standard.

The proposed Florida irrigation code, and City of Allen, Texas irrigation plan checklist included in the appendices include additional examples.

5.2 WATER BUDGET ALLOWANCE

To provide for efficient use of water, a water budget and irrigation schedule should be developed and managed to utilize the minimum amount of water required to maintain plant health. The water efficient irrigation and landscape ordinance should include requirements for irrigation to be regulated by automatic irrigation controllers and, at a minimum, rain sensor overrides should be provided to ensure irrigation is delayed during and immediately following rain events.

The water efficient irrigation and landscape ordinance may establish allowable hours for irrigation, with irrigation scheduled for the evening hours when evaporation and evapotranspiration are minimized. The local jurisdiction should limit scheduled irrigation during the day, and may consider appropriate time limitations (in the range of 7:00pm – 10:00am). Exceptions may be permitted for performing audits of irrigation systems. It should be noted that switching to night-time watering typically results in at least 10% water savings so runtimes should be reduced accordingly.

Irrigation schedules should provide parameters for the irrigation controller to be applied during the following:

- the plant establishment period;
- the established landscape; and
- temporarily irrigated areas.

The local jurisdiction should also require the following information to be submitted within an irrigation schedule:

- irrigation interval (days between irrigation);
- irrigation run times (hours or minutes per irrigation event to avoid runoff);
- number of cycle starts required for each irrigation event to avoid runoff;
- amount of applied water scheduled to be adjusted on a monthly basis;
- application rate setting;
- root depth setting;
- plant type setting;
- soil type;
- slope factor setting;
- shade factor setting; and
- irrigation uniformity or efficiency setting.

EXAMPLE LANGUAGE

Irrigation Water Budgets and Schedules satisfying the following conditions must be submitted as part of the Irrigation and Landscape Documentation Package:

1) A water budget analysis based on one of the following calculation methods:
   a. Appendix B - Landscape Water Budget. Landscape Irrigation Best Management Practices. The Irrigation Association and American Society of Irrigation Consultants, May 2014.
   b. WaterSense Water Budget Tool. United States Environmental Protection Agency.
   c. Landscape water features shall not use potable water unless the water feature recirculates water used in its operation.
   d. The irrigation water use may be monitored by the water purveyor after the date of release of the performance bond.
   e. Alternative water sources such as recycled wastewater or rainwater are encouraged as permitted by the Department of Ecology. Such water sources shall not be subject to the limits of the water budget.

2) An annual irrigation program with monthly irrigation schedules, are required for:
   a. The plant establishment period,
   b. The established landscape, and
   c. Any temporarily irrigated areas.
   d. A schedule for weaning water requirement plants (see approved plant list) from irrigation, if applicable.

3) The irrigation schedule must:
   a. Be included on the Irrigation Design Plan as well as in the Irrigation and Landscape Documentation Package;
   b. Include run time (in minutes per cycle), number of cycles per day, frequency of irrigation for each station (weekly/monthly) and maximum operating hours per day for peak demand; and
   c. Program valves for multiple repeat cycles shall be required where necessary to reduce runoff, particularly on slopes and soils with slow infiltration rates.
   d. Provide the amount of applied water (in hundred cubic feet, gallons, or in whatever billing units the local water supplier uses) recommended on a monthly and annual basis.

4) *Whenever possible, irrigation scheduling will incorporate the use of evapotranspiration data such as those from the AgriMet weather stations to apply the appropriate levels of water for different climates.*

5) *Sprinkler irrigation will be scheduled for the early morning, late evening or at night to avoid irrigating during times of high wind or high temperature. This will reduce losses due to evaporation.*

Language from the Sammamish, WA Municipal Code offers a terrific example of how water efficiency can be required. Sammamish provides calculations and standard budgeting values within their code to simplify review.

Water use – Irrigation water budget calculated.

(1) The water budget (WB) allocation shall be calculated using the following formula:

WB = (ETO) x (AF) x (LA) x (CF)

ETO: Referenced evapotranspiration rate (net seasonal irrigation requirement in inches; see table below)

AF: Adjustment factor value of 0.8 (i.e., 0.5 x (ETO)/0.625 irrigation efficiency coefficient)

LA: Landscape area (square feet)

CF: Conversion factor value of 0.62 (ETO inches to gallons per square foot)

	Monthly Net Irrigation Requirement (inches)
January	*.00*
February	*.00*
March	*.00*
April	*.00*
May	*1.59*
June	*3.13*
July	*4.46*
August	*3.51*
September	*1.77*
October	*.03*
November	*.00*
December	*.00*
Season Total	*14.49*

**These figures are based on a 30-year average of National Weather Service Data and represent the amount of additional irrigation required for turf grass. The figures are adjusted for turf typically used in commercial landscaping.*

(2) The City shall periodically undertake an evaluation of the WB calculation formula outlined in subsection (1) of this section. The evaluation shall include a recommendation to retain or modify the adjustment factor or components thereof, and shall be made in consultation with groups including landscape professionals and water purveyors.

(3) The water budget will be calculated upon the total area of the site in landscape areas and in landscape water features (such as decorative ponds, pools or fountains) that are fed by irrigation water. For the purpose of calculating the water budget, "landscape area" shall mean the entire parcel, less:

(a) Sensitive areas and their buffers;

(b) The building footprint;

(c) Driveways;

(d) Paved portions of parking lots; and

(e) Hardscapes (e.g., decks, patios, sidewalks, and other nonporous areas).

(4) Areas such as playgrounds, sport fields, golf courses, school yards, or other recreational spaces where the turf provides a playing surface or serves other recreational purposes may be allowed additional water beyond the calculated water budget. In order to receive additional water for such turf areas, the applicant shall submit a statement designating such turf areas for recreational purposes and specifying additional water needs above the water budget. This additional water need will be based upon the ETO information for the turf grass species or species mix used in such turf areas.

(5) Landscape water features shall not use potable water unless the water feature recirculates water used in its operation.

(6) The irrigation water use may be monitored by the water purveyor after the date of release of the performance bond.

(7) Alternative water sources such as [reclaimed] water or rainwater are encouraged as permitted by the Department of Ecology. Such water sources shall not be subject to the limits of the water budget.

5.3 MAINTENANCE

Irrigation systems should be regularly inspected and maintained. Consider the language below from the City of Sammamish, Washington.

EXAMPLE LANGUAGE

Irrigation systems shall be maintained and inspected annually to assure proper functioning and in compliance with the calculated water budget for the system. Replacement of components shall be of originally specified parts or materials, or their equivalents.

6. ADDITIONAL CRITERIA

6.1 GRADING DESIGN PLAN

A grading plan is likely already required for construction permits to review site grading and drainage patterns for opportunities to reduce runoff. These plans should be reviewed in conjunction with the irrigation and landscape design standards to ensure consistency. In the event a grading plan is not already required for a type of permit application, the following language may be adopted.

EXAMPLE LANGUAGE

A Grading Design Plan, if required, satisfying the following conditions must be submitted as part of the Irrigation and Landscape Documentation Package:

1) *A Grading Design Plan must be drawn on project base sheets. It must be separate from, but use the same format as, the Landscape Design Plan and Irrigation Design Plan.*
2) *The plan must indicate finished configurations (pre-existing and new contour elevations) of the landscaped area(s), including the height of graded slopes, drainage patterns, pad elevations, and finish grade.*
3) *Erosion and sediment control measures and features.*
    a. *All temporary stormwater barriers and siltation fences shall be maintained in a satisfactory condition by the owner of the property, or his/her agents or contractors, until such time that grading and/or construction is completed.*

6.2 SOIL ANALYSIS

A soil analysis may be required to assist in identifying appropriate plant species that minimize the need for artificial irrigation.

EXAMPLE LANGUAGE

The Irrigation and Landscape Documentation Package must include the following soil analysis data:

1) *Determination of soil texture, indicating the percentage of organic matter.*
2) *An approximate soil infiltration rate (either measured or derived from soil texture/infiltration rate tables). A range of infiltration rates will be noted where appropriate.*

6.3 RECLAIMED WATER USE

The adopting jurisdiction should consider requiring the use of reclaimed or recycled water for plantings within the public right-of-way (such as medians and planting strips). Other landscapes such as parks, golf courses, and other facilities, may also be required to use reclaimed water or other non-groundwater water supplies for irrigation. Consider including statements encouraging the use of reclaimed water for private landscapes.

APPENDICIES

7. APPENDICIES

7.1 LITERATURE REVIEW

7.2 IRRIGATION ASSOCIATION: IRRIGATION BEST MANAGEMENT PRACTICES

7.3 RAIN BIRD'S GUIDE TO: CALIFORNIA CODE OF REGULATONS CHAPTER 2.7: MODEL WATER EFFICIENT LANDSCAPE ORDINANCE

7.4 FLORIDA BUILDING CODE: APPENDIX F – PROPOSED CONSTRUCTION BUILDING CODES FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS

7.5 CITY OF ALLEN, TEXAS: IRRIGATION PLAN REVIEW CHECKLIST

IDAHO WASHINGTON AQUIFER COLLABORATIVE

- WHAT IS THE IDAHO WASHINGTON AQUIFER COLLABORATIVE (IWAC)?
- WHO ARE THE IWAC MEMBERS?
- WHY ARE WE HERE TODAY?
- WHY DO WE CARE?
- WHAT PROJECTS WE ARE INVOLVED WITH?

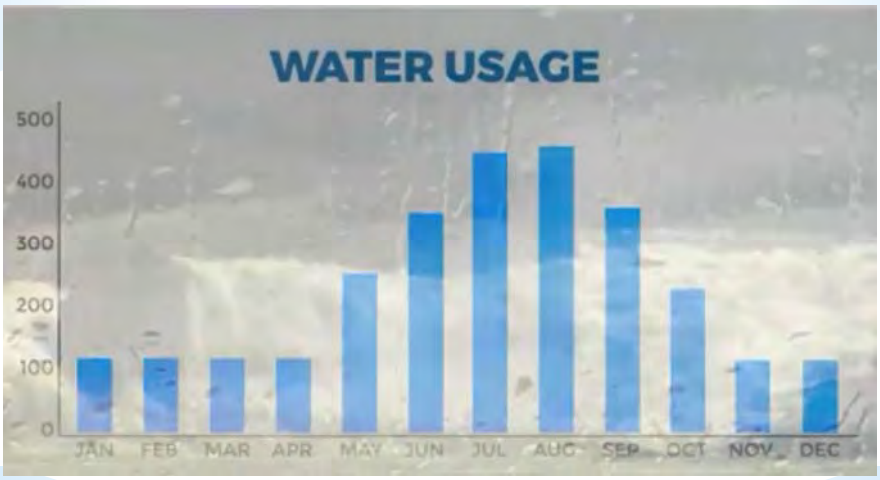
MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

IDAHO WASHINGTON AQUIFER COLLABORATIVE

- DO YOU REALIZE THAT 50% TO 70% OF AVERAGE SUMMER USE IS ATTRIBUTED TO OUTDOOR USE SUCH AS MAINTENANCE, RECREATION, BUT MOSTLY IRRIGATION?
- HOW DOES THIS AFFECT YOUR BOTTOM LINE?

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

WATER USAGE ACROSS THE SVRP AQUIFER TRIPLES DURING THE SUMMER



IDAHO WASHINGTON AQUIFER COLLABORATIVE

- HOW OFTEN DO YOU RECEIVE COMPLAINTS FROM THE PUBLIC ABOUT THIS PROBLEM?
- WHAT ISSUES CAN THIS CAUSE?
  - STORMWATER POLLUTION
  - PROPERTY DAMAGE
- REMEMBER, "ONLY RAIN DOWN THE DRAIN!"

IWAC
IDAHO WASHINGTON AQUIFER COLLABORATIVE

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

IRRIGATION AND LANDSCAPE DESIGN STANDARDS

- LANDSCAPE IRRIGATION INDUSTRY LACKS NATIONAL OR INTERNATIONAL STANDARDS FOR CONSTRUCTION AND OPERATION.
- MOST JURISDICTIONS DO NOT HAVE STRONG PROVISIONS FOR WATER EFFICIENCY WITHIN THEIR LANDSCAPE CODES.

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

IWAC
IDAHO WASHINGTON AQUIFER COLLABORATIVE

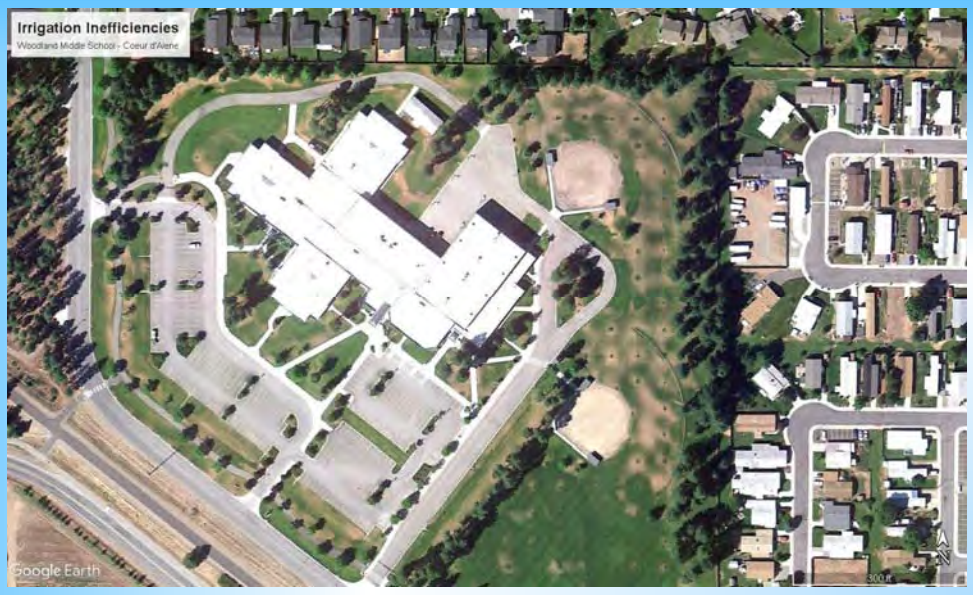
Importance of Distribution Uniformity

DU measures how uniformly an irrigation system applies water to the landscape.

DU %	Water the plant needs	÷	DU Decimal	=	Amount of water you need to keep the dry areas green
30%	1 inch	÷	0.3	=	3.33 inches
50%	1 inch	÷	0.5	=	2.00 inches
70%	1 inch	÷	0.7	=	1.42 inches

Excellent (Achievable)	Good (Expected)	Poor (Common)
75%	60%	50%

8/2011 – BETTY KIEFER ELEMENTARY SCHOOL RATHDRUM, ID



8/2011 – WOODLAND MIDDLE SCHOOL COEUR D'ALENE, ID

8/2011 – HIGHLANDS GOLF COURSE POST FALLS, ID

8/2011 – LIBERTY LAKE ELEMENTARY LIBERTY LAKE, WA

8/2011 – VALLEY CHRISTIAN SCHOOL SPOKANE VALLEY, WA

8/2011 – WHITMAN ELEMENTARY SCHOOL SPOKANE, WA

VS.

TRADITIONAL SPRAY HEAD

FLOW (GPM) = 0.1 TO 5.52

EXAMPLE:
TRADITIONAL 1.85 X 20 MIN = 37 GAL

MP ROTATOR 0.50 X 20 MIN = 10 GAL

= 73% REDUCTION

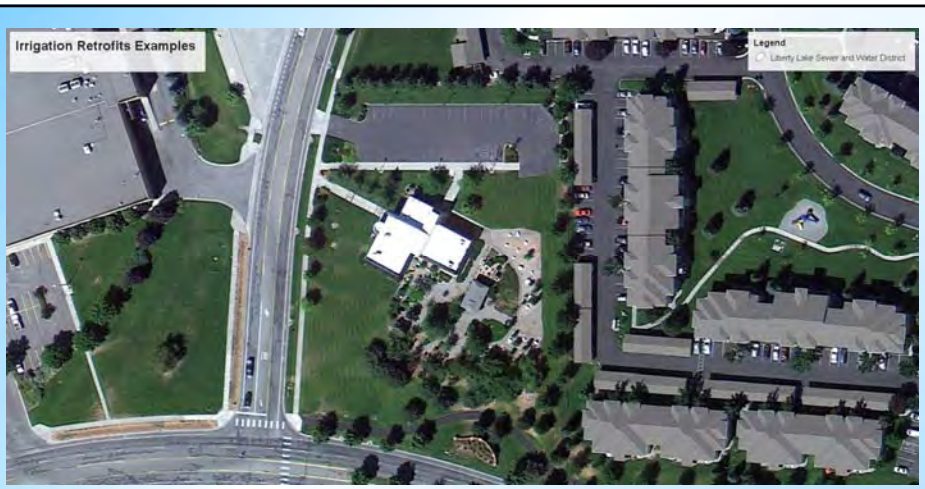
MP ROTATOR

FLOW (GPM) = 0.17 TO 1.01

DESIGN USING TRADITIONAL SPRAYS

DESIGN USING MP ROTATORS

https://www.hunterindustries.com/mp-smarter-faster-better



LIBERTY LAKE SEWER AND WATER DISTRICT EXAMPLE

8/2011

- 2.4 ACRES. AUDITED IN JUNE 2005. SYSTEM EFFICIENCY (DU) WAS 44%
- IMPLEMENTED LANDSCAPE MEASURES (PRESSURE REGULATION, MATCHED AND ALIGNED ROTOR HEADS, AND INSTALLED SENSOR-BASED TECHNOLOGY)
- COST UNDER $500 (INCLUDING SOIL SENSOR)
- **REDUCED WATER BY 36% THE FOLLOWING YEAR AND IMPROVED DU TO 61%**

2005

- RETROFITTED 22 SPRAY HEADS TO MP2000 ROTATORS
- OBSERVED WATER SAVINGS WAS 2.66 GPM TO 0.71 GPM PER HEAD
- **RECOGNIZED SAVINGS = 42.9 GALLONS PER MINUTE THE SYSTEM RUNS**

2014

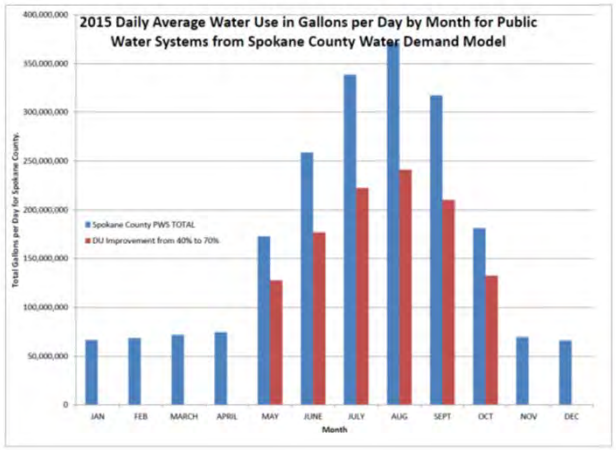
- 61 SPRAY HEADS – 34 WERE RETROFITTED TO MP1000 ROTATORS AND 27 WERE ELIMINATED.
- OBSERVED WATER SAVINGS WAS 1.85 GPM TO 0.50 GPM PER HEAD
- **RECOGNIZED SAVINGS = 95.85 GALLONS PER MINUTE THE SYSTEM RUNS**

SPOKANE SCAPE

Kristen and Hillary,

We need 2-3 slides with before and after photos and your notes on what to say about the slides. Thanks

IDAHO WASHINGTON AQUIFER COLLABORATIVE



- WHAT IF WE COULD DOUBLE IRRIGATION SYSTEM EFFICIENCY?
- WE COULD CUT OUR PEAK USE BY A THIRD AT THE VERY LEAST!

IDAHO WASHINGTON AQUIFER COLLABORATIVE

EVEN SIMPLE ADJUSTMENTS AND SOME RELATIVELY INEXPENSIVE HEAD REPLACEMENTS CAN HAVE A SIGNIFICANT EFFECT ON IRRIGATION PERFORMANCE.

IDAHO WASHINGTON AQUIFER COLLABORATIVE

- UPGRADES DO NOT HAVE TO COST A FORTUNE.
- THEY CAN BE RELATIVELY QUICK, EASY AND INEXPENSIVE.

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

- PROVIDE LOCAL JURISDICTIONS, AGENCIES, AND WATER PURVEYORS WITH AN UNDERSTANDING OF THE IMPORTANCE OF DESIGNING, INSTALLING, AND MAINTAINING EFFICIENT LANDSCAPES.
- ENACT WATER EFFICIENT IRRIGATION AND LANDSCAPE REQUIREMENTS FOR NEW AND REHABILITATED LANDSCAPE PROJECTS TO ADDRESS IRRIGATION EFFICIENCY AND DESIGN STANDARDS.
- THIS GUIDE PROVIDES THE RECOMMENDED ELEMENTS THAT AN ORDINANCE OR DESIGN STANDARD SHOULD INCLUDE, TO ENSURE LANDSCAPES ARE DESIGNED WITH WATER EFFICIENCY IN MIND.

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

LAWN AND YARD CHECKLIST:

- EFFICIENT IRRIGATION UPGRADES
- PROPER INSTALLATION AND MAINTENANCE
- SEASONAL ADJUSTMENTS
- NATIVE AND DROUGHT TOLERANT PLANTS

IDAHO WASHINGTON AQUIFER COLLABORATIVE

IWAC'S GOALS FOR IRRIGATION GUIDELINES:

1. REDUCE REGIONAL SUMMER IRRIGATION PEAK USAGE
2. ENHANCE REGIONAL EFFICIENCY STANDARDS
3. PROTECT WATER QUALITY AND QUANTITY
4. PROVIDE A MENU OF IMPLEMENTATION OPTIONS FROM WHICH MUNICIPALITIES CAN CHOOSE

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

AS ELECTED OR APPOINTED OFFICIALS, HOW COULD THE MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES SUPPORT YOUR COMMUNITY?

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

IDAHO WASHINGTON AQUIFER COLLABORATIVE

- PLEASE JOIN ME IN THANKING THE IWAC MEMBERS FOR TAKING TIME TO BE PRESENT TODAY.
- AND THANK YOU FOR YOUR VALUABLE TIME.

MODEL EFFICIENT IRRIGATION AND LANDSCAPE DESIGN GUIDELINES

IDAHO WASHINGTON AQUIFER COLLABORATIVE

THANK YOU!

FOR MORE INFORMATION, PLEASE CONTACT US AT:
info@iwac.us or www.iwac.us

MODEL EFFICIENT IRRIGATION AND
LANDSCAPE DESIGN GUIDELINES

ANNOUNCEMENTS

CONSENT CALENDAR

MINUTES OF A REGULAR MEETING OF THE CITY
COUNCIL OF THE CITY OF COEUR D'ALENE, IDAHO,
HELD AT THE LIBRARY COMMUNITY ROOM

SEPTEMBER 17, 2019

The Mayor and Council of the City of Coeur d'Alene met in a regular session of said Council at the Coeur d'Alene City Library Community Room, September 17, 2019 at 6:00 p.m., there being present upon roll call the following members:

Steve Widmyer, Mayor

Woody McEvers	) Members of Council Present
Amy Evans	)
Loren Ron Edinger	)
Dan Gookin	)
Dan English	)
Kiki Miller	)

CALL TO ORDER: Mayor Widmyer called the meeting to order.

INVOCATION: Pastor Chris Lauri with Anthem Church provided the invocation.

PLEDGE OF ALLEGIANCE: Councilmember McEvers led the Pledge of Allegiance.

PUBLIC COMMENT:
Karen Hansen commented that she has attended many meetings, and one meeting was in regard to public input on Riverstone and the Atlas park and Lacrosse signal light. She asked the council what happened to the priority list. Mayor Widmyer responded that they are working through the priority list. Ms. Hansen said that, from what she understands, ignite did not agree with the list and changed it. Mayor Widmyer said that Mr. Tymesen would be happy to respond to any questions that Ms. Hansen has, and noted that they are following the priority list and are working through it. Ms. Hansen asked if council was working through the list in the order that the items were listed in priority. Mayor Widmyer said that Mr. Tymesen has the list and they are following it.

A male, who did not identify himself, asked how the City is responding to having someone injured in a wheelchair and not having the proper person in jail. Mayor Widmyer responded that concerns about the jail should be directed to the county. The unidentified male asked if the City has a plan for ensuring the safety of those who have been treated wrongly. Mayor Widmyer responded this is a time for public comment, and not a question and answer period, and that Mr. Tymesen can follow up with him.

FIRE DEPARTMENT LIFE SAVING AWARD TO SARAH HARWOOD, TYLER HARWOOD AND JEROME NELSON:
Deputy Fire Chief Tom Greif noted that an event occurred on September 16, 2018, in the Riverstone area, that involved a sudden cardiac arrest. Citizens Sarah Harwood, Tyler Harwood and Jerome Nelson came to the aid of Mr. Jim Hawkins, and Mr. Hawkins is here today thanks to their life saving CPR efforts. Deputy Fire Chief Greif emphasized the importance of CPR and people in the community learning how to perform it. He encouraged citizens who don't know CPR to please learn how to do it, and to take a family member or friend with them. Mr. Hawkins thanked Mr. and Mrs. Harwood, and Mr. Nelson for saving his life, and expressed his deepest thanks to Coeur d'Alene and noted that citizens are fortunate in Coeur d'Alene to have that kind of support. He commented that he was born and raised in Coeur d'Alene and also thanked the Fire Department and 9-1-1- folks.

PROCLAMATION – CONSTITUTION WEEK – SEPTEMBER 17 – 23, 2019:
Mayor Widmyer proclaimed the week of September 17 through 23, 2019 as Constitution Week. Human Rights Task Force President Christie Wood and community member Laura Tenneson accepted the Proclamation.

Ms. Tenneson thanked the city council and Mayor Widmyer for standing up on this important issue. She commented that she is a recent graduate of North Idaho College and has lived and worked in this area for ten years and is passionate about human rights. She noted that as a high schooler, she received mail from the Aryan Nations trying to recruit her and said that she will never let this beautiful place be overtaken by such hateful people again. She commented that she is concerned about racist actions she has seen in the community recently, so she approached the mayor with her concerns and he invited the Human Rights Task Force and Western States Center to the table. She believes it is important to address those actions while they still involve such a small faction of the community. Ms. Tenneson recognized the work done by the Human Rights Task Force and the city of Coeur d'Alene to drive the Aryan Nations out of the community and establish Coeur d'Alene as a promoter of human rights and equal treatment. She commented that we can choose to remain silent, or we can choose to stand up and fight.

Ms. Wood said that she was proud to accept the Proclamation commemorating the drafting of the U. S. Constitution, and noted that the Human Rights Task Force has enjoyed nearly 40 years of a great, strong relationship with the city of Coeur d'Alene. She commented that the community has lived through some trying times, and that they support the truth that all persons are created equal. Ms. Wood commented that it is very fitting for the city leaders to acknowledge the rights of people as guaranteed in the Constitution, and she looks forward to many more years of working with the city.

PROCLAMATION – ATAXIA AWARENESS DAY – SEPTEMBER 25, 2019:
Mayor Widmyer proclaimed September 25, 2019 as Ataxia Awareness Day in honor of Sarah Stuker, of Rathdrum, Idaho, whose daughter is afflicted with Ataxia.

COUNCIL COMMENTS:
Councilmember Miller reminded everyone to put on their calendars the Thursday, September 26th Kick-off event for Envision CDA, which is the start of the outreach for the comprehensive

planning process. The event will be held beginning at 5:30 p.m., at the Innovation Den, 418 Lakeside Avenue. For more information, visit envisioncda.org.

Councilmember Evans invited everyone to East Sherman on Friday evening, September 20th, from 4 – 9 p.m., for the annual PARK(ing) it on Sherman block party, which will feature live music, food trucks, a beer garden, and lawn games. She noted that it is a great community event and citizens can learn more about it on eastsherman.org.

Councilmember McEvers wished Mayor Widmyer a Happy Birthday.

Mayor Widmyer requested the appointment of Ann Smart to the Library Board.

MOTION: Motion by Edinger, seconded by Evans to appoint Ann Smart to the Library Board. Motion carried.

CONSENT CALENDAR: **Motion** by McEvers, seconded by Gookin, to approve the Consent Calendar.

1. Approval of Council Minutes for the September 3, 2019 Council Meeting.
2. Approval of Bills as Submitted.
3. Approval of Financial Report.
4. Setting of General Services and Public Works Committees meetings for Monday, September 23, 2019 at 12:00 noon and 4:00 p.m. respectively.
5. Resolution No. 19-042 - A RESOLUTION OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO, APPROVING BENEFIT PLAN CHANGES AND RENEWAL RATES EFFECTIVE OCTOBER 1, 2019. THESE CHANGES AND RENEWALS INCLUDE REGENCE BLUESHIELD OF IDAHO, BLUE CROSS DENTAL, DENTAL BLUE CONNECT (WILLAMETTE), PEAK1 (FLEXIBLE SPENDING ACCOUNT), AFLAC, AND A NEWLY OFFERED DENTAL PLAN WITH NORTHWEST DENTAL BENEFITS, LLC. OTHER CITY BENEFITS SUCH AS UNITED HERITAGE LIFE & LONG-TERM DISABILITY, GALLAGHER BENEFITS HRA/VEBA SERVICE GROUP, AND RELIANT BEHAVIORAL HEALTH HAVE NO CHANGES.

ROLL CALL: Miller Aye; English Aye; Edinger Aye; Evans Aye; McEvers Aye; Gookin Aye. **Motion carried.**

RESOLUTION NO. 19-043

A RESOLUTION OF THE CITY OF COEUR D'ALENE, IDAHO, DECLARING THAT AN EMERGENCY EXISTS, AND THAT THE PUBLIC INTEREST AND NECESSITY DEMAND THE IMMEDIATE EXPENDITURE OF PUBLIC MONEY TO REPAIR THE HOT WATER LOOP SYSTEM AT THE WASTEWATER TREATMENT PLANT IN ORDER TO SAFEGUARD LIFE, HEALTH, AND PROPERTY, AND AUTHORIZING THE EXPENDITURE OF PUBLIC FUNDS WITHOUT COMPLIANCE WITH FORMAL BIDDING PROCEDURES.

STAFF REPORT: Wastewater Capital Programs Manager Mike Becker explained that the Wastewater Treatment Plant's Hot Water Loop (HWL) System is a closed loop 2-pipe system that recirculates 140 -160 deg F water from a series of gas boilers to heat exchangers located in the Plant Digesters, the Collections Maintenance Shop, and the Wastewater Administration Building. The water in this loop is heated with gas produced with the digesters and supplemented by natural gas in colder temperatures. Completed in 2010, the HWL system is responsible for continuously maintaining digester sludge temperatures that optimize treatment efficiencies during the Plant's sludge digestion process. It also provides hot water to the Collection Shop and Administration Building heat exchangers. This is the only heat source for these buildings. Last summer, WW staff became aware of a significant increase in water demand within the system and discovered several leaks in the steel pipes to and from the Collection Shop and Administration Building. They had no leaks outside of the underground pipes. HDR Engineering was hired to complete a Corrosion Investigation and their findings determined the corrosion damage was likely the result of a number of factors. After the report, they did a pressure test and additional leaks were detected in the system. Mr. Becker noted that corrosion is occurring from the outside of the pipe working inward. Based on this information, it was determined that the existing HWL system is unsalvageable.

Mr. Becker said that, with the colder temperatures rapidly approaching, staff began looking into options and concluded that best solution would abandoning the system and installing a new pipe system. Staff determined that abandoning the existing underground HWL system in-place and laying two (2) new insulated Polypropylene pipes adjacent to the existing system is the most timely, economical, and permanent solution. This option will function similarly to the existing system and will not require modifications to the remaining HWL system. The Polypropylene option is a seamless pipe that offers inert material properties, is corrosion resistant, and can handle the high temperatures and pressures. It is a specialized pipe that is readily available in Texas and Southeast, but will take several weeks to deliver to the plant. The material required to insulate the new pipe is 4 weeks out. Mr. Becker said that this is not the only option and they have looked at replacing pipe with steel pipe that is also insulated. Mr. Becker noted that Big Sky, Inc., a local contractor already under contract with the Wastewater Department (for the Fernan Pump Station Retrofit) is readily available for the construction, equipment, and labor required, and the Wastewater utility would provide project management and oversight on the project. He clarified that this is an unforeseen and unique circumstance for which the Department did not plan or budget, but noted that the Wastewater Department has funds available for the project under the Capital Replacement Fund Account. That fund was dedicated to start building up monies for unforeseen conditions as well as other capital program projects. Preliminary project estimates for the abandonment and replacement of the existing underground HWL system range $225,000 to $250,000. Mr. Becker noted that if they were to go out for a formal bidding process, it would probably take 60 days, which would place construction in November and December, not including order time, and they would need heat before then. He explained that there is a provision in Idaho Code 67-2808 that provides for the immediate expenditure of public funds. Wastewater has consulted with the Legal and Finance departments and the Legal Department concurs that the circumstances do constitute an emergency under the statute. Mr. Becker asked for authorization of the emergency expenditure and a finding that it is in the public's interest and a necessity to the deviate from standard procurement requirements.

DISCUSSION: Councilmember McEvers asked about the system only lasting nine years. Mr. Becker said that when it was installed, it was standard practice and many other facilities have the same scenario, so he is sure they will be addressing similar situations. He noted that there were a number of factors involved, and they had almost a "perfect storm" that led up to the corrosion of the pipe. Mr. Becker said that there are methods of protection available that would minimize corrosion of steel pipe, and they could probably spend months trying to find out how the water got there. He commented that they are looking at changing the insulation also, depending on the availability of pipe materials and what pipe they ultimately use.

Councilmember Gookin asked, moving forward, what are the odds of it happening again, and if there is a guarantee. Mr. Becker responded that it will be hard to demonstrate that anything might have triggered it and if it was a warranty-related issue as it was standard practice. He noted that they are aware of something similar happening within Boise's wastewater treatment facility. He also reminded council that their lab facility is in the Administration building and they need a controlled environment for their lab tests. If they remove the heat source, they have to introduce another heat source that could possibly influence the lab results. They are looking at it from a proactive standpoint and Mr. Becker commented that he is trying to do his best to avoid a future situation by removing the corrosive environment.

MOTION: Motion by McEvers, seconded by Gookin, to approve **Resolution No. 19-043;** Declaring an emergency and finding that the public interest and necessity requires that the City depart from the standard procurement requirements, and Council should authorize Wastewater to immediately order materials and hire a contractor for the emergency work to repair of the Wastewater Treatment Plant's Hot Water Loop System.

DISCUSSION: Councilmember Gookin commented that he met with Mr. Becker yesterday and they discussed the request. He said that he thinks Mr. Becker raised the bar and was very thorough, and that he knows Mr. Becker is a "quality nut" and he appreciates that. Councilmember Miller said that she thinks that part of their concern is that this doesn't happen again. She commented that she hopes that during the repair process they can do some exploration on what the cause and sources were.

Mr. Becker explained that it is a "quasi-green" technology in that they are able to capture some of the gas that would be burned off.

ROLL CALL: English Aye; Edinger Aye; Evans Aye; McEvers Aye; Gookin Aye; Miller Aye. **Motion carried.**

COUNCIL BILL NO. 19-1015

AN ORDINANCE AMENDING ORDINANCE 3618, THE ANNUAL APPROPRIATION ORDINANCE FOR THE FISCAL YEAR BEGINNING OCTOBER 1, 2018 APPROPRIATING THE SUM OF ~~$90,685,504~~ $95,597,311, WHICH SUM INCLUDES ADDITIONAL MONIES RECEIVED BY THE CITY OF COEUR D'ALENE IN THE SUM OF $4,911,807; REPEALING ALL ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT HEREWITH; PROVIDE FOR THE PUBLICATION OF A SUMMARY OF THIS ORDINANCE AND PROVIDING AN EFFECTIVE DATE HEREOF.

BE IT ORDAINED, by the Mayor and City Council of the City of Coeur d'Alene, Kootenai County, Idaho:

That Section 1 of Ordinance 3618, Ordinance of the City of Coeur d'Alene, be and the same is hereby amended to read as follows:

That the sum of ~~$90,685,504~~ $95,597,311, be and the same is hereby appropriated to defray the necessary expenses and liabilities of the City of Coeur d'Alene, Kootenai County, Idaho, for the fiscal year beginning October 1, 2018.

That Section 2 of Ordinance 3618; Ordinances of the City of Coeur d'Alene be and the same is hereby amended to read as follows:

That the objects and purposes for which such appropriations are made are as follows:

GENERAL FUND EXPENDITURES:		
Mayor and Council	$264,838	
Administration	320,169	
Finance Department	1,182,771	
Municipal Services	1,881,130	
Human Resources	387,110	
Legal Department	1,231,937	1,264,125
Planning Department	727,982	
Building Maintenance	552,832	
Police Department	14,557,464	14,753,084
Drug Task Force	100,000	

Police Department Grants	115,292	208,293
Fire Department	10,047,296	10,150,364
General Government	86,850	535,795
Streets / Engineering	4,926,544	5,736,463
Parks Department	2,301,573	
Recreation Department	762,423	769,358
Building Inspection	960,120	979,120
TOTAL GENERAL FUND EXPENDITURES:	$40,406,331	42,115,007
SPECIAL REVENUE FUND EXPENDITURES:		
Library Fund	$1,724,388	1,738,388
Community Development Block Grant	408,854	
Impact Fee Fund	521,500	
Parks Capital Improvements	131,500	1,804,500
Annexation Fee Fund	286,000	
Cemetery Fund	389,955	
Cemetery Perpetual Care Fund	207,000	
Jewett House	30,955	
Reforestation/Street Trees/Community Canopy	110,000	
Public Art Funds	348,500	
TOTAL SPECIAL FUNDS:	$4,158,652	$5,845,652
ENTERPRISE FUND EXPENDITURES:		
Street Lighting Fund	$650,050	699,450
Water Fund	12,197,334	
Wastewater Fund	19,759,659	
Water Cap Fee Fund	1,700,000	
WWTP Cap Fees Fund	1,000,000	
Sanitation Fund	4,154,083	4,239,083
City Parking Fund	289,880	757,980
Drainage Fund	1,799,624	
TOTAL ENTERPRISE EXPENDITURES:	$41,550,630	$42,153,130
FIDUCIARY FUNDS:	$2,961,960	
STREET CAPITAL PROJECTS FUNDS:	731,000	1,644,631
DEBT SERVICE FUNDS:	876,931	
GRAND TOTAL OF ALL EXPENDITURES:	$90,685,504	$95,597,311

All ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.

This ordinance shall take effect and be in full force upon its passage, approval and publication in one (1) issue of the Coeur d'Alene Press, a newspaper of general circulation published within the City of Coeur d'Alene and the official newspaper thereof.

STAFF REPORT: Comptroller Vonnie Jensen presented the budget amendments for fiscal year 2018-2019, noting that Idaho code allows the City Council at any time during the current fiscal year to amend the appropriations ordinance to reflect the receipt of revenues and/or the expenditures of funds that were unanticipated when the ordinance was adopted. The City each year adopts an amendment or amendments to the appropriation's ordinance. Unanticipated expenses are being funded by 3 categories: Unanticipated revenues, assigned fund balance, and unassigned fund balance. Assigned fund balance is being used for project carryovers that were budgeted in the previous year, which account for $168,000 of the General Fund amendment. Unassigned fund balance is being used for $375,524 of the General Fund Amendment, and the remaining $1,176,521 is being funded by unanticipated revenues. This fiscal year unanticipated revenues were mostly generated by revenues the city receives from the state, which would include gas tax, sales tax, and liquor. Interest earnings were also higher than anticipated, and the amendment include $607,000 of revenue from proceeds for capital leasing. The proceeds for capital leasing are for loaders that the Street Department is leasing. Increased expenses in the General Fund include various grants for the fire and police departments, separation payouts for accrued vacation and sick leave, project carryovers, the purchase of the East Sherman property, some transfers to Street Lighting, the Atlas Waterfront project, police department call out availability pay, legal claims, etc. Increased expenses in other funds include grants, street relighting with LIDs, Atlas Waterfront project, street projects, and project carryovers. There are also some parking garage expenses, a trail realignment, and some carryovers for the Memorial skateboard park, and the Memorial Park Grandstand project.

Vonnie explained the history of the city's unassigned fund balance and the projections going forward for the end of Fiscal Year 2019 and Fiscal Year 2020. The Government Finance Officers Association (GFOA) uses anticipated revenues and/or expenses as a benchmark for projecting if an organization has adequate reserves. The GFOA benchmark is 16.7% or two months of the fiscal year's total revenues being in reserve. The city's average for the prior eight years was 20.53%. Barring any major, unforeseen expenses, the city should be able to maintain a reserve of above 15% through Fiscal Year 2020.

PUBLIC COMMENTS: The mayor opened the meeting for public testimony. There was none.

Public testimony was closed.

MOTION: Motion by Gookin, seconded by English, to dispense with the rule and read **Council Bill No. 19-1015** once by title only.

ROLL CALL: McEvers Aye; Gookin Aye; English Aye; Edinger Aye; Evans Aye; Miller Aye. **Motion carried.**

MOTION: Motion by Gookin, seconded by McEvers, to adopt **Council Bill 19-1015.**

ROLL CALL: McEvers Aye; Gookin Aye; English Aye; Edinger Aye; Evans Aye; Miller Aye. **Motion carried.**

LEGISLATIVE HEARING: A-4-19 A PROPOSED 0.84-ACRE ANNEXATION FROM COUNTY AG. SUBURBAN TO R-3 ZONING DISTRICT BY APPLICANT T.J. ROSS; LOCATION: 1905 E. NETTLETON GULCH

STAFF REPORT: Associate Planner Tami Stroud explained that the applicant ATS Incorporated, representing T.J. Ross, the owner, is requesting annexation of .84 acres zoned from County AG Suburban to City R-3 (Residential 3 units/acre) zoning on the property located at 1905 E. Nettleton Gulch. Ms. Stroud noted that the reasons for the request are to allow the applicant to hook up to the city's sewer system. She noted that R-3 is intended as a low-density residential district consisting of detached single-family dwellings within the city limits 3 dwelling units per gross acre. Ms. Stroud noted that there are four findings required for this annexation as follows: that the request is or is not in conformance with the Comprehensive Plan policies; that public facilities and utilities are or are not available and adequate for the proposed use (she noted that stormwater will be addressed as the annexation develops and the applicant will be required to submit a landscape plan for approval to prevent double access); that the physical characteristics of the site do or do not make it an acceptable request at this time; and that the proposal would or would not adversely affect the surrounding neighborhood with regard to traffic, neighborhood character and/or existing land uses. She presented the surrounding zoning, land uses, and applicable Comprehensive Plan objectives and provided staff input regarding the finding categories including traffic.

DISCUSSION: Councilmember McEvers asked if the applicant has water rights on a well. Ms. Stroud said that the question would need to be directed to the applicant's representative. Councilmember McEvers asked about the requirement to eliminate two frontages. Ms. Stroud said that the city's municipal code does not allow frontages on two opposite boundaries. As a result, the applicant would have to provide a 10 foot-wide planting strip to prohibit secondary access, and that the applicant is aware of the requirement.

Councilmember Gookin said that it looks like the applicant doesn't have any access on the north side of the property and that there are trees there already. Ms. Stroud responded that they do have a gate on Satre Avenue (north side) and they would require a landscape plan and plantings to prohibit secondary access there.

APPLICANT: Tiffany Espe of ATS, Incorporation, 9177 Hess Street, Hayden, said that the applicant is already on city water and the main request is to be on the city sewer so that the applicant will have all the services with the city. He also intends to improve the existing shop to create in-law quarters for his parents because the current county regulations do not permit it.

Councilmember Gookin asked if the applicant is on a septic tank. Ms. Espe confirmed that he is, and acknowledged that the applicant understands that he will be required to get rid of it.

PUBLIC COMMENTS: The Mayor opened the meeting for public testimony. The Clerk swore in those that gave testimony.

Emma Rosenthall, 1824 Nettleton Gulch Road, commented that up the street there are some cluster houses that always turn around in front of their house, which is really annoying, and her mom doesn't want any more traffic.

APPLICANT REBUTTAL: Councilmember Gookin asked if there were any plans to split or sub-plat to add more houses. Ms. Espe said that it is not the intention of the property owner to subdivide the property.

Public testimony closed.

MOTION: Motion by McEvers, seconded by Miller, to approve A-4-19, A proposed 0.84-acre annexation from County Ag. Suburban to R-3 zoning district by applicant T.J. Ross; Location: 1905 E. Nettleton Gulch, to direct staff to negotiate an annexation agreement, and to develop the necessary Findings and Order.

DISCUSSION: Councilmember Gookin commented that there was a note in their packet that said that if that if there is an increase beyond the R-3 density, the Wastewater plant would require some modeling to handle the capacity, so he doesn't think there is going to be any increase in density or traffic.

ROLL CALL: Gookin Aye; English Aye; Edinger Aye; Evans Aye; Miller Aye; McEvers Aye. **Motion carried.**

ADJOURNMENT: Motion by McEvers, seconded by Miller, that there being no other business this meeting be adjourned. **Motion carried**.

The meeting adjourned at 7:01 p.m.

_____
Steve Widmyer, Mayor

ATTEST:

_____
Amy Ferguson, Deputy City Clerk

PUBLIC WORKS COMMITTEE
MINUTES
September 23, 2019
4:00 p.m., Library Community Room

COMMITTEE MEMBERS PRESENT
Councilmember Woody McEvers
Councilmember Dan English
Councilmember Kiki Miller

STAFF PRESENT
Jack Reichert, Streets & Eng. Field Super.
Amy Ferguson, Executive Asst.
Mike Gridley, City Attorney
Troy Tymesen, City Administrator
Mike Becker, WW Capital Program Mgr.
Chris Bosley, City Engineer

Item 1 Declaration of Surplus Used Equipment and Vehicles and Authorization to Proceed to Auction
Consent Calendar

Jack Reichert, Streets & Engineering Field Supervisor, presented a request for council to declare various pieces of used equipment and vehicles as surplus and authorize staff to dispose of them at auction.

Mr. Reichert presented the following items as surplus:

- Paver: LeeBoy, 2001, VIN#1031098001261
  - Non-replaceable auger boxes have worn through
  - Hours - 2,216
- Crafco Poly Patcher, 1999, Vin# 1C9TP1220X1418097
  - Parts unavailable to repair
- Trailers (paver): Felling 1226T, 2003, VIN# 5FTCF3823L1002672
  - Lee boy, VIN# 42ETPPF4881000434 Econoline
  - Both trailers have ½ axles which are of poor design
- GMC Topkick Dump truck, 1995, VIN# 1GDT7HAJ6SJ502305
  - Mileage - 146,892
  - Hours - 11,389
- Freightliner, 2005, VIN# 1FVAB6BV66DW22294
  - Tymco box/blower housing + pick up head sand blasted thin w/many patches
  - Mileage - 71,815
  - Hours- 8,10
- Loader Plow: prototype plow in-house in 2004
  - It no longer will attach to any of our machines and is not useful
- GMC Flatbed, 2000, VIN# 1GDJK34R0YF495894
  - Rusty and well-worn
  - Mileage – 71459

Mr. Reichert explained in his staff report that the equipment/vehicles have been deemed of little to no value to any City department, and that they have offered the items in-house before the items were deemed to be surplus. There is no cost to the taxpayers. The auction house takes a percentage of the bid and there is very minimal cost to the department to shuttle the items to Post Falls.

Councilmember English asked if Mr. Reichert thought all of the items would sell, and if they don't, would the City have to take them back. Mr. Reichert responded that he didn't think they have ever had to bring anything back from the auction house.

Councilmember McEvers asked Mr. Reichert if they take the life expectancy of items into consideration when they buy them. Mr. Reichert commented that it is the material that you put through the machine that wears it down.

MOTION: Motion by English, seconded by Miller, that Council declare the pieces of used equipment and vehicles presented as surplus and authorize staff to proceed to auction. Motion carried.

Item 2 Approval of Change Order No. 2 to the Agreement between the City of Coeur d'Alene and Apollo, Inc. for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements.

Agenda

Mike Becker, Capital Program Manager, presented a request for Council Approval of Change Order No. 2 (Final) to the Agreement between the City of Coeur d'Alene and Apollo, Inc., dated February 7, 2017, for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements.

Mr. Becker explained that the scope of the improvements for the project includes the construction of a third covered Primary Clarifier, a third Secondary Clarifier, and the additional concrete tankage, piping, pumps, and membranes at the Tertiary Membrane Filtration (TMF) facility. Change Order No. 1 for the contract provided a bridge crane lifting apparatus needed for the removal and maintenance of the TMF membrane cassettes. Change Order No. 2 is for all the unanticipated and additional work items that are common for the completion of projects of this size and complexity. The original construction contract price of the project was $16,169.00. There are 35 change proposal requests as well as 66 work change directives included in the current change order, and Mr. Becker noted that they were for unforeseen conditions, and corrosion was also an issue. He commented that the treatment process utilizes some very caustic materials which require pumps, pipes, etc. that have to deal with the caustic nature of the fluids. He also noted that the improvements have increased the plant capacity from 1MGD to 5 MGD. Change Order No. 1 increased the contract by $534,930.00. Change Order No. 2 will increase the contract by another $971,404.59, resulting in a new contract total of $17,675,334.59. In addition, Change Order No. 2 will extend the Substantial Completion Date by 237 days and the Final Completion Date by 207 days. The design and construction of the project is funded by a $20,000,000 CWSRF loan obtained from the Idaho Department of Environmental Quality. The loan funding was amended on April 3, 2018 by an additional $500,000 specifically for the design

and construction of the bridge crane in Change Order No. 1. The total loan funding available is $20,500,000. Funds for this Change Order No. 2 are available in the FY 19-20 Wastewater Operating Fund, Capital Replacement Fund, which was set up for unforeseen conditions such as this. The change order represents a cost increase of 5.8% to the amended contract total. The industry norm for a project of this size and complexity is 5-10%. Mr. Becker commented that Wastewater engineering has worked well with the contractor and the plant is functioning as intended. Staff is working on optimizing the process and they have been quite pleased with the results of the project.

Councilmember English commented that it is never as cheap to go back after the fact to fix issues, and noted that a weeks ago they had a decision point for another unanticipated expense at the Wastewater plant, and he asked if there were sufficient funds to handle this additional expense. Mr. Becker explained that the funding request that took place a week ago occurred in the current fiscal year. The funding for the Change Order request will draw off of monies that were dedicated in the next fiscal year. He commented that a lot of the time what happens when they do excavations is that some things reveal themselves, and that now is the time to take care of it while they have a contractor on site, or otherwise the change order requests included in the packet would have to be brought forth to council pretty much every council meeting because they are constantly discovering things as they go. They count on the contractor being there, and get price quotes from them and, if they seem reasonable, they go ahead and amass the change orders to get the best deal for the city.

Councilmember Miller asked if there will be another change order before final completion of the project. Mr. Becker said no, and that they actually got everything taken care of with the exception of odors backdrifting into the storm system, and they have been taken care of through the requested change order.

Councilmember Miller said that it would appear to anyone who is watching that council is approving the spending of the money but, in reality, they are approving work that has already been agreed to be paid for. Mr. Becker agreed and clarified that the work was agreed to by the Wastewater Superintendent as well as the previous Capital Program Manager. Councilmember Miller said that sometimes it feels like they are rubber-stamping a big, giant change order which is money that has already been spent, and that sometimes it feels like they are opening the checkbook and letting people spend what they want to spend. She asked about oversight and checks and balances. Mr. Becker said that council is relying on staff's expertise along with the guys in the trenches that provide the oversight and justification for doing the projects. In this case, they look at it from the standpoint of what is the best and most efficient way that they can accomplish the work, keeping in mind the ratepayers so that their costs do not exceed what monies coming in can allow. When they excavate the ground and discover a lot of unforeseen conditions such as corrosion, etc., now is the time to get that work done and they pay the contractor to do that. They get a quote from the contractor and, if they don't like it, they renegotiate. That is also where they rely on the expertise of their consultant, HDR, who has a vast knowledge and resource pool and experience in that area. Mr. Becker said that council has to rely on the fact that staff is looking out for the best interest at this point and they have management, engineering, and professional expertise out there guiding them. They are trying to

protect the city's resources by ensuring that they have a final product that is going to get them into the next century and beyond.

Councilmember Miller said that as she reviewed the 1300+ pages of the change order, including the sanitary sink installation, and parking lot landscaping. She also questioned "force account" work, where the work has to be done but was unforeseen, and then it becomes a different markup. She commented that it makes sense to her to dig in and look at some of those things and asked if they are really watching those things, or did they just get tired and know that they had a lot of money left, so they said let's just spend some more money and do it the quick way. Ricky Shults, HDR, responded that they would have to look at the exact changes that Councilmember Miller was referring to, but that the contractor is allowed a 15% markup on self-performed work, and 5% on subcontract work. They review each of the changes, look at labor rates, consider what is the norm and whether it makes sense, and with each change they review it and with some changes they negotiate to arrive at a reasonable price. Councilmember Miller said that it seems like there were some items that didn't need to be done (sanitary sink and parking lot) and that they made her question who is keeping a sharp eye on it. Councilmember Miller said that she would send Mr. Shults a note regarding any questions that she has. She commented that there are a lot of people signing off on the change order, and she just wants to make sure that they are doing their due diligence and paying attention to the user fee dollars.

Councilmember English asked if the decisions are bounced off of and approved by Finance, the City Administrator, or others in the city. Mr. Becker said that the Wastewater Superintendent has his hand in it all the time, and that he usually meets with the Executive Tim on a bi-weekly basis to disclose some of that information. He noted that 1300+ pages for the change order on a project this size is not unheard of, and that he has called some neighboring cities and they are all doing a very similar thing, and that there are a lot of unforeseens occurring out there. Their goal is they try to find a permanent solution or one that will take them as far down the road as possible.

Councilmember McEvers asked if the pipes are guaranteed. Mr. Becker said that most manufacturers will give them a one year guarantee, and he has never heard of a caustic material eating away through a product designed to transport caustic materials within that time frame. It always occurs later down the road, usually due to imperfections in the material. Sometimes there is just common wear and tear. Mr. Becker noted that the engineering behind the conveyance of the fluids is sound and what they are installing is standard practice. He explained that the hot water system that was brought before council a week ago was a unique situation and many factors contribution to that corrosion. They are looking at it proactively, but at the same time they will experience more corrosion as they deal with caustic material. Eventually the treatment facility will phase away from caustic material and use other technologies later on down the road, but until then they are operating efficiently and effectively, and in compliance with their permit.

Councilmember McEvers noted that the Wastewater treatment plant is over 100 years old and has been through many phases. He asked if they have a map of where everything is located now. Mr. Becker commented that they are getting better at it, and they are dealing with things that were installed 100 years go. Now they use GPS and not only are they using GPS to install the

pipes, but while they are surveying new pipes they take a shot of the old pipes while the ground is exposed and open, to get better control of the locations.

Councilmember McEvers asked about the $20,500,000 DEQ loan and asked why, since the total came in $17.6M, they aren't paying for the current change order out of those loan funds, rather than a line item. Mr. Becker said that they have had other things that have come out of that loan and the money has been spent, and that is why they are having to draw on their replacement fund. Mr. Shults confirmed that they do not anticipate any more change orders, and Mr. Becker commented that they have a great facility that has been a tremendous benefit to the residents of Coeur d'Alene.

MOTION: Motion by English, seconded by Miller, that Council approve Change Order #2 to the Agreement between the City of Coeur d'Alene and Apollo, Inc., for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements in the amount of $971,404.59.

DISCUSSION: Councilmember Miller said that she seconded the motion but is still hoping to receive answers to her questions about how some of the change orders are being reviewed.

Motion carried.

The meeting adjourned at 4:36 p.m.

Respectfully submitted,

Amy C. Ferguson
Public Works Committee Liaison

RESOLUTION NO. 19-044

A RESOLUTION OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO DECLARING PROPERTY AS SURPLUS AND AUTHORIZING THE SALE OF THE SURPLUS PROPERTY AT AUCTION.

WHEREAS, the City Streets & Engineering department recommends that the Mayor and City Council of the City of Coeur d'Alene declare certain property surplus and that the property be sold at auction.

WHEREAS, certain items of property of the City have become worn out, obsolete, or are no longer needed by the City; and

WHEREAS, the City Council desires to dispose of the following surplus property:

- Paver: LeeBoy, 2001, VIN#1031098001261
  - Non-replaceable auger boxes have worn through
  - Hours - 2,216
- Crafco Poly Patcher, 1999, Vin# 1C9TP1220X1418097
  - Parts unavailable to repair
- Trailers (paver): Felling 1226T, 2003, VIN# 5FTCF3823L1002672
  - Lee boy, VIN# 42ETPPF4881000434 Econoline
  - Both trailers have ½ axles which are of poor design
- GMC Topkick Dump truck, 1995, VIN# 1GDT7HAJ6SJ502305
  - Mileage - 146,892
  - Hours - 11,389
- Freightliner, 2005, VIN# 1FVAB6BV66DW22294
  - Tymco box/blower housing + pick up head sand blasted thin w/many patches
  - Mileage - 71,815
  - Hours- 8,10
- Loader Plow: prototype plow in-house in 2004
  - It no longer will attach to any of our machines and is not useful
- GMC Flatbed, 2000, VIN# 1GDJK34R0YF495894
  - Rusty and well-worn
  - Mileage - 71459

NOW, THEREFORE, it is hereby RESOLVED by the Mayor and City Council of the City of Coeur d'Alene, that the property listed above should be offered for sale at auction; and

BE IT FURTHER RESOLVED, that the Mayor and City Clerk be and they are hereby authorized to execute such action on behalf of the City.

DATED this 1st day of October, 2019.

_____
Steve Widmyer, Mayor

ATTEST:

_____
Renata McLeod, City Clerk

Motion by _____, Seconded by _____, to adopt the foregoing resolution.

ROLL CALL:

COUNCIL MEMBER ENGLISH	Voted _____
COUNCIL MEMBER MCEVERS	Voted _____
COUNCIL MEMBER EVANS	Voted _____
COUNCIL MEMBER GOOKIN	Voted _____
COUNCIL MEMBER EDINGER	Voted _____
COUNCIL MEMBER MILLER	Voted _____

_____ was absent. Motion _____.

PUBLIC WORKS
STAFF REPORT

DATE: September 23, 2019
FROM: Jack Reichert, Streets & Engineering Field Supervisor
SUBJECT: DECLARATION OF SURPLUS USED EQUIPMENT AND VEHICLES

DECISION POINT:
Should Council declare various pieces of used equipment "surplus" and authorize staff to dispose of them at auction?

HISTORY:
The following assets and items are the subject of this request:

- Paver: LeeBoy, 2001, VIN#1031098001261
  - Non-replaceable auger boxes have worn through
  - Hours - 2,216
- Crafco Poly Patcher, 1999, Vin# 1C9TP1220X1418097
  - Parts unavailable to repair
- Trailers (paver): Felling 1226T, 2003, VIN# 5FTCF3823L1002672
  - Lee boy, VIN# 42ETPPF4881000434 Econoline
  - Both trailers have ½ axles which are of poor design
- GMC Topkick Dump truck, 1995, VIN# 1GDT7HAJ6SJ502305
  - Mileage - 146,892
  - Hours - 11,389
- Freightliner, 2005, VIN# 1FVAB6BV66DW22294
  - Tymco box/blower housing + pick up head sand blasted thin w/many patches
  - Mileage - 71,815
  - Hours- 8,10
- Loader Plow: prototype plow in-house in 2004
  - It no longer will attach to any of our machines and is not useful
- GMC Flatbed, 2000, VIN# 1GDJK34R0YF495894
  - Rusty and well-worn
  - Mileage - 71459.

PERFORMANCE ANALYSIS
This equipment/vehicles have been deemed of little or no value to any City department. We looked to provide or offer in-house before we sent items to surplus.

FINANCIAL ANALYSIS
There is no cost to the taxpayers. The Auction house takes a percentage of the bid auction item. There is a very minimal cost to the department for us to shuttle items to Post Falls.

DECISION POINT:
Council should declare the listed equipment to be "surplus" and authorize staff to dispose of them at auction.


For The Sake Of Our Lake
TYMCO
600


GMC


229

Resolution No. 19-044

OTHER BUSINESS

PUBLIC WORKS COMMITTEE
STAFF REPORT

DATE: **September 23, 2019**
FROM: **Mike Becker, Capital Program Manager**
SUBJECT: **Approval of Change Order No. 2 to the Agreement between the City of Coeur d'Alene and Apollo, Inc. for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements**

DECISION POINT: Should the City Council approve Change Order No. 2 (Final) to the Agreement between the City of Coeur d'Alene and Apollo, Inc., dated February 7, 2017, for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements.

HISTORY: The scope of the improvements for this project includes the construction of a third covered Primary Clarifier, a third Secondary Clarifier, and the additional concrete tankage, piping, pumps, and membranes at the Tertiary Membrane Filtration (TMF) facility. Change Order No. 1 for this contract provided a lifting apparatus needed for the removal and maintenance of the TMF membrane cassettes.

Change Order No. 2 is for all the unanticipated and additional work items that are common for the completion of projects this size and complexity. This work is summarized in the attached Change Order through Change Proposal Requests (CPR) 001-035 and Work Change Directives (WCD) 001-066.

FINANCIAL ANALYSIS: The original construction contract price of this project was $16,169,000. Change Order No.1 increased the contract by $534,930. **Change Order No. 2 will increase the contract by another $971,404.59** resulting in a new contract total of $17,675,334.59. In addition, **Change Order No. 2 will extend the Substantial Completion Date by 237 days and the Final Completion Date by 207 days.** The design and construction of this project is funded by a $20,000,000 CWSRF loan (9/16/2015) obtained from Idaho Department of Environmental Quality. This loan funding was amended on April 3, 2018 by an additional $500,000 specifically for the design and construction of the bridge crane in Change Order No 1. The total loan funding available is therefore $20,500,000. Funds for this Change Order No 2 are available in FY 19-20 Wastewater Operating Fund, account # 031-022-4351-7200, Capital Replacement Fund.

Original Contract (February 7, 2017)	$16,169,000
Change Order No 1 (October 16, 2018)	$534,930
Change Order No 2 (pending approval)	$971,404.59
Amended Contract Total	$17,675,334.59

PERFORMANCE ANALYSIS: This Change Order represents a cost increase of 5.8% to the amended contract total. Industry norm for a project of this size and complexity is 5-

10%. The Wastewater Department, Engineer, and Contractor worked well together during the entire process, the plant is functioning as intended, and staff is working on process optimization. The Wastewater Department is quite pleased with the results of this project.

DECISION POINT/RECOMMENDATION: The council should approve and authorize the Mayor to execute Change Order No. 2 to the Agreement between the City of Coeur d'Alene and Apollo, Inc., dated February 7, 2017, for Construction of the Wastewater Tertiary Treatment Phase 2 Improvements in the amount of $971,404.59.

Attachments:

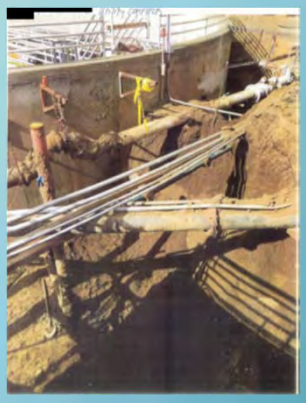
- Change Order No. 2 (6 pages)
- CPR & WCD Summarized Detail Report Detail Report (18 pages)

City of
Coeur d'Alene
IDAHO

Wastewater Tertiary Treatment Upgrade:
Construction Contract Amendment No 2

September 23, 2019

Upgraded Wastewater Treatment Facility



Examples of Unanticipated and Additional Work

Underground "Utility" Interferences

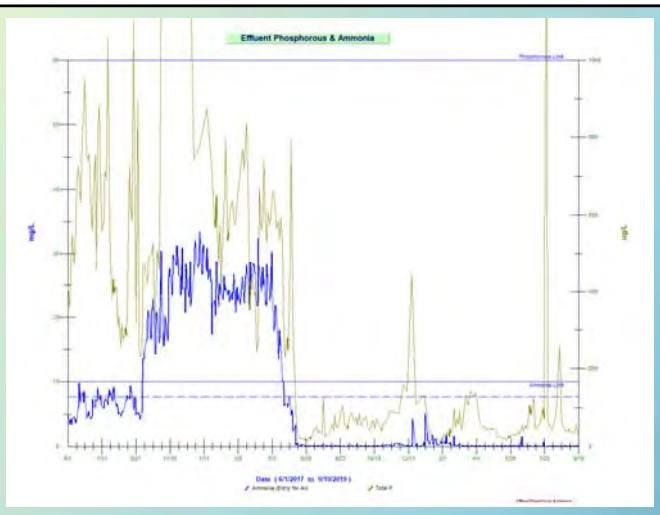
Examples of Unanticipated and Additional Work

Corrosion Issues

Contract With Apollo, Inc.

- **Original Contract for "Tertiary Treatment Phase II Improvements" which included a third Primary Clarifier, third Secondary Clarifier, and build-out of Tertiary Membrane Filtration system from 1 MGD to 5 MGD.**
- **Change Order No 1 was for construction of a gantry crane to facilitate maintenance of the membranes.**
- **Change Order No 2 is for unanticipated and additional work throughout the project.**

Item	Date	Cost
Original Contract	Feb 7, 2017	$16,169,000
Change Order No 1	Oct 16, 2018	$534,930
Change Order No 2	Pending Approval	$971,404.59
Amended Contract Total		$17,675,334.59



Plant Performance Before & After Full Tertiary Treatment

Staff is pleased with the performance of both the plant as well as the contractor.

Questions?

RESOLUTION NO. 19-045

A RESOLUTION OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO AUTHORIZING CHANGE ORDER NO. 2 TO THE CONTRACT WITH APOLLO, INC. FOR THE WASTEWATER TERTIARY TREATMENT PHASE 2 IMPROVEMENTS.

WHEREAS, pursuant to Resolution No. 17-003 the City entered into a contract with Apollo, Inc., for the Wastewater Tertiary Treatment Phase 2 Improvements pursuant to advertised bidding specifications dated the 12th day of January, 2017; and

WHEREAS, pursuant to Resolution No. 18-056 the City approved Change Order No. 1 for the Wastewater Tertiary Treatment Phase 2 Improvements dated the 16th day of October, 2018; and

WHEREAS, the Wastewater Department has requested that the City of Coeur d'Alene approve Change Order No. 2 for the FY 19-20 at an additional cost of $971,404.59, a copy of which change order is attached hereto marked Exhibit "1" and by reference made a part hereof, thereby increasing the total contract price to $17,675,334.59; and

WHEREAS, the City Council deems it to be in the best interests of the City of Coeur d'Alene and the citizens thereof to approve such Change Order No. 2; NOW, THEREFORE,

BE IT RESOLVED, that the Mayor and City Council of the City of Coeur d'Alene hereby agree to the requested Change Order No. 2 in the scope of the original specifications and contract with Apollo, Inc., as set forth above, a copy of which Change Order No. 2 is attached hereto as Exhibit "1" and by reference made a part hereof.

BE IT FURTHER RESOLVED, that the Mayor and City Clerk be and they are hereby authorized to execute any and all documents necessary to effect such change order on behalf of the City of Coeur d'Alene.

DATED this 1st day of October, 2019.

_____
Steve Widmyer, Mayor

ATTEST:

_____
Renata McLeod, City Clerk

Motion by _____, Seconded by _____, to adopt the foregoing resolution.

ROLL CALL:

COUNCIL MEMBER MCEVERS Voted _____

COUNCIL MEMBER MILLER Voted _____

COUNCIL MEMBER ENGLISH Voted _____

COUNCIL MEMBER GOOKIN Voted _____

COUNCIL MEMBER EVANS Voted _____

COUNCIL MEMBER EDINGER Voted _____

_____ was absent. Motion _____.

Change Order No. 002

Date of Issuance: September 13, 2019
Effective Date: September 23, 2019

Owner: City of Coeur d'Alene Wastewater Department
Owner's Contract No.:

Contractor: Apollo, Inc.
Contractor's Project No.: P162

Engineer: HDR
Engineer's Project No.: 10053342

Project Name: Coeur d'Alene Tertiary Treatment Phase 2
Owner Project Number:

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

Description:

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

Description:

1**. DELETE** Agreement Specification Section 00 52 13 4.02 Contract Times: Dates in its entirety and **REPLACE** with:

A. The Work will be substantially completed on or before October 25, 2019, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before November 25, 2019.

B. Parts of the Work shall be substantially completed on or before the following Milestone(s):

1. Milestone 1: July 14, 2018
   a. Process Area 570 – Chemical Systems Center
   b. Process Area 591 – Secondary Effluent Pumping Station
   c. Process Area 610 – Tertiary Membrane Filtration
      1) Excludes membrane acceptance testing as defined in City of Coeur d'Alene Wastewater Department – Tertiary Treatment Phase 2 Membrane Pre-purchase contract with Zenon Environmental Corporation d/b/a GE Water & Process Technologies, Specification Section 01 75 03 System Start-up and Acceptance for Membrane Procurement Contracts.

2. Milestone 2: July 16, 2019
   a. Process Area 610 – Tertiary Membrane Filtration
      1) Specifically includes membrane acceptance testing as defined in City of Coeur d'Alene Wastewater Department – Tertiary Treatment Phase 2 Membrane Pre-purchase contract with Zenon Environmental Corporation d/b/a GE Water & Process Technologies, Specification Section 01 75 03 System Start-up and Acceptance for Membrane Procurement Contracts.

The following is an explanation of how the new Contract Times for Substantial Completion and Final Completion were developed:

There was one Change Proposal Request (CPR) and three Work Change Directives (WCD) that affected the Substantial and Final Completion dates of the projects. CPR 035 was additional work requested by the City to renovate electrical equipment and wiring in Primary Clarifier No. 1. This work required a 60-day time extension to Substantial Completion and a 30-day time extension to Final completion. WCD 054 was additional work requested by the City to provide modifications to the Primary Sludge Building (PSB) and LCP-4352. This work required a 30-day time extension to Substantial Completion and a 48-day time extension to Final Completion. WCD 065 was additional work requested by the City to replace existing corroded/damaged wiring between Primary Clarifier No. 1 Ventilation Fan and its corresponding bucket Section 3C in MCC-4351. This work required a 53-day time extension to Substantial Completion and a 35-day time extension to Final Completion. WCD 066 provided for odor control in three Sanitary Sewer Manholes by placing Tide Flex valves onto the influent pipelines. Due to the long lead time of the Tide Flex valves this this work required a 94-day time extension to Substantial Completion and a 94-day time extension to Final Completion.

The increase in Contract Price was determined by totaling the amount of the CPRs and WCDs that are included with the backup of this Change Order. The amount of Contract Allowance of $275,000.00 was subtracted from the total of Change Order No. 2 to arrive at the total amount to be added to the Contract Price. Other than the one CPR and three WCDs listed above, none of the other CPRs or WCDs requested any Contract Time be added to the project's Substantial or Final Completion dates.

CPR	Description	Cost	Time
001	DIFFERING SITE CONDITIONS	$ 24,997.46	0 Days
002	SUMP – RFI 003	$ 1,846.59	0 Days
003	NACE INSPECTION CREDIT	$ 0.00	0 Days
004	VOID	$ VOID	VOID
005	PRIMARY CLARIFIER 3 – EXISTING PIPE	$ 3,778.90	0 Days
006	8PW RELOCATION	$ 0.00	0 Days
007	VOID	$ VOID	0 Days
008	CAUSTIC STATIC MIXER	$ 1,172.69	0 Days
009	LIGHT & ALARM POLE RELOCATION	$ 989.84	0 Days
010	TMF FIBER RELOCATION	$ 1,463.70	0 Days
011	TMF – PIPING, EXISTING CONCRETE REPAIR	$ 103,349.65	0 Days
012	CHEMICAL CENTER 14” ABOVE GRATING COATING	$ 0.00	0 Days
013	ISOLATION GATES IN PC EFFLUENT BOXES	$ 12,537.00	0 Days
014	RELOCATE TRANSFORMER AT TMF & SCB	$ 8,254.24	0 Days
015	PC3 STEEL UPPER ROOF SUPPORT	$ 13,389.71	0 Days
016	VOID	$ VOID	VOID
017	SURVEY EXPOSED FITTINGS AND VALVES	$ 11,379.59	0 Days
018	REVISED MEMBRANE TANK COATING	$ 41,723.68	0 Days
019	SEPS MAIN DISCONNECT RELOCATION	$ 3,650.31	0 Days
020	TMF SEC CONTAINMENT COATING	$ 17,612.03	0 Days
021	TMF SHUTDOWN PLAN	$ 0.00	0 Days
022	VOID	$ VOID	VOID
023	TMF TANK 6SS GATE	$ 8,269.62	0 Days
024	TMF BLOWER CONTROL PANEL	$ 5,581.52	0 Days
025	SEPS FILLET REPAIR AND GRATING CHANGESE	$ 5,082.74	0 Days
026	MSA PIPE SUPPORT JOIST REINFORCEMENT	$ 16,172.17	0 Days
027	SS WET ENDS FOR 3W INLINE CENTRIFUGAL GRUNDFOS PUMPS	$ 19,897.45	0 Days
028	TMF TANK FRP COVER HANDLES	$ 12,117.60	0 Days
029	REMEDIATION OF JOINTS ON HYPO SYSTEM	$ 6,479.21	0 Days
030	HIGH PERFORMANCE INDUSTRIAL COATINGS SYSTEMS	$ 18,425.20	0 Days
031	INTERIOR METAL LINER PANEL	$ 11,665.14	0 Days
032	SCB2 FLOOR HARDENER – EPOXY	$ -3,219.82	0 Days
033	TMF GANTRY CRANE	$ -71,985.60	0 Days

034	VOID	$	VOID	VOID
035	PC1 CORROSION RENOVATION	$	53,538.85	60 Days SC 30 Days FC
036	CHEMICAL TANK LEVEL TRANSMITTER BRACKETS	$	5,477.51	0 Days
SUBTOTAL		$	333,646.98	60 Days SC 30 Days FC

WCD	Description		Cost	Time
001	ELECTRICAL DUCTBANK RED DYE	$	3,457.09	0 Days
002	GE U BRACKETS MODIFICATIONS	$	10,124.41	0 Days
003	ADDITIONAL ASPHALT TMF	$	5,094.07	0 Days
004	PERMEATE PIPING ORIENTATION	$	4,079.36	0 Days
005	TANK WEIR COATING	$	4,656.03	0 Days
006	SEPS GUARDRAIL AND MEGA-FLANGE	$	13,359.02	0 Days
007	ORDER AND INSTALL NEW TMF VALVES	$	44,745.15	0 Days
008	REPLACEMENT 10IN PER PIPE IN TMF	$	10,347.63	0 Days
009	BELZONA COATING	$	19,980.47	0 Days
010	FLOWSERVE REPLACEMENT SEALS	$	19,718.38	0 Days
011	TMF FLOW SPLIT STRUCTURE GATES RELOCATION	$	1,535.83	0 Days
012	CHEM BLDG ELECTRICAL, HVAC DUCT, EYE WASH ALARM	$	16,553.16	0 Days
013	TMF SPRAY WATER	$	2,441.59	0 Days
014	SLIDE GATE COATING IN MEMBRANE TANKS	$	8,923.41	0 Days
015	RTS CHANNEL GRATING AND ELECTRICAL	$	2,008.96	0 Days
016	RETAINER RING ON DUCK BILL FLAPPER VALVE	$	2,327.09	0 Days
017	TMF ROOF DRAIN	$	2,464.68	0 Days
018	TMF TANK 6 SS BULK HEAD	$	8,009.82	0 Days
019	CHEMICAL BUILDING TANK OVERFLOW PREVENTION	$	24,471.37	0 Days
020	CHEMICAL LINE PRESSURE SWITCH	$	14,024.92	0 Days
021	FLAMMABLE LIQUIDS STORAGE SHED SLAB	$	10,159.40	0 Days
022	MEMBRANE BASIN T-6101-21 REPAIRS	$	14,131.09	0 Days
023	AIR PIPING FOR BUBBLE TESTING	$	2,876.29	0 Days
024	SECONDARY INFLUENT STRUCTURE MOD & SHY LINE EXTENSION	$	76,786.24	0 Days
025	HEAT TRACE & INSULATION FOR PERMEATE PIPING	$	75,368.81	0 Days
026	NEW TRANSFORMER FOR UV SYSTEM LOCAL CONTROL PANEL	$	5,498.94	0 Days
027	HEAT TRACE ALARMING	$	2,398.08	0 Days
028	PRIMARY CLARIFIER INCIDENTALS	$	75,627.75	0 Days
029	SCONDARY CLARIFIER INCIDENTALS	$	134,626.29	0 Days

030	PRESSURE TRANSDUCER FOR SEPS WET WELL	$	3,938.83	0 Days
031	EXTERIOR LIGHTING AT SCB2	$	1,712.67	0 Days
032	SQUARE D MCC BUCKET MODIFICATION	$	10,023.51	0 Days
033	SC1 ELECTRICAL VAULT	$	3,870.50	0 Days
034	PC2-PC3 SCUM VAULT RECOAT	$	888.78	0 Days
035	TRENCH DRAIN MODIFICATIONS	$	16,797.46	0 Days
036	SCB2 ECCENTRIC REDUCER	$	4,200.73	0 Days
037	FA DUCT REVISIONS	$	5,036.54	0 Days
038	ASPHALT CROSS SECTION AND PAVING AREA REVISIONS	$	46,387.99	0 Days
039	ROOF DRAIN PIPING RECONFIGURATION	$	-2,427.95	0 Days
040	PSPS PUMP ROOM MODIFICATIONS	$	10,612.56	0 Days
041	PC3 ROOF FRAMING AND HATCH MODIFICATIONS	$	9,091.02	0 Days
042	UV PROTECTOR SHIELD UNDER STAIRS	$	2,909.90	0 Days
043	SCB2 MONORAIL MODIFICATIONS	$	2,357.57	0 Days
044	6-SSC GRAVITY ROUTING REVISIONS	$	VOID	VOID
045	TMF 3W ORIFICE PLATE INSTALLATION	$	962.27	0 Days
046	PC1 & 2 SCUM PUMP MODIFICATIONS	$	9,701.74	0 Days
047	HEAT TRACE TERMINALS – RFI 119	$	453.57	0 Days
048	PC3 SIDING CHANGE	$	28,350.72	0 Days
049	SITE BOLLARDS	$	8,210.57	0 Days
050	SCB2 PIPING & HEAT TRACE MODIFICATIONS	$	14,126.92	0 Days
051	PC3 ACTUATOR	$	2,433.49	0 Days
052	MISCELLANEOUS ELECTRICAL	$	9,973.78	0 Days
053	RSS WSS SAMPLING EQUIPMENT	$	3,321.87	0 Days
054	PSB & LCP 4352	$	21,247.26	30 Days SC
				48 Days FC
055	SEALING HOLES IN PC3	$	2,368.01	0 Days
056	REPLACE-REPAIR EXISTING ELECTICAL VAULTS QTY 3	$	7,228.24	0 Days
057	AHU PUMP MODIFICATION	$	12,331.08	0 Days
058	BOILER PUMP MODIFICATIONS	$	1,629.07	0 Days
059	SILLING WELL FOR SEPS WET WELL PRESSURE TRANSDUCER	$	2,071.55	0 Days
060	SOLENOID VALVE FOR PC3 SCUM BEACH SPRAY WATER	$	3,011.20	0 Days
061	PRIMARY CLARIFIER GAS MONITORING UPDATE	$	10,657.25	0 Days
062	AREA CLASSIFICATION WORK FOR SCB & SCB2 INSTRUMENTATION	$	7,414.10	0 Days
063	MISCELLANEOUS POLYMER SYSTEM ELECTRICAL WORK	$	7,860.12	0 Days

064	LANDSCAPING CHANGES	$	13,837.91	0 Days
065	FAN CONDUCTOR REPLACEMENT	$	3,239.89	53 Days SC 35 Days FC
066	MANHOLE MODIFICATIONS	$	10,778.54	94 Days SC 94 Days FC
SUBTOTAL		$	912,404.59	177 Days SC 177 Days FC
CHANGE ORDER NO. 2 TOTAL		$	1,246,051.57	237 Days SC 207 Days FC
CONTRACT ALLOWANCE		$	275,000.00	
CHANGE ORDER TOTAL TO CONTRACT		$	971,051.57	

Attachments: *CPR 001, CPR 011, CPR 020, CPR 029*
CPR 002, CPR 012, CPR 021, CPR 030
CPR 003, CPR 013, CPR 023, CPR 031
CPR 005, CPR 014, CPR 024, CPR 032
CPR 006, CPR 015, CPR 025, CPR 033
CPR 008, CPR 017, CPR 026, CPR 035
CPR 009, CPR 018, CPR 027, CPR 036
CPR 010, CPR 019, CPR 028

WCD 001, WCD 011, WCD 021, WCD 031, WCD 041, WCD 052, WCD 062
WCD 002, WCD 012, WCD 022, WCD 032, WCD 042, WCD 053, WCD 063
WCD 003, WCD 013, WCD 023, WCD 033, WCD 043, WCD 054, WCD 064
WCD 004, WCD 014, WCD 024, WCD 034, WCD 045, WCD 055, WCD 065
WCD 005, WCD 015, WCD 025, WCD 035, WCD 046, WCD 056, WCD 066
WCD 006, WCD 016, WCD 026, WCD 036, WCD 047, WCD 057
WCD 007, WCD 017, WCD 027, WCD 037, WCD 048, WCD 058
WCD 008, WCD 018, WCD 028, WCD 038, WCD 049, WCD 059
WCD 009, WCD 019, WCD 029, WCD 039, WCD 050, WCD 060
WCD 010, WCD 020, WCD 030, WCD 040, WCD 051, WCD 061

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES *[note changes in Milestones if applicable]*
Original Contract Price: $ 16,169,000.00	Original Contract Times: Milestone 1: December 31, 2017 Milestone 2: June 29, 2018 Project Substantial Completion: October 31, 2018 Project Final Completion: December 31, 2018 Date
[Increase] [~~Decrease~~] from previously approved Change Orders No. 0 to No. 1 : $ 534,930.17	[Increase] [~~Decrease~~] from previously approved Change Orders No. 0 to No. 1 : Milestone 1: July 14, 2018 Milestone 2: January 9, 2019 Project Substantial Completion: March 01, 2019 Project Final Completion: May 01, 2019 Date
Contract Price prior to this Change Order: $ 16,703,930.17	Contract Times prior to this Change Order: Milestone 1: July 14, 2018 Milestone 2: January 9, 2019 Project Substantial Completion: March 01, 2019 Project Final Completion: May 01, 2019 Date
[Increase] [~~Decrease~~] of this Change Order: $ 971,051.57	[Increase] [~~Decrease~~] of this Change Order: Milestone 1: July 14, 2018 Milestone 2: July 16, 2019 Project Substantial Completion: October 25, 2019 Project Final Completion: November 25, 2019 Date
Contract Price incorporating this Change Order: $ 17,674,981.74	Contract Times with all approved Change Orders: Milestone 1: July 14, 2018 Milestone 2: July 16, 2019 Project Substantial Completion: October 25, 2019 Project Final Completion: November 25, 2019 Date

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____	By: _____	By: _____
Engineer (if required)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title: Project Manager	Title _____	Title _____
Date: 09/13/2019	Date _____	Date _____

Change Proposal Request No: 011

(Not a Change Order)

Project Name:

CDA Tertiary Ph 2 Improvements

HDR Project No:

10053342

Contractor:

Apollo, Inc

Project Owner:

City of Coeur d'Alene, Idaho

Owner's Project No. (If applicable):

Regulatory Agency Project No. (If applicable):

Initiated by: Contractor **Date:** 12/01//2017

Attention:

The following change in the contract on this project is proposed. Please provide your proposed price for the cost of this change.

1) A breakdown of cost SHALL be provided upon request by the Owner or Engineer.

2) Work shall not commence until authorized by the Owner.

Description of Proposed Change:

The following work aligns with the response to RFI 17 TMF Facility Process Piping. Please provide pricing before work begins, with the exception of the installation of any filler/wedge flanges which will be priced on a Time and Materials basis (*italicized wording are comments/questions from Contractor*).

Corrective Concrete Work to existing Membrane Tank Walls: Item 1

1. Contractor shall provide a list and description of each item thought to be corrective work performed that was unforeseen concerning concrete work to existing Membrane Tank Walls. Provide a timesheet logging the hours specifically associated with each entry on the list for review and concurrence with the on-site RPR.

Raise Bottom of Sump: Item 2

1. Add Normal Weight – all other concrete with 28 day compressive strength of 4,500 psi to bottom of tank drain sump to match invert of 6 inch tank drain piping. See Specification Section 03 31 30 – 2.3 Table 1. The piping is currently higher than the sump bottom which will prevent proper draining of sump contents. Ensure the bottom of sump slopes towards the piping.

MSA Piping: Item 3

1. Loosen link seal of existing 8-inch MSA piping wall spool pieces. Add five 8-inch spools to existing exterior MSA piping manifolds to move the interior centerline one foot further away from the face of interior south wall. Use grooved coupling at point of connection exterior to the building to facilitate proper piping alignment and a level two hole configuration at the flanges.

2. Remove three existing air inlet boxes on south wall of TMF Facility. Block off existing openings with sheet metal to accommodate new inlet filter box provided by MSA blower manufacturer. Fabricate an inlet adapter to transition from inlet filter box to 16-inch MSA inlet piping. Provide drawings of inlet adapter with cost proposal for Engineer's review.

Permeate Piping: Item 3

1. *The existing south wall spools do not align with each other, are not properly aligned horizontally or vertically, and are not square with the grid layout.* Contractor shall avoid removing flanges on existing piping. Contractor shall loosen link seal and align piping properly. Also, achieve proper level two hole orientation with the exterior flanges, and facilitate the interior flanged connection with a grooved to flanged adapter on the new piping.

2. *The existing 20-inch PER pipe at centerline elevation 2138.42 feet is not level.* Contractor shall install a filler/wedge flange with a width of 2 inches or less at the point of connection to bring new 20-inch PER piping level.

10-inch BW Piping: Item 4

1. *Existing manifold is not parallel with wall/grid layout lines.* Contractor shall install a filler/wedge flange with a width of 2 inches or less at the point of connection to bring new 10-inch BW piping parallel with wall/grid layout lines.

Backpulse/CIP Pumps: Item 5

1. *Plans indicate the existing discharge connect to be 6 inches. Flowserve pump drawings indicated the discharge to be 6-inch. The existing discharge size is 4-inch.* Contractor shall provide new pipe section and flexible bellow from the pump discharge to the existing check valve above to make the 6-inch connection.

2. *Contract Drawing 610D301, Section F shows no modification to the existing suction piping for the new pump "swap out" and did not provide the size of the existing suction piping.* This issue was not discovered until the new pumps were delivered. The existing suction piping is 6-inch. The new pump suction flange diameter is 8-inch. For each backpulse pump:

a. Remove existing 6-inch bellow on suction side of pump.

b. Remove suction piping from bellow to existing 12-inch butterfly valve.

c. Provide 8-inch bellow on suction side of pump. See Specification Sections 40 05 00 and 40 05 23.

d. Provide new 8-inch backwash piping, 12” x 8” eccentric reducer, and 12-inch 90 degree elbow to existing 12-inch butterfly valve. See Specification Sections 40 05 00 and 40 05 23.

e. Reinstall existing pressure gage on top of new reducer. See Standard Detail 40 91 10-16.

Plant Drain & Other Piping Systems at Strainer: Item 5

1. *New plant drain piping at 2 line conflicts with existing HVAC duct discharge vent.* Contractor shall raise HVAC duct discharge and vent above elevation of PC line.

2. *On the 10-inch PRG piping near the strainer where the check valve is relocated, the check valve will be in contact with the existing installed non-potable plant water line.* Contractor shall reroute the existing non-potable plant water line.

3. *The two 18-inch SE pipes at each strainer are not parallel and elevations differ. They get further apart where the spool and fittings are being connected for the new strainer.* Installation of a FCA is not acceptable. Contractor shall install a dismantling joint, similar to Romac Style DJ400, in new spool piece near area C7 on Sheet 610D104 to bring the two 18-inch SE pipes parallel and accommodate installation of new SE piping.

3W Piping:

1. *8-inch 3W pipe spool at A line near 5 line is not installed horizontally and the flange is not vertical.* FCA is not acceptable. Contractor shall install a dismantling joint, similar to Romac Style DJ400, in new 8-inch 3W line to provide adjustment at tie-in.

Tank Drain Piping Elevation and Manifold Corrections Item 5

1. The tank drain piping inverts as they penetrate the wall into the TMF basement are below the inverts of the 6-inch drain manifold tie-in points. Contractor shall raise the 6-inch drain manifold piping by cutting out a portion of the existing vertical spool.

    a. Correct the elevations and re-groove the vertical spool and reuse the victaulic by flange adaptor.

    b. A neoprene or approved material pipe support, with shims if necessary, shall be used to vertically support the piping in the new space created between the piping and the concrete pillars.

    c. As the manifold is raised, the attached piping on the south side of the tee will also be raised, and these associated flanges will interfere with the existing grating. Provide cut outs in the grating and band the raw edges using flat bar.

    d. Provide touch-up paint as necessary for finished product.

Six inch 3W Piping Interference with Strainer Removal Item 6

1. Sheet 610D104 in the Contract Drawings show the 6-inch 3W piping being routed to within interference of the where the strainer STR-6102-21 would be raised vertically when removed.

    a. Correct the routing of the 6-inch 3W to be sufficiently moved southwest of the area directly above the strainer.

    b. For pipe support reuse any available existing hangers and Unistruts to perform the relocation, otherwise provide costs for purchase of new hangers or Unistruts.

    c. Purchase and install a 6-inch check valve in orientation and at location as directed by RPR.

    d. Provide costs for re-order of new 6-inch spool to accommodate the shorter dimensions between fittings as a direct result of shifting the pipe horizontally, approximately 8 inches, and installing a 6-inch check valve.

    e. Provide touch-up paint as necessary for finished product.

UV System Reconfiguration Additional Piping Item 6

1. Sheet 610D104 in the Contract Drawings provides a layout for the UV system including the pumps and associated control panel. The wiring for the pumps to reach the control panel was too short to accommodate the layout provided on sheet 610D104, thus a reconfiguration was necessary.

    a. Provide cost for additional piping that was necessary to accommodate reconfiguration.

TODD JENSEN, PE, CCM

By

All work shall be in accordance with the terms, stipulations, and conditions of the original Contract Documents. If the work herein provided for is Approved by Change Order, the time of completion will be:

[ ] Increased [ ] Decreased [ ] Unchanged

by _____ calendar days.

This change will: [ ] Add [ ] Deduct [ ] Not Change

HDR Recommendation:

[ ] Recommend Acceptance

[ ] Do Not Recommend Acceptance

By: HDR Engineering

Date

Owner's Action:

[ ] Accepted [ ] Not Accepted

By: Owner

Date

Change Proposal Request No: 018

(Not a Change Order)

Project Name:

CDA Tertiary Ph 2 Improvements

HDR Project No:

10053342

Contractor:

Apollo, Inc

Project Owner:

City of Coeur d'Alene, Idaho

Owner's Project No. (If applicable):

Regulatory Agency Project No. (If applicable):

Initiated by: Engineer **Date:** 9/1/2017

Attention:

The following change in the contract on this project is proposed. Please provide your proposed price for the cost of this change.

1) A breakdown of cost SHALL be provided upon request by the Owner or Engineer.

2) Work shall not commence until authorized by the Owner.

Description of Proposed Change:

Section 09 96 00 -1.4.A.5 of the Contract Documents requires that the coating systems proposed for use are to be reviewed and approved by a Senior Corrosion Specification Specialist employed by the coatings manufacturer. Tnemec's specialist has reviewed the coating proposed for application to the interior of the membrane tanks at the Tertiary Membrane Filtration (TMF) Facility and has proposed an alternative coating. Please reference Tnemec's letter dated August 25, 2017 attached here. The alternative coating proposed by Tnemec's specialist, Series 436/435 coatings, were applied to the interior of Membrane Tanks 1 and 2 during the Phase 5C.1 project and has performed well since. The filler/surfacer, Tnemec Series 218 MortarClad, has already been applied to the interior of Membrane Tanks 3 – 6 at a thickness of 1/16 inch.

Tnemec's specialist has certified the use of the Series 436/435 for application in the membrane tanks. See letter dated August 30, 2017 attached here. This certification is based upon the environmental conditions described in the email thread also attached to this CPR.

Please provide a cost proposal for the following:

1. Provide a credit for the specified system for an Immersion – non-NSF environment, 16 to 20 mil of Tnemec Series 22.
2. Provide material and labor costs for applying the following coatings system to the entire interior concrete surface of Membrane Tanks 3 - 6:
    a. Reinforced Epoxy: Series 436 Perma-Shield FR at 60-80 mils DFT
    b. Topcoat: Series 435 Perma-Glaze at 15-20 mils DFT
3. Surface preparation and coatings application shall be per coatings manufacturer's recommendation and per Section 09 96 00 – 3.4 and 3.5.
4. Apply coatings two inches beyond horizontal edge of chamfer at top of each membrane tank, matching existing coatings application. Termination cut is not required.

TODD JENSEN, PE, CCM

By

All work shall be in accordance with the terms, stipulations, and conditions of the original Contract Documents. If the work herein provided for is Approved by Change Order, the time of completion will be:

[ ] Increased [ ] Decreased [ ] Unchanged

by calendar days.

This change will: [ ] Add [ ] Deduct [ ] Not Change

HDR Recommendation:

[ ] Recommend Acceptance

[ ] Do Not Recommend Acceptance

By: HDR Engineering

Date

Owner's Action:

[ ] Accepted [ ] Not Accepted

By: Owner

Date

HDR Project Tracker Collaboration System

Change Proposal Request No: 035

(Not a Change Order)

Project Name:

CDA Tertiary Ph 2 Improvements

Project Owner:

City of Coeur d'Alene, Idaho

HDR Project No:

10053342

Owner's Project No. (If applicable):

Contractor:

Apollo, Inc

Regulatory Agency Project No. (If applicable):

Initiated by: Contractor **Date:** 01/09/2019

Attention:

The following change in the contract on this project is proposed. Please provide your proposed price for the cost of this change.

1) A breakdown of cost SHALL be provided upon request by the Owner or Engineer.

2) Work shall not commence until authorized by the Owner.

Description of Proposed Change:

Provide a cost proposal for the proposed modifications as stated below and with the accompanying drawings.

Primary Clarifier #1 (PC1) has had considerable deterioration of electrical equipment, conduit, wire, and appurtenances housed within the footprint of the building due to the extremely corrosive nature of the process area. With this, the City would like to renovate all electrical equipment excluding the one (1) drive unit, lights, and louvers for ventilation. The following statements should encompass the majority of work involved in renovating this structure in order to implement a new installation that closely resembles the current Primary Clarifier #3 (PC3).

PC1 Interior (Class I Division 1), Exterior (Class I Division 2, up to 3.5' – Unclassified beyond 3.5'):
Remove all conduits and wire for the devices as shown in the accompanying diagrams including, but not limited to, one (1) drive unit disconnect switch, hand-off-auto switches, emergency pushbutton(s), light switches, solenoid valve hand-off-auto switch, and gas detection sensor(s). All lighting fixtures with respective conduits and wire from the switch level are to remain in place. Louvers and HVAC conduits/wire, where applicable, shall remain in place.

Remove all devices as shown in the accompanying diagrams including, but not limited to, one (1) drive unit disconnect switch, hand-off-auto switches, emergency pushbutton(s), light switches, solenoid valve hand-off-auto switch, and gas detection sensor(s).

Install new devices as shown in the accompanying diagrams including, but not limited to, one (1) drive unit disconnect switch, hand-off-auto switches, emergency pushbutton(s), light switches, solenoid valve hand-off-auto switch, and gas detection sensor(s).

Install Class I Division 1 rated conduits and wire for the devices as shown in the accompanying diagrams including, but not limited to, one (1) solenoid valve hand-off-auto switch, gas detection sensor(s), high torque and high-high torque limit switches, and emergency pushbutton(s) and light switches where passing through PC1.

Install seal offs and explosionproof rated junction boxes inline with the raceway system on the exterior of PC1 where transitioning from unclassified space to classified spaces per NFPA 820, 2016.

Install stainless steel 304 Uni Strut rack system affixed to guard rail outside North PC1 door for mounting of electrical equipment as shown in the accompanying diagrams.

Install RGS conduits, or approved equal, on the exterior of PC1 where transitioning from the existing ductbank to the electrical equipment area, or from the electrical equipment area to the seal off(s) and explosionproof junction boxes, where transitioning between classified spaces. Field route conduits in the most effective, lowest area of visibility, and with minor exposure to possible damage.

Install new wire for all devices, where being replaced, relocated, or untouched, using the existing conduit system ductbank from Primary Sludge Building to the electrical area.

Handhole intercepting ductbank 14B and 14C shall be cleaned out, debris removed, and backfilled under with gravel, or appropriate bedding material, of sufficient depth to provide adequate drainage of liquid buildup inside electrical handhole.

Field research and review wiring, outside the replacements above, within handhole for insulation failures, knicks, abrasions, or other integrity deformities and failures in which replacement shall be reviewed with and approved by the Engineer. Where wiring is subject to review and approved by Engineer, replacement, termination, and verification of testing operations shall be completed.

Terminate new wiring within existing MCC buckets at the intended equipment locations. Testing and commissioning shall be performed and verified by the electrical contractor, control system integrator, and Engineer following PC3 and Primary Clarifier #2 (PC2) startups. Preliminary testing may take place ahead of schedule to fast track the PC1 startup if deemed necessary.

Coordinate locations with Engineer during installation for final approval. Clearances, ratings, and conduit bending radii for wireway shall meet National Electric Code (NEC) 2017 and National Fire Protection Association 820, 2016.

TODD JENSEN, PE, CCM

By

All work shall be in accordance with the terms, stipulations, and conditions of the original Contract Documents. If the work herein provided for is Approved by Change Order, the time of completion will be:

[ ] Increased [ ] Decreased [ ] Unchanged

by calendar days.

This change will: [ ] Add [ ] Deduct [ ] Not Change

HDR Recommendation:

[ ] Recommend Acceptance

[ ] Do Not Recommend Acceptance

By: HDR Engineering

Date

Owner's Action:

[ ] Accepted [ ] Not Accepted

By: Owner

Date

Work Change Directive No. 007

Date of Issuance:		Effective Date:	11/21/2017
Owner:	City of Coeur d'Alene, ID	Owner's Contract No.:	
Contractor:	Apollo	Contractor's Project No.:	
Engineer:	HDR	Engineer's Project No.:	10026247
Project:	CDA Tertiary Phase 2 Improvements	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description:

While working to remove piping in the TMF, corrosion was discovered on the existing valves. These valves identified will need to be replaced with new valves that have stainless steel for the disc and body and Buna-N or EPDM for the seat. Exhibits identifying these valves are provided.

Contractor shall proceed with ordering the following valves, or equivalent as approved by engineer:

Description	Manufacturer Information
Two, 8" Wafer Check Valves on Permeate Pump Discharge , 5C.1	~~Prince Series 813~~ Bray Rite Model 210
Two, 8" Butterfly Valves - One Upstream of each Flow Meter	Bray Series 30/31
Two, 8" Butterfly Valves - One Downstream of each Purge Flow Control Valve	Bray Series 30/31
Two, 8" Manual Wafer Butterfly Valves, Isolation to Permeate Tank	Bray Series 30/31
Two, 10" Wafer Check Valves on Backpulse Pump Discharge	~~Prince Series 813~~ Bray Rite Model 210
Two, 10" Butterfly Valves on Backpulse Pump Discharge	Bray Series 30 - General Use
Two, 10" Butterfly Valves Backwash to Filter	Bray Series 31
One, 10" Wafer Butterfly Valve, Purge line before Strainers	Bray Series 30/31
Three, 8" Wafer Check Valve on Permeate Pump Discharge, TTP2	~~Prince Series 813~~ Bray Rite Model 210

Continue forward with contract work to install valves currently on-site so as not to let the work included in this Work Change Directive delay the project.

Contractor shall proceed with installing new valves once they are received on-site.

Contractor shall confirm work activities daily with on-site RPR.

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to:

☐ Non-agreement on pricing of proposed change.

☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price $ 26,125 increase

Contract Time 0 days [increase] [decrease].

Basis of estimated change in Contract Price:

☐ Lump Sum ☐ Unit Price

☒ Cost of the Work per Day ☐ Other

RECOMMENDED:	**AUTHORIZED BY:**	**RECEIVED:**
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title: Project Manager	Title: Cap. Program Mgr.	Title: VP
Date: 11/21/17	Date: 11-21-2017	Date: 11/22/17

Work Change Directive No. 024

Date of Issuance:	April 3, 2018	Effective Date:	April 3, 2018
Owner:	City of Coeur d'Alene, ID	Owner's Contract No.:	
Contractor:	Apollo	Contractor's Project No.:	
Engineer:	HDR	Engineer's Project No.:	10026247
Project:	CDA Tertiary Phase 2 Improvements	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description:

Secondary Influent Structure Modifications:

1. Install a new cast-in-place concrete wall in existing Secondary Distribution Structure. The concrete wall shall be pre-engineered for lifting tolerances, pre-cast on-site and lifted into place.
   a. The wall shall be 8-inches wide and captured between two 4"x4"x1/4" 316 SS angles and ½" 316 SS anchors at 18-inches on center.
   b. The wall shall be nested in a 1 ½" bed of grout, and built to accommodate 1 ½" of grout on each side poured after the wall is set. The grout allows for imperfections in the floor and the walls.
2. Install a new 36" x 36" face mounted, downward opening stainless steel slide gate on the new concrete wall. Gate to have a seating and unseating head of 3 feet and crank handle. See Specification Section 40 05 59 for additional requirements.
3. Gate SLG-501-32 to be used on PC #3 Effluent Box with an adjusted operating rod. See CPR 13.
4. Dimensions of existing structures were verified by Contractor during deactivation request on February 15, 2018.
5. See modifications on Drawings 001C501 attached.

Extension of 1"-SHY line:

1. Install new tee. See Specification Section 40 05 00 – 3.12.F.
2. Install two plastic ball valves on 1"-SHY line. See Specification Section 40 05 63 – 2.3. Additionally, provide "vented" ball valves for all services with greater than 5 percent concentrated sodium hypochlorite.
3. Route new 1"-SHY line to Secondary Effluent Pumping Station. See Specification Section 31 23 33 for trenching, backfilling, and compaction requirements.
4. See modifications on Drawings 001C203, 501D901, and 591D01 attached.
5. Provide a negative slope on secondary containment piping extending 2-inches beyond the inside face of the basement wall. This will allow leaking to be more readily noticed.

Contractor shall confirm work activities daily with on-site RPR.

Attachments:

1. Drawing 001C203, 001C501, 501D901 and 591D101 modifications
2. Detail 3 on 001C501 does not apply as contractor desires to engineer the wall to verify he can pick it up, and the wall will be precast. Apollo is thinking they need a double mat of rebar.

☐ Non-agreement on pricing of proposed change.

☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price	$ TBD		increase
Contract Time	0	days	[increase] [decrease].

Basis of estimated change in Contract Price:

- ☐ Lump Sum
- ☐ Unit Price
- ☒ Cost of the Work per Day
- ☐ Other

	RECOMMENDED:	**AUTHORIZED BY:**	**RECEIVED:**
By:			
	Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title:	Project Manager	Cap. Program Mgr.	VP
Date:	04/03/2018	4-4-2018	4/4/18

Work Change Directive No. 025

Date of Issuance:	04/06/18	Effective Date:	04/06/18
Owner:	City of Coeur d'Alene, ID	Owner's Contract No.:	
Contractor:	Apollo	Contractor's Project No.:	
Engineer:	HDR	Engineer's Project No.:	10026247
Project:	CDA Tertiary Phase 2 Improvements	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description:

Contractor shall remove existing heat trace and insulation on exterior permeate piping for Membrane Trains 1 and 2. Replace with new heat trace and insulation. See Specification Sections 40 41 13 and 40 42 00. Reuse existing aluminum shroud to greatest extent possible.

Additionally, the scale for Sheet 610E105 is incorrectly shown as 3/8" = 1' -0". The correct scale is 3/16" = 1' -0". Therefore, Contractor shall provide cost and labor for installation for additional heat trace and insulation required.

Contractor shall confirm work activities daily with on-site RPR.

Attachments:
1)

Purpose for Work Change Directive:
Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to:

- ☐ Non-agreement on pricing of proposed change.
- ☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price	$ TBD	increase
Contract Time	0	days

Basis of estimated change in Contract Price:

- ☐ Lump Sum
- ☒ Cost of the Work
- ☐ Unit Price
- ☐ Other

RECOMMENDED:	**AUTHORIZED BY:**	**RECEIVED:**
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title: Project Manager	Title: Cap. Program Mgr	Title: VP
Date: 04/06/18	Date: 4-6-2018	Date: 5/1/19

Work Change Directive No. 028

Date of Issuance:	06/20/19	Effective Date:	06/20/19
Owner:	City of Coeur d'Alene, ID	Owner's Contract No.:	
Contractor:	Apollo	Contractor's Project No.:	
Engineer:	HDR	Engineer's Project No.:	10026247
Project:	CDA Tertiary Phase 2 Improvements	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description:

PC3 Incidental Work:

1) Make revisions to the PI(G) piping for PC3 to address conflicts with existing piping as directed by the Owner and Engineer.

2) Upsize water supply piping to PC3 from 1-inch piping to 2-inch piping from the main 3-inch 3W supply line to the hydrants. Piping to remain 1-inch downstream of the walkway hydrant.

3) Provide revised hydrant type per the attached detail on all installed/changed hydrants at Primary Clarifiers.

4) Provide a new hydrant per the attached detail at the northwest corner of the Primary Sludge Pump Building.

PC1 Incidental Work:

1) Move the proposed PC1 Effluent box approximately 18 inches to the north and lower by approximately 12 inches to accommodate the existing effluent piping. Provide any credit associated with change in piping.

2) Provide additional grating and support as needed on PC1 Effluent Box.

3) Provide a 2-inch drain from PC1 scum valve vault to the PSPB.
   a. Provide 2-inch schedule 80 PVC piping.
   b. Provide a cored opening approximately 36 inches below grade through the west wall and seal piping using link seal. Grout hole outside of link seal.
   c. Join the new 2-inch valve vault drain line to the contract provided Foul Air Fan drain inside the PSPB and run one common drain line to the sump via the closest drain.
      i. Coordinate with the city/engineer on which drain to use and routing of piping.

4) Re-route the existing 4-inch DI Secondary Dewatering Sump Drain Piping around the newly located valve vault at PC1.

5) For grading purposes in this area, remove the top two northern steps immediately west of the new PC1 Effluent Box (steps leading down to the grit removal gallery).
   a. Modify existing handrail to accommodate the change in steps.
   b. Grade general area to where flow is directed towards the new CB near the PSPB. Flow should be away from the existing 'Low P' Building, the new Foul Air Fan support slab, and the new PC1 Effluent Box. Coordinate with the Owner and Engineer.

Attachments:
CDA Hydrant Details for WCD 28.pdf

Purpose for Work Change Directive:
Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to:

☐ Non-agreement on pricing of proposed change.

☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price	$ TBD	increase
Contract Time	0	days

Basis of estimated change in Contract Price:

☐ Lump Sum
☒ Cost of the Work (time and materials)
☐ Unit Price
☐ Other

	RECOMMENDED:	AUTHORIZED BY:	RECEIVED:
By:	Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title:	Project Manager	Cap. Program Mgr.	VP
Date:	06/20/19	6-21-2019	9/10/19

Work Change Directive No. 029

Date of Issuance:	08/21/19	Effective Date:	08/21/19
Owner:	City of Coeur d'Alene, ID	Owner's Contract No.:	
Contractor:	Apollo	Contractor's Project No.:	
Engineer:	HDR	Engineer's Project No.:	10026247
Project:	CDA Tertiary Phase 2 Improvements	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description: Incidental Extra Work for SC1, 2, 3, Dewatering Sumps, and Field Piping Interferences.

SC1:

1) Replace existing ¾-inch hydrants located on the north and east sides of SC1 with new hydrants per attached hydrant detail. Run minimum 2-inch schedule 80 PVC from the 3-inch 3W mainline for all new hydrants.
2) Provide a new 3W source for the existing spray bar system with curb stop and valve box.
   a. The source tie-in shall be approximately 4 to 5 LF upstream of the new northern hydrant assembly.
   b. A hole shall be cored through the outer clarifier wall and using a swing joint from the main line piping, the spray bar piping shall pass through the wall and be secured with link seal.
   c. Discontinue the existing piping to the spray bar by removing and providing a removable cap on the original system. Coordinate with OWNER/RPR for other details as needed.
3) SC1 Dewatering Sump 1: 4-inch TD (p) routing change per Owner's request.
   a. Intercept existing common 4-inch tank drain from DW Sump 2 and 3 at the closest proximity to DW Sump 1 TD. This location will most likely be at the 4-inch elbow (see attached photos).
   b. Provide credit for approximately 40 LF of piping, fittings, excavation, and the core drill required that was originally detailed in the drawings.

SC2:

1) Replace existing southern hydrant with new hydrant per attachment.
   a. The source line for this hydrant may be 1-1/2-inch schedule 80 PVC as it was pre-existing.
2) Replace the existing hydrant on the east side with the new hydrant using 2-inch minimum schedule 80 PVC as the source from the mainline.
3) Remove existing 2-inch hydrant being used for water truck filling. Discontinue use below ground at the source.

SC3:

1) Provide two extra hydrants around the perimeter of SC3 per attachment.
   a. Yard Hydrant 1 shall be constructed per the attached detail.
   b. Yard Hydrant 2 shall be a combination yard hydrant and water truck fill point. Construction shall be per attached detail except all piping will be a minimum 2-inch through the hose bib.
2) Place concrete under the upper level access stairs at SC3 in lieu of asphalt and return the concrete to the concrete landing at SCB2.

Secondary Dewatering Sumps:

1) Dewatering Sumps #1 and #3: For safety and ease of access, the following sump piping changes have been requested by the city.
   a. Modify the 4-inch cleanout piping to delete the 4-inch plug valve shown on details 1 & 3 on sheet 001C503. Provide a blind flange with a 2-inch ball valve. Give the plug valve to the city.
   b. Provide a separate cored access hole in the lid for the 4-inch cleanout piping to pass through. This may require an offset in the 4-inch piping.
   c. Coordinate with the city on final height of the 2-inch ball valve above cored opening.
2) Dewatering Sump #2:
   a. Leave this sump as is. Leave the existing pump in place. Leave the wall attached gate valve in place.

b. Provide credit for the 6-inch plug valve as shown on the 6-inch TD(G) in P&IDs sheet 00Y609 at Dewatering Sump 2. This valve was inadvertently omitted.
c. Provide credit for all contract work not performed as well as material cost savings.

Field Piping Interferences:

1) The existing 6-inch WSS line and 10-inch RSS line from SC2 are in the way of the proposed 36-inch SI(G) #3 line. Relocate the existing 6-inch and 10-inch lines as needed, replacing plastic pipe with ductile.
2) The existing 6-inch SSC line from both SC1 and SC2 share a common line with the solids contact basins. Provide piping so the solids contact basins will continue to drain into DWS 2 and reroute the existing 6-inch SSC (g) lines to converge and travel to the new scum vault at SCB2. Provide as-built drawings showing new elevations as per additional survey work.
3) Remove and replace the existing metering vault that is located above the required excavation for the 36-inch SI(G). Maintain the flow meter for plant operations.
   a. Install a 2-inch schedule 80 PVC drain from the new vault to DW Sump 2. Include a 'P' trap. Discuss option with City to pipe directly to the SCB1 and avoid sump gases and delete the 'P' trap.
4) Provide credit for 'leaving as is' the 8-inch RSS from SCB1 to the 16-inch ML line per sheet 001C202, keynotes 10 & 11.

Grating Support for Secondary Distribution Box:

1) Provide grating support for grating spanning the weir gate cut-out. Use 2-inch x 2-inch SS or Galvanized angle the same length as the wall per field discussion with Tony.

Grating Support for Secondary Effluent Box:

1) Provide grating support for installed grating on the secondary effluent box per detail –inch SE Grating Detail-inch and per field discussion with Tony.

Note: All supply piping from the mainline to the hydrants shall be 2-inch minimum unless discussed otherwise.

Attachments:
Grating Support Detail

Purpose for Work Change Directive:
Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to:

☐ Non-agreement on pricing of proposed change.

☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price	$ TBD	Increase
Contract Time	TBD	days

Basis of estimated change in Contract Price:

☐ Lump Sum
☒ Cost of the Work (time and materials)
☐ Unit Price
☐ Other

	RECOMMENDED:	AUTHORIZED BY:	RECEIVED:
By:	Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title:	Project Manager	Wastewater Superintendent	
Date:	08/21/19	8/21/19	8/10/19

Work Change Directive No. 38

Date of Issuance:	06/15/19	Effective Date:	06/15/19
Owner:	City of Coeur d'Alene, ID	Owner's Contract No.:	
Contractor:	Apollo	Contractor's Project No.:	
Engineer:	HDR	Engineer's Project No.:	10026247
Project:	CDA Tertiary Phase 2 Improvements	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description:
1) Modify existing asphalt placement plan to incorporate new limits as discussed in the field and as detailed in the attachments.

Attachments:
1) 001C105, 001C204, 001C205

Purpose for Work Change Directive:
Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to:

- ☐ Non-agreement on pricing of proposed change.
- ☒ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price	$ TBD	increase
Contract Time	0	days

Basis of estimated change in Contract Price:

- ☐ Lump Sum
- ☒ Cost of the Work
- ☐ Unit Price
- ☐ Other

RECOMMENDED:	**AUTHORIZED BY:**	**RECEIVED:**
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title: Project Manager	Title: Wastewater Superintendent	Title: VP
Date: 06/15/19	Date: 9/11/2019	Date: 9/11/19

Staff Report

Date: October 1, 2019

To: Mayor Widmyer and the City Council

From: Troy Tymesen; City Administrator

Re: Deputy Fire Chief's Memorandum of Understanding (MOU)

Decision Point: Should the City Council approve the proposed Deputy Fire Chief MOU establishing compensation and benefits for a three-year contract?

History: The MOU shall be applicable to the three Deputy Fire Chief's for a term commencing October 1, 2019 and ending September 30, 2022. All prior resolutions between the City and the Deputy Fire Chief's will no longer be applicable.

Financial:
The following are the significant highlights regarding the MOU:

- → 3-year MOU;
- → Deputy Fire Chief's will be leveled in the City's compensation/classification plan at a Pay Grade 18 (3.95% overall increase for fiscal year 2019-2020, including the 2.5% COLA);
- → Increasing educational incentive pay to be equivalent with all other employee groups;
- → Increasing monthly HRA/VEBA contribution to $165.

Performance Analysis:
The proposed MOU with the Deputy Fire Chief's was discussed in good faith with the City, and the compensation and benefits included will provide a competitive package for the three Deputy Fire Chief's represented.

Decision Point/Recommendation:
City Council should approve the proposed Deputy Fire Chief MOU establishing compensation and benefits for a three-year contract.

RESOLUTION NO. 19-046

A RESOLUTION OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO, APPROVING A MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF COEUR D'ALENE AND THE DEPUTY FIRE CHIEFS.

WHEREAS, it is recommended that the City of Coeur d'Alene enter into a Memorandum of Understanding with the Deputy Fire Chiefs, pursuant to terms and conditions set forth the agreement, a copy of which is attached hereto as Exhibit "1" and by reference made a part hereof; and

WHEREAS, it is deemed to be in the best interests of the City of Coeur d'Alene and the citizens thereof to enter into such agreement;

NOW, THEREFORE,

BE IT RESOLVED by the Mayor and City Council of the City of Coeur d'Alene that the City enter into a Memorandum of Understanding with the Deputy Fire Chiefs in substantially the form attached hereto as Exhibit "1" and incorporated herein by reference, with the provision that the Mayor, City Administrator, and City Attorney are hereby authorized to modify said agreement to the extent the substantive provisions of the agreement remain intact.

BE IT FURTHER RESOLVED that the Mayor and City Clerk be and they are hereby authorized to execute such agreement on behalf of the City.

DATED this 1st day of October, 2019.

_____
Steve Widmyer, Mayor

ATTEST:

_____
Renata McLeod, City Clerk

Motion by _____, Seconded by _____, to adopt the foregoing resolution.

ROLL CALL:

COUNCIL MEMBER EVANS Voted _____

COUNCIL MEMBER ENGLISH Voted _____

COUNCIL MEMBER EDINGER Voted _____

COUNCIL MEMBER MILLER Voted _____

COUNCIL MEMBER MCEVERS Voted _____

COUNCIL MEMBER GOOKIN Voted _____

_____ was absent. Motion _____.

Memorandum of Understanding with Deputy Fire Chiefs

This understanding is made and entered into this 1st day of October, 2019, by and between the **City of Coeur d'Alene**, hereinafter referred to as the "City," and the **Fire Department Deputy Chiefs**, hereinafter referred to as "Deputy Chiefs." The understanding shall be applicable to Deputy Chiefs for a term commencing October 1, 2019, and ending September 30, 2022, except as specifically provided herein. All prior agreements between the City and Deputy Chiefs are superseded by this understanding and are no longer applicable. If a new agreement has not been reached between the City and the Deputy Chiefs upon expiration of this agreement, this agreement will remain in effect and unchanged until a new agreement is reached.

Section 1. Purpose/Intent

The purpose of this document is to create an understanding that specifically pertains to Fire Department Deputy Chiefs, who are FLSA "exempt employees." Deputy Chiefs perform work under the day-to-day guidance of the Fire Chief.

Section 2. Definitions

a) Fire Department Deputy Chief shall mean an employee responsible for the management of one or more major divisions within the Fire Department.

b) Administrative exempt employee shall be the Fair Labor Standards Act classification under which Deputy Chiefs will be regulated. As such, Deputy Chiefs shall be paid on a salary basis and shall not be eligible for compensatory or overtime pay.

Section 3. Conditions of Employment

a) Residency: Deputy Chiefs must disclose to the Fire Chief any intent to change residency because Deputy Chiefs, at the discretion of the Fire Chief, may be required to reside within twenty (20) minutes of City limits.

b) Duties: Deputy Chiefs' duties and responsibilities shall be in accordance with the adopted job description, as well as all duties assigned by the Fire Chief.

c) Application of Personnel Rules: Deputy Chiefs shall be exempt from the personnel rules except the following and as may be determined by City Council thereafter.

1. Rule 1, Section 11, entitled "Employee Standards of Conduct"
2. Rule 11, Section 4, entitled "Sick Leave"
3. Rule 11, Section 5, entitled "Bereavement Leave," allowing for up to 40 hours of leave with pay
4. Rule 11, Section 6, entitled "Military Leave"

5. Rule 11, Section 8, entitled "Witness and Jury Leave"
6. Rule 11, Section 10, entitled "Holidays"
7. Rule 11, Section 11, entitled "Family and Medical Leave"
8. Rule 11, Section 12, entitled "Retirement Consultation Benefit"
9. Rule 14, Disciplinary Action – Layoff – Resignation"
10. Rule 15, entitled "Grievance Procedures"
11. Rule 16, entitled "Personnel Appeals Procedures"
12. Rule 18, Section 5, entitled "City Property"
13. Rule 19, entitled "Authorization and Procedures for Expense Reimbursement"
14. Rule 21, entitled "Drug/Alcohol Policy"
15. Rule 22, entitled "Prohibition Against Harassment and Violence in the Workplace"
16. Any rule specifically applicable to Fire Department Deputy Chiefs.

d) In addition to the personnel rules listed above, Deputy Chiefs shall abide by City policies and procedures approved by the City Council and any additional policies and procedures adopted by resolution not incorporated in the personnel rules.

Section 4. Benefits

a) Vacation Accruals: Vacation accruals shall be as follows:

1. First through third year of service: 8 hours of leave accrued for each complete month of service.
2. Fourth through fifth year of service: 12 hours of leave accrued for each complete month of service.
2. Sixth through tenth year of service: 16 hours of leave accrued for each complete month of service.
3. After ten (10) or more years of service: 20 hours of leave accrued for each complete month of service.

Vacation usage must be reported on time records in half day increments. Maximum accumulation will not exceed three-hundred-sixty (360) hours as of October 1. Deputy Chiefs with more than 360 hours vacation leave as of each October 1 shall be allowed to utilize leave by January 15th of the following calendar year unless otherwise specifically approved by the Fire Chief and Human Resources Director**.**

b) Sick Leave: As FLSA exempt employees, Deputy Chiefs shall continue to accrue sick leave according to Rule 11, Section 4 (ten hours per month). Sick leave usage must be reported on time records in half day increments. Deputy Chiefs shall be eligible to participate in the sick leave bank. Deputy Chiefs shall not receive compensation for accumulated sick leave unless the employee retires from the City of Coeur d'Alene pursuant to the provisions of Idaho Code. Sick leave options 1 and 2, found in Rule 11, Section 4, are applicable. If Option 2 is selected, the Deputy Chief shall be paid for forty-one percent (41%) of the accrued sick leave hours.

c) Compensatory Time (comp time): As FLSA exempt employees, Deputy Chiefs are not eligible for comp time. Any existing comp time that the employee has accrued prior to the adoption of this agreement or upon appointment shall be used at a rate of at least 40 hours per calendar year.

d) Compensation/salary increases: Deputy Chiefs shall be paid a salary within the City of Coeur d'Alene adopted compensation/classification plan. Deputy Chiefs' identified range in the compensation/classification plan is a Pay Grade 18.

EMT-Paramedic Certification Differential is no longer applicable to the Deputy Chief classification. Deputy Chiefs shall receive annual salary increases based on a performance evaluation and recommendation from the Fire Chief. Deputy Chiefs will receive a salary increase ranging from 5% to 8% if the performance is rated standard or above. If performance is below standard, the Deputy Chief is not eligible for any increase until performance is up to standard. A salary increase will only be granted following a minimum of twelve consecutive months of service from the previous performance salary increase and salary increases will continue, not to exceed the maximum salary of the compensation/classification plan, Pay Grade 18, as follows:

Deputy Fire Chief (Exempt)	**Minimum**	**Maximum**
FY 2019 – 2020	$39.65/$6,872/$82,472	$55.78/$9,668/$116,022
FY 2020 – 2021	$40.64/$7,044/$84,528	$57.17/$9,910/$118,913
FY 2021 – 2022	$41.66/$7,220/$86,644	$58.60/$10,157/$121,888

The above minimum and maximum of the compensation/classification plan includes the agreed upon 2.5% cost of living increase.

Deputy Chiefs who earn degrees reasonably related to their job function from accredited colleges outside the City's tuition reimbursement program/plan that is not a requirement of the position shall be paid the following which is in addition to base wage:

Associate degree:	$.19 hour
Bachelor's degree:	$.37 hour
Master's degree:	$.47 hour

e) Fringe Benefits: Deputy Chiefs shall receive fringe benefits as adopted establishing wages and benefits for employees who are not represented by an employee organization, limited to the following benefits only: Public Employees Retirement System of Idaho (PERSI), medical, dental, and vision insurance and long-term disability insurance.

f) Health Reimbursement Arrangement (HRA)/VEBA: The City will contribute One Hundred Sixty-Five Dollars ($165.00) per month to each Deputy Chiefs HRA/VEBA Plan.

The City agrees to contribute One Thousand Dollars ($1000) annually for an individual employee deductible and Two Thousand Dollars ($2000) annually for an employee family deductible into the Deputy Chief's HRA/VEBA plan. The contribution will be deposited into the
Deputy Chief's HRA/VEBA plan on a monthly basis with the applicable deductible contribution divided by the applicable months of eligible coverage.

If a Deputy Chief elects to opt out of the City's medical insurance plan, the Deputy Chief's premium on the selected medical insurance plan that the City would have paid for single coverage will be placed in the Deputy Chief's HRA/VEBA plan. Proof of other medical insurance, not provided by the City, must be provided by the Deputy Chief.

g) Life Insurance: The City will provide life insurance for Deputy Chiefs and dependents as follows:
   1) Deputy Chief life insurance shall be $50,000;
   2) Dependent life insurance, $1,000;
   3) Accidental death and dismemberment insurance, Deputy Chief only, shall be $50,000.

h) Tuition Reimbursement: The City agrees to reimburse Deputy Chiefs one hundred percent (100%) with an "A" or "B" grade and eighty (80%) with "C" grade for the cost of approved job-related educational courses at accredited colleges and universities which are directly related to the Deputy Chief's present position or expected promotional position, but which courses are not required by the City and are attended upon the Deputy Chief's personal volition. All books, supplies and travel expenses shall be paid by the Deputy Chief. The courses shall be approved for reimbursement by the Fire Chief and Human Resources Director (30) days prior to the start of the course.

   If a Deputy Chief voluntarily separates form the City's employment within two years of receipt of tuition reimbursement, he/she agrees to reimburse the City in full for the total amount of tuition reimbursement paid by the City to the Deputy Chief.

i) Miscellaneous: The Fire Chief shall authorize car assignments. Any personal use of a City assigned vehicle may be taxable to the Deputy Chief per IRS Publication 15-B.

j) Social Security Option: The City agrees to contribute 6.2% of the Deputy Chief's compensation into their PERSI Choice plan with a required minimum employee match of 1%. This applies to any compensation that would have otherwise been taxable social security wages.

   If the Social Security tax is abolished, the City shall match the Deputy Chief's percentage of wages, up to the maximum of the City's previous portion of the Social Security tax, into the above allowable plans.

Section 5. Supervision

Deputy Chiefs shall be supervised by the Fire Chief and subject to disciplinary action as deemed appropriate by the Fire Chief as per City Rules and Regulations for just cause.

IN WITNESS WHEREOF, the Mayor and City Clerk of the City of Coeur d'Alene have executed this Memorandum of Understanding on behalf of said City, and the Deputy Chief has caused the same to be signed, the day and year first above written.

CITY OF COEUR D'ALENE,
KOOTENAI COUNTY, IDAHO

By: _____
Steve Widmyer, Mayor

ATTEST:

By: _____
Renata McLeod, City Clerk

DEPUTY CHIEFS

By: _____
Thomas Greif

By: _____
William Deruyter

By: _____
Lucas Pichette

Date: October 1, 2019

To: Mayor Widmyer and the City Council

From: Troy Tymesen; City Administrator

Re: Police Captains Memorandum of Understanding (MOU)

Decision Point: Should the City Council approve the proposed Police Captain MOU establishing compensation and benefits for a two-year contract?

History: The MOU shall be applicable to the two Police Captains for a term commencing October 1, 2019 and ending September 30, 2021. All prior resolutions between the City and the Police Captains will no longer be applicable.

Financial:
The following are the significant highlights regarding the MOU:

- → 2-year MOU;
- → Police Captains will be leveled in the City's compensation/classification plan at a Pay Grade 19 (5.84% overall increase for fiscal year 2019-2020, including the 2.5% COLA);
- → Add benefit for Administrative Call-Out Compensation for up to 50 hours per year payed at the Police Captains gross hourly rate of pay and placed into their HRA/VEBA plan.

Performance Analysis:
The proposed MOU with the Police Captains was discussed in good faith with the City, and the compensation and benefits included will provide a competitive package for the two Captains represented.

Decision Point/Recommendation:
City Council should approve the proposed Police Captain MOU establishing compensation and benefits for a one year contract.

RESOLUTION NO. 19-047

A RESOLUTION OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO, APPROVING A MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF COEUR D'ALENE AND THE POLICE DEPARTMENT CAPTAINS.

WHEREAS, it is recommended that the City of Coeur d'Alene enter into a Memorandum of Understanding with the Police Department Captains, pursuant to terms and conditions set forth the agreement, a copy of which is attached hereto as Exhibit "1" and by reference made a part hereof; and

WHEREAS, it is deemed to be in the best interests of the City of Coeur d'Alene and the citizens thereof to enter into such agreement;

NOW, THEREFORE,

BE IT RESOLVED by the Mayor and City Council of the City of Coeur d'Alene that the City enter into a Memorandum of Understanding with the Police Department Captains in substantially the form attached hereto as Exhibit "1" and incorporated herein by reference, with the provision that the Mayor, City Administrator, and City Attorney are hereby authorized to modify said agreement to the extent the substantive provisions of the agreement remain intact.

BE IT FURTHER RESOLVED that the Mayor and City Clerk be and they are hereby authorized to execute such agreement on behalf of the City.

DATED this 1st day of October, 2019.

_____
Steve Widmyer, Mayor

ATTEST:

_____
Renata McLeod, City Clerk

Motion by _____, Seconded by _____, to adopt the foregoing resolution.

ROLL CALL:

COUNCIL MEMBER MILLER Voted _____

COUNCIL MEMBER MCEVERS Voted _____

COUNCIL MEMBER GOOKIN Voted _____

COUNCIL MEMBER EVANS Voted _____

COUNCIL MEMBER ENGLISH Voted _____

COUNCIL MEMBER EDINGER Voted _____

_____ was absent. Motion _____.

Memorandum of Understanding

This understanding is made and entered into this 1st day of October, 2019, by and between the **City of Coeur d'Alene**, hereinafter referred to as the "City," and the **Police Department Captains**, hereinafter referred to as "Captains." The understanding shall be for a term commencing October 1, 2019, and ending September 30, 2021, except as specifically provided herein.

Section 1. Purpose/Intent

The purpose of this document is to create an understanding that specifically pertains to Captains, who are FLSA "exempt employees." Captains perform work under the day-to-day guidance of the Police Chief.

Section 2. Definitions

(a) Police Department Captains shall mean employees responsible for the management of one or more major divisions within the Police Department with a rank of captain.

(b) Administrative exempt employee shall be the Fair Labor Standards Act classification under which Captains will be regulated. As such, Captains shall be paid on a salary basis and shall not be eligible for compensatory or overtime pay.

Section 3. Conditions of Employment

(a) Residency: Captains must disclose to the Police Chief any intent to change residency because Captains, at the discretion of the Police Chief, may be required to reside within twenty (20) miles of City limits.

(b) Duties: A Captain's duties and responsibilities shall be in accordance with the adopted job description, as well as all duties assigned by the Police Chief.

(c) Application of Personnel Rules: Captains shall be exempt from the personnel rules except the following and as may be determined by City Council hereafter.

1. Rule I, Section 11, "Standards and Conduct"
2. Rule 11, Section 43, "Sick Leave"
3. Rule 11, Section 5, "Bereavement Leave," allowing for up to 40 hours of leave without pay
4. Rule 11, Section 6, "Military Leave"
5. Rule 11, Section 8, "Witness and Jury Leave"
6. Rule 11, Section 10, "Holidays"
7. Rule 11, Section 11, "Family and Medical Leave"
8. Rule 11, Section 12, "Retirement Consultation Benefit"

9. Rule 14, “Disciplinary Action – Layoff – Resignation”
10. Rule 15, "Grievance Procedures"
11. Rule 16, “Personnel Appeals Procedures”
12. Rule 18, Section 5, " City Property"
13. Rule 19, "Authorization and Procedures for Expense Reimbursement"
14. Rule 21, "Drug/Alcohol Policy"
15. Rule 22, "Prohibition Against Harassment and Violence in the Workplace”
16. Any other rule that, by its terms, is specifically applicable to Police Department Captains.

(d) In addition to the personnel rules listed above, Captains must follow all policies and procedures applicable to them that are approved by the City Council by resolution.

Section 4. Benefits

(a) Vacation Accruals: Vacation accruals shall be as follows:

1. First through third year of service: Eight (8) hours for each month of service.
2. Fourth through fifth year of service: Twelve (12) hours for each month of service.
3. Sixth through tenth year of service: Sixteen (16) hours for each month of service.
4. After ten (10) or more years of service: Twenty (20) hours for each month of service.

Vacation usage must be reported on time records in half day increments. A Captain with more than three hundred sixty (360) hours vacation leave as of each October 1 (the first day of the City’s fiscal year) shall utilize the excess leave before January 15 of the following calendar year, unless otherwise approved by the Police Chief and by the Human Resources Director.

Vacation Accrual Credit for Past Work Experience: Captains may be given credit for vacation accrual based on past similar work experience. In order to qualify, the Captain must provide their previous job description and any other relevant information to the Human Resources Director who will review the information to determine if the prior position was sufficiently similar to the adopted job description for the position to warrant vacation accrual credit for the past work experience.

(b) Sick Leave: As an FLSA exempt employee, Captains shall continue to accrue sick leave according to Rule 11, Section 4 (ten hours per month). Sick leave usage must be reported on time records in half day increments. Captains shall be eligible to participate in the sick leave bank. Captains shall not receive compensation for accumulated sick leave unless the employee retires from the City of Coeur d'Alene pursuant to the provisions of Idaho Code. Sick leave options 1 and 2, found in Rule 11, Section 4, are applicable.

(c) Compensatory Time (comp time): As an FLSA exempt employees, Captains are not eligible for comp time.

(d) Compensation/Performance Based Salary Increases: Captains shall be paid a salary within the City of Coeur d'Alene adopted compensation/classification plan. Captains' identified range in the compensation plan is a Pay Grade 19.

Captains shall receive annual salary increases based on a performance-based evaluation from the Police Chief. Captains will receive a salary increase ranging from 5% to 8% if the performance is rated an overall average or above rating. If performance is below average, a Captain is not eligible for any increase until performance is at a minimum of an overall average. A salary increase will only be granted following a minimum of twelve consecutive months of service from the previous performance salary increase and salary increases will continue, not to exceed the maximum salary of the pay/classification plan as follows:

Police Captain (Exempt)	**Minimum**	**Maximum**
FY 2019 – 2020:	$44.40/$7,696/$92,352	$62.47/$10,828/$129,937
FY 2020 – 2021:	$45.51/$7,888/$94,660	$64.03/$11,098/$133,182

The above minimum and maximum of the compensation/classification plan includes the agreed upon 2.5% Cost of Living Adjustment (COLA). Any other changes to the compensation/classification plan will only be made if approved by the Captains and the City Administrator.

Captains who earn a degree reasonably related to their job function from accredited colleges shall be paid an additional amount based upon the following:

Associate degree:	$.19 per hour
Bachelor's degree:	$.37 per hour
Master's degree:	$.47 per hour

(e) Additional Benefits: Captains shall receive the same Social Security (F.I.C.A.), Public Employees Retirement System of Idaho (PERSI), medical, dental, and vision insurance, and long-term disability insurance authorized by the City Council for the employees represented by the Police Association.

(f) Health Reimbursement Arrangement (HRA/VEBA): The City will contribute one hundred thirty-three dollars ($133.00) per month to each Captain's HRA/VEBA Plan.

If the Captain is covered on the City of Coeur d'Alene's medical plan, the City Agrees to contribute One Thousand Dollars ($1,000) annually for an individual employee deductible and Two Thousand Dollars ($2,000) annually for an employee family

deductible into the Captain's HRA/VEBA plan. The contribution will be deposited into the Captain's HRA/VEBA plan on a monthly basis with the applicable deductible contribution divided by the applicable months of eligible coverage.

If a Captain elects to opt out of the City's medical insurance plan, the Captain's premium on the selected medical insurance plan that the City would have paid for single coverage will be placed in the Captain's HRA/VEBA. Proof of other medical insurance, not provided by the City, must be provided by the Captain.

A Captain who retires from the City of Coeur d'Alene pursuant to the provisions of Idaho Code will receive a lump sum payment to the Captain's HRA/VEBA plan for vacation and eligible sick leave balances.

(g) Administrative Call-Out Compensation for Exempt Police Captains: The City agrees to compensate Captains for up to 50 hours per fiscal year in recognition of unplanned hours worked outside of a typical exempt employee work schedule. Hours shall be recorded and approved by the Police Chief and compensation shall be based on Captains' gross hourly rate of pay and placed into their HRA/VEBA plan.

(h) Life Insurance: The City will provide life insurance for Captains and dependents as follows:

1) Captain life insurance shall be $50,000;
2) Dependent life insurance, $1,000;
3) Accidental death and dismemberment insurance, Captain only, shall be $50,000.

(i) Tuition Reimbursement: The City agrees to reimburse Captains at the in-state tuition rates for public education institutions in Idaho. The City will reimburse one hundred percent (100%) with an "A" or "B" grade and eighty (80%) with a "C" grade for the cost of approved job-related educational courses at accredited colleges and universities which are directly related to the Captain's present position or expected promotional position, but which courses are not required by the City and are attended upon the Captain's personal volition. All books, supplies and travel expenses shall be paid by the Captain. The courses shall be approved for reimbursement by the Chief of Police thirty (30) days prior to the start of the course and forwarded to the Human Resources Director.

If a Captain voluntarily separates from the City's employment within two years of receipt of tuition reimbursement, he/she agrees to reimburse the City in full for the total amount of tuition reimbursement paid by the City to the Captain.

(j) Miscellaneous: The Police Chief shall authorize car assignments. Any personal use of a City assigned vehicle may be taxable to the Captain per IRS Publication 15-B.

Section 5. Supervision

Captains shall be supervised by the Police Chief and subject to disciplinary action as deemed appropriate by the Police Chief.

IN WITNESS WHEREOF, the Mayor and City Clerk of the City of Coeur d'Alene have executed this Memorandum of Understanding on behalf of said City, and the Captains have caused the same to be signed, the day and year first above written.

CITY OF COEUR D'ALENE,
KOOTENAI COUNTY, IDAHO

By: _____
Steve Widmyer, Mayor

ATTEST:

By: _____
Renata McLeod, City Clerk

CAPTAINS

By: _____
David A. Hagar

By:_____
Lee Brainard

STAFF REPORT

Date: **October 1, 2019**

From: **Bill Greenwood Parks & Recreation Director**

SUBJECT: **Public Space for the Atlas Waterfront Bids** (*Council Action Required)*

DECISION POINT:
Should Council accept the lowest responsive base bid for the public space at the Atlas Waterfront project or reject the bid and authorize staff to negotiate with contractor(s) for pricing within the available budget?

HISTORY:
The City purchased the Atlas Mill site with the intent to reserve the waterfront area as public open space. Considerable public input helped direct the public space design to be focused on a natural style park with separate pedestrian and wheeled vehicle trails, water accesses, adequate parking and a historic lumber mill themed restroom/picnic shelter and park maintenance storage building. The project also restores a historic beach and provided several "add alternate" options, if funding permitted, including a dog park, ADA swim access and kayak launch, site furniture, log booms for swimming safety, and others.

FINANCIAL ANALYSIS:
The available construction funding from ignite CDA is $6,000,000. The City is not currently providing project funding. One responsive bid was received from Cameron Reilly Construction with a base bid of $6,602,489.90 and Additive Alternates totaling $1,230,297. The base bid is $602,489.90 over the available budget.

PERFORMANCE ANALYSIS:
The Engineer's estimate is $6,053,802.70 and $1,222,888 for the base bid and Additive Alternates, respectively. T. LaRiviere submitted a bid less than a minute after the bids were closed and it was not able to be considered. T. LaRiviere authorized the City to review their bid pricing. T. Lariviere's base price was $5,408,603.10 and additive alternate pricing totaled $945,930.40. Both the Engineer's estimate and the T. LaRiviere pricing indicate lower cost pricing is likely available to the City on the open market.

The Legal Department has determined that Idaho Code 67-2805(2)(a)(viii) and (ix) authorizes the Council to reject all bids, and after finding it to be a fact, pass a resolution declaring that the project can be performed more economically by purchasing the goods and services on the open market. The Engineer's Estimate and the T. LaRiviere Pricing indicate that the project can be performed more economically by purchasing the goods and service on the open market.

DECISION POINT / RECOMMENDATION:
1. Council should reject the Cameron Reilly Bid because it exceeds the available project funding.
2. Council should authorize staff to negotiate a contract with the bidders who submitted or attempted to submit bids, in order to determine if the open market purchasing will result in pricing the is below the available budget.

RESOLUTION NO. 19-048

A RESOLUTION OF THE CITY OF COEUR D'ALENE, KOOTENAI COUNTY, IDAHO REJECTING ALL BIDS FOR THE ATLAS WATERFRONT PROJECT AND AUTHORIZING STAFF TO NEGOTIATE WITH CONTRACTOR(S) FOR PRICING WITHIN THE AVAILABLE BUDGET.

WHEREAS, the invitation for bids for the Atlas Waterfront Project was duly published and bids were opened in the office of the City Clerk at 2:00 p.m., the 24th day of September, 2019; and,

WHEREAS, it appears that no responsive bids within the available budget were received; and,

WHEREAS facts have been presented documenting that the project can be performed more economically by purchasing the necessary goods and services on the open market;

NOW, THEREFORE,

BE IT RESOLVED, by the Mayor and City Council of the City of Coeur d'Alene that all bids be and the same are hereby rejected.

BE IT FURTHER RESOLVED, that the Mayor and City Council hereby make a finding that the project can be performed more economically by negotiating with contractors to purchase the necessary goods and services on the open market.

BE IT FURTHER RESOLVED, that the Parks & Recreation Department be and is hereby directed to negotiate with contractors to purchase the necessary goods and services for the project on the open market.

DATED this 1st day of October, 2019.

_____
Steve Widmyer, Mayor

ATTEST:

_____
Renata McLeod, City Clerk

Motion by _____, Seconded by _____, to adopt the foregoing resolution.

ROLL CALL:

COUNCIL MEMBER MILLER Voted _____

COUNCIL MEMBER EVANS Voted _____

COUNCIL MEMBER GOOKIN Voted _____

COUNCIL MEMBER ENGLISH Voted _____

COUNCIL MEMBER MCEVERS Voted _____

COUNCIL MEMBER EDINGER Voted _____

_____ was absent. Motion _____.