Table 7A: Possible Permitting Requirements for Pump Stations

This table is a general list of known and possibly required permits and plan approvals for a pump station. Completeness of the list is not guaranteed. The absence of information shall not relieve the Design Engineer or Contractor of the responsibility for determining and verifying the extent of permits required and for obtaining applicable permits.

Pump Station Construction Permitting Requirements		
Agency Providing Permit	***Permit/Document Type***	***Permittee***
Federal Permit/Authorizations		
U.S. Forest Service, Bureau of Land Management, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service Military Installations	Special Use Permit	Developer/Owner/Contractor
	Right Of Way/Easement Acquisition	Developer/Owner/Contractor
	Timber Sales Contract	Developer/Owner
	Record of Decision	Developer/Owner
	Section 106 and Class III Cultural Resource Survey Concurrence	Developer/Owner
	Tribal Review and Concurrence (If Section 106 is required)	Developer/Owner
	Approval of: Biological Assessment, Biological Evaluation, Biological Report, Environmental Assessment, Environmental Impact Statement, Section 106 –Class III, Cultural Survey, Archeological/Paleontological Survey, Environmental Justice, vegetation survey, Site development plan approval, mitigation plans, Letter of consent Agreement, Memorandum Of Understanding and Memorandum Of Agreement.	Developer/Owner
	Annual Operating Plan/Forest Operating Plan	Developer/Owner/Contractor
	Long Term Occupancy Agreement	Developer/Owner
	Migratory Bird Treaty Act Survey	Developer/Owner/Contractor
	Prebles' Meadow Jumping Mouse Clearance	Developer/Owner/Contractor
	Endangered Species Act Section 7 or 10 Consultation concurrence (if required)	Developer/Owner/Contractor
	Fish and Wildlife Coordination Act Compliance	Developer/Owner/Contractor
U.S. Army Corps Of Engineers (USACE)	Section 404, Wetland delineation	Developer/Owner/Contractor
EPA Region 8	NPDES Stormwater Permit/ SWPPP (If on Federal land)	Contractor
Federal Aviation Administration (FAA)	FAA Form 7460-1, Notice of Intent (OE notice), Record of Decision, and Authorization to Proceed Finding of No Significant Impact	Developer/Owner/Contractor
Environmental Protection Agency (EPA)	Oil Pollution Prevention Regulations (40 CFR Part 112) / Spill Prevention, Control, and Countermeasure (SPCC) Plan	Developer/Owner must comply; however, formal permit is not needed.
	"General Duty Clause" under the Clean Air Act - Section 112(r)(1)	Developer/Owner must comply; however, formal permit is not needed.
State Permit/Authorizations		

Colorado Department Of Transportation (CDOT)	Transportation Permit	Contractor
	Utility/Special Use Permit	Contractor
	State Highway Access Permit//Right of Way Permit	Contractor
Colorado Parks & Wildlife (CPW)	Wildlife Certification (SB40) (If working in CDOT/CPW jurisdiction Fish and Wildlife Management Plan Memorandum of Agreement/Understanding	Developer/Owner/Contractor
Colorado State Engineer's Office (SEO)	Well Permit (If required)	Developer/Owner/Contractor
Colorado Department of Public Health & Environment (CDPHE), Air Quality Control Division (AQCD)	Air Pollution Emission Notice (APEN) and/or Construction Permit	Contractor
	Emergency Back-Up Diesel Generator Permit	Developer/Owner/Contractor
	Hazardous Waste Management Plan	Contractor
	Asbestos Abatement Certification, Certification of No Asbestos Containing Building Materials (ACBM) used, Management Plan,	Contractor
	Miscellaneous Permits: Demolition Sandblasting Hot Weld Spray painting Portable Transit Hot Mix Facility Fuel Use and Storage Tanks Generators, and Reciprocating Internal combustion engines	Contractor
Colorado Department of Public Health & Environment (CDPHE), Water Quality Control Division (WQCD)	Design/Location Plan Approval for the Construction of a Waterworks facility	Developer/Owner/Contractor
	Permit for Stormwater Discharges Associated with Construction Activity /Construction Stormwater Permit/Stormwater Management Plan (SWMP)	Contractor
	Construction Dewatering Permit	Contractor
	Hydrostatic Testing of Pipelines, Tanks, and Similar Vessels- General Permit	Contractor
	Clean Water Act, Section 401 Water Quality Certification	Developer/Owner
	Minimal Industrial Discharge Permit	Developer/Owner
Colorado Department Of Labor And Employment (CDLE) - Division Of Oil And Public Safety (OPS)	Storage Tank Permit(s), Inspections, & Registration (7 CCR 1101-14)	Developer/Owner/Contractor
Colorado Department of Public Health & Environment (CDPHE), Hazardous Materials & Waste Management Division (HMWMD)	Solid Waste Regulations - Section 9 - Waste Impoundments (6 CCR 1007-2).	Developer/Owner/Contractor
Local County Authorizations		
El Paso County (EPC): • **Development Services** • **Public Health** • **Other Counties should be considered**	Site/Location Approval Development Plan Approval	Developer/Owner
	Drainage Plan	Developer/Owner
	Construction Activity Air Permit	Contractor
	Erosion & Stormwater Quality Control Permit (ESQCP)/Stormwater Management Plan (SWMP)	Contractor

El Paso County (EPC) cont.:	Haul Route Plan	Contractor
	Building Erosion & Stormwater Quality Control Plan (BESQCP)	Developer/Owner
	Working within ROW Permit	Contractor
	Road Sign Permit	Developer/Owner/Contractor
	Special Transport Permit	Contractor
	Temporary Access Permit	Contractor
	On Site Wastewater System	Developer/Owner
	Traffic Plan	Contractor
	Electrical Permit	Contractor
	Permanent Driveway Permit	Contractor
	Temporary Driveway Permit	Contractor
	Special Transportation Permit	Contractor
	Common Use Agreement	Contractor
	Submittal of Design Drawings	Contractor
Pikes Peak Regional Building (PPRB)	Building Permit and others as required	Contractor
	Floodplain Development Permit (If in 100 Year Floodplain designation)	Developer/Owner
	Wrecking Permit	Contractor
Local Municipality Authorizations		
City of Colorado Springs, • **City Engineering** • **Land Use Review Division office** • **Real Estate Office** • **Other Cities/towns should be considered**	Approval of Location (if in City Jurisdiction	Developer/Owner/Contractor
	Land and/or Easement Acquisitions: Environmental Review or Audit per The City of Colorado Springs Procedure Manual for the Acquisition and Disposition of Real Property Interests	Developer/Owner
	Drainage Plan Approval	Developer/Owner
	Zoning Approval	Developer/Owner
	Grading and Erosion and Stormwater Quality Control Plan Approval /Stormwater Management Plan (SWMP)	Developer/Owner/Contractor
	Transportation Permit	Contractor
	Temporary Use Permit	Contractor
	Access Permit	Contractor
	Right of Way Construction Excavation Permit	Contractor
	Traffic Control Plan/Permit	Contractor
	Sub-Surface revocable Permit	Contractor
	Concrete Permit	Contractor
	Oversize loads Permit	Contractor
	Airport Overlay, Streamside Overlay, Hillside Overlay Review and Approval (If required)	Developer/Owner
City of Colorado Springs, Park & Recreation Department	Parks and Trails access permit	Contractor
City of Colorado Springs, Forester	Tree removal and/or trimming permit	Developer/Owner/Contractor
Fire Department	Notification and Permit	Contractor
	Temporary Installation of Fuel Storage Tanks with Secondary Containment	Contractor
	Development Plan Review and Approval	Developer/Owner
	Storage Tank Permitting	Developer/Owner
	Hazardous Materials Management Plan	Developer/Owner
	Master Plan Amendment	Developer/Owner
Utility Services	Utility Service Taps	Contractor
	Development Plan Review and Approval	Contractor

	Line and Crossing Agreement	Developer/Owner
	Water Utility Disinfection and Discharge Plan Temporary Authorization to Discharge	Contactor
Colorado Springs Utilities, Environment, Safety & Health **Colorado Springs Utilities, Environment, Safety & Health cont.**	Bulk Material, New Chemical or Product Review and Approval	Contractor
	Job Hazard Analysis and Site Specific Safety Plan	Contractor
	Facility Stormwater Management Plan Development	Developer/Owner
	Facility Spill Prevention Countermeasure Control Plan Review	Developer/Owner
	Master Plan Amendment	Developer/Owner
	Contractor Environmental Management Survey	Contractor
Other Agencies & Entities	Pipeline Encroachment Agreements and RPI	Developer/Owner
	Programmatic Agreements	Developer/Owner
	Memorandum of Understanding Agreements Memorandum of Agreement	Developer/Owner

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CHAPTER 8
Nonpotable Water

CHAPTER 8

Nonpotable Water

8.1 General

The purpose of Chapter 8 is to establish criteria for Nonpotable Water use and for designing and constructing Nonpotable Water Distribution Systems, Service Lines, and irrigation systems that are supplied with Nonpotable Water from Colorado Springs Utilities. These criteria are not intended for the design of Raw Water Transmission and Collection Systems.

8.2 Nonpotable Water

Colorado Springs Utilities' Nonpotable Water is defined as water that is not treated to approved drinking water standards and is not suitable, nor intended for human consumption (to include drinking, bathing, showering, cooking, dishwashing, or maintaining oral hygiene), but is produced and delivered to Users for irrigation, commercial and industrial uses. Nonpotable Water includes treated wastewater (Reclaimed Water), raw (untreated) Groundwater, and raw (untreated) surface water. The Design Engineer shall be responsible for assessing the water quality of the Nonpotable Water to ensure its suitability for the intended use.

A. Authorized Uses

Nonpotable Water is authorized for:

- Landscape irrigation of areas accessible to the public including, but not limited to, parks, greenbelts, golf courses and common areas at residential building developments (townhomes, condominiums, and apartments), commercial/business parks, and other similar complexes
- Non-resident controlled landscape irrigation at single family homes (i.e. Home Owners Associations)
- Agricultural irrigation including non-food crop and silviculture
- Industrial uses, including but not limited to, evaporative and non-evaporative industrial processes, wash water applications, and non-discharging construction and road maintenance activities
- Other uses as approved on a case-by-case basis by Colorado Springs Utilities

B. Non-Authorized Uses

Nonpotable Water is not authorized for:

- Resident-controlled landscape irrigation (excluding privately owned and permitted wells)
- Fire protection
- Potable use
- Other uses not specifically approved by Colorado Springs Utilities

8.3 Enforcement

Pursuant to City Code § 12.4.1109, Colorado Springs Utilities are authorized to take appropriate action, up to and including discontinuation of service, against any Reclaimed Water User who does not meet the requirements of these standards, CDPHE *Regulation No. 84*, or the User's *Notice of Authorization* (*NOA*).

8.4 Cost Responsibilities

Unless otherwise provided by written agreement with Colorado Springs Utilities, all potential Users of the Nonpotable Water System are responsible for all costs associated with acquiring and utilizing Nonpotable Water service including, but not limited to engineering costs, Nonpotable Distribution Main extensions, pump stations, pressure regulating stations, materials, on-site material conversion costs, signage, and other costs and development charges associated with the requirements are outlined in these *Water LESS*, and *Utilities Rules and Regulations*.

8.5 Conditions of Use

Unless otherwise specified in these *Water LESS*, all Users of Nonpotable Water, regardless of water source, must adhere to the general requirements for use as outlined in CDPHE *Regulation No. 84*. Additionally, the following requirements apply:

A. Operational Requirements for Landscape Irrigation

Operation of a User's irrigation system, including valves, outlets, couplers, and sprinkler heads, and commercial or industrial equipment utilizing Nonpotable Water, shall be performed only by personnel authorized by the User and trained in accordance with Section 8.5F of these *Water LESS*.

Users of Nonpotable irrigation systems shall:

- Implement measures to minimize direct contact of Nonpotable Water System with the public or nearby public equipment such as occupied buildings, domestic drinking water facilities, facilities where food is being prepared for human consumption, playground equipment, domestic water wells and reservoirs, thoroughfares, and property and facilities not under the control of the User
- Minimize ponding and runoff
- Confine spray and windblown spray to the designated irrigation areas to minimize public contact with Nonpotable Water
- Apply Nonpotable Water at Agronomic Rates to protect surface and Groundwater quality
- Schedule watering times during periods when public facilities are not in use
- Repair all leaks immediately
- Implement other public protection measures (i.e. locking hose bibs, segregating equipment, etc.) as determined and communicated by Colorado Springs Utilities

B. Operational Requirements for All Other Users (including Construction Watering)

- All Nonpotable Water tank trucks, hoses, Nonpotable Water meters, and Backflow devices must be dedicated only for use on the Nonpotable Water system.
- To ensure adequate system operation, a 2-inch Nonpotable Water meter or smaller must be used at any Nonpotable Water hydrant connection see Detail Drawing A5-5.
- Application rates shall minimize any ponding on or runoff from the area approved for application or use when wetting down or pre-watering work surfaces to minimize the off-property transport of airborne particulate matter from activities

such as construction or grading or when utilizing Nonpotable Water for soil compaction.

- The User shall ensure that releases of Reclaimed Water do not occur either through filling operations or the use of the Nonpotable Water for construction activities.

C. Public Notification

The following notifications shall be provided to inform the public that Nonpotable Water is being used and is not safe for drinking. The notification shall be posted in English and any other dominant language that may be spoken at a Site, as applicable, and shall be on a sign of sufficient size to be clearly read.

- "NONPOTABLE WATER – DO NOT DRINK" shall be posted at public entrances where Nonpotable Water is used, boundaries of areas irrigated with Nonpotable Water, around Nonpotable Water impoundments, on Nonpotable Water tanks or storage facilities, and on any portable equipment used to distribute Nonpotable Water.
- "NONPOTABLE WATER USED FOR IRRIGATION – DO NOT DRINK" shall be posted on golf score cards for Users of Nonpotable Water who irrigate golf courses.
- Any additional signage as determined by Colorado Springs Utilities.

D. Backflow Prevention

Nonpotable Water Mains, Service Lines, and Irrigation Main and Lateral Lines will not be approved by Colorado Springs Utilities until the required Cross Connection and Backflow prevention measures have met the standards specified by CDPHE *Regulation No. 84* and these Water LESS. A Reduced Pressure Principle Backflow Prevention Assembly shall be required where a high hazard condition exists such as, but not limited to, chemicals, rust inhibitors or bodily fluids that could potentially be back siphoned into the domestic water supply or raw water source. (*City Code § 12.4.1201, et seq.*)

For all Nonpotable Water User Sites, an Approved Backflow Prevention Assembly must be installed, at the User's expense, in accordance with Chapter 2.1 of these *Water LESS* and at the following locations:

- On each Nonpotable Water Service Line within a User's Nonpotable Water System, immediately following the meter, and in all cases, before the first branch line leading off the Nonpotable Water Service Line.
- On every Potable Water Service Line also serving the Nonpotable Water User Site, immediately following the meter and in all cases before the first branch line leading off of the Potable Water Service Line.

E. Water Conservation

All Nonpotable Water landscape irrigation Users shall comply with the City of Colorado Springs *Landscape Code and Policy Manual.*

For industrial and other Nonpotable Water uses, Colorado Springs Utilities may specify appropriate water conservation measures on a case-by-case basis.

F. Training

In general, at least one representative from each User Site must attend a mandatory annual informational/training seminar conducted by Colorado Springs Utilities. Colorado Springs Utilities will issue written notifications of the meeting date, time, and place by email or mail to all Users.

- Employees of permanent Nonpotable Water use Sites, specifically supervisory and operations personnel who are responsible for day-to-day operation of the Nonpotable Water System on that Site, shall be trained on public health protection requirements, operational requirements, potential health hazards involved with contact or ingestion of Nonpotable Water, and associated proper hygiene procedures.
- For temporary or short-term Nonpotable Water use Sites, such as those approved for non-discharging construction and road maintenance activities, all managers, workers, contractors, and others accessing use Sites shall be informed that Nonpotable Water is being used and personnel who may come in contact with Nonpotable Water shall receive training regarding safe practices and hygiene required when using Nonpotable Water.

G. Recordkeeping

All Nonpotable Water Users must maintain accurate and up-to-date records and plans describing in detail the physical extent and nature of the portion of the Nonpotable Water system located on the User's property.

Records of all employee training as required by Section 8.5F must be kept up-to-date and be maintained on-Site or readily available upon the request of Colorado Springs Utilities or the CDPHE/WQCD for inspection.

H. Discharge/Release Requirements

- All Nonpotable Water Users having low point gravity drains or detention/storage ponds that require periodic system drainage shall not drain Nonpotable Water from their system into a waterway, tributary, storm or sanitary sewer.
- Any discharges of Nonpotable Water to a waterway, tributary, storm or sanitary sewer must be reported immediately to Colorado Springs Utilities and the CDPHE/WQCD (when applicable).
- The User shall also be responsible for any damage or spillage of Nonpotable Water to private property or public facilities. This includes the payment of any fines levied against him for said damage or spillage and other requirements.

I. Additional Conditions for Reclaimed Water Users

All Users who have the potential to receive Reclaimed Water must adhere to the following additional requirements:

- Users shall submit a *User Plan to Comply t*o Colorado Springs Utilities and receive a *Notice of Authorization (NOA)* from the CDPHE/WQCD prior to receiving Nonpotable Water Service. Reclaimed Water Users must adhere to all terms, limitations, and conditions as outlined in their *User Plan to Comply*, *NOA*, and *Regulation No. 84*.
- Landscape irrigation Users must record the total volume of Nonpotable Water used per year and the associated acreage and area irrigated. These records must

be kept up-to-date and be maintained on-Site or readily available upon the request of Colorado Springs Utilities or the CDPHE/WQCD for inspection.

- Users shall submit a certification statement to Colorado Springs Utilities annually by February 1st demonstrating their compliance with the conditions of use as outlined in the NOA.
- Any release of Reclaimed Water into Groundwater, to surface water or the storm drain system is considered a violation of *Regulation No. 84* and is subject to enforcement by the CDPHE/WQCD.

8.6 Public or Private Nonpotable Water System

Private ownership of the Nonpotable Water Main shall begin downstream of the Secondary Valve located at or near the property line of the premise served or at an alternate location determined by Colorado Springs Utilities. Colorado Springs Utilities shall own and maintain the Nonpotable Water Mains and Service Lines extending from Colorado Springs Utilities' Nonpotable Water Distribution System to the Secondary Valve.

All Nonpotable Mains and Service Lines constructed downstream of the Secondary Valve shall be the responsibility of the owner to repair and maintain.

Colorado Springs Utilities' Nonpotable Water Customers are not allowed to re-deliver or sell Nonpotable Water to any other residential or non-residential entity. Exceptions may be allowed by Colorado Springs Utilities on a case by case basis provided that prior authorization to do so is obtained through a written agreement administered by Colorado Springs Utilities Development Services and executed by all interested parties.

8.7 Planning

The Owner/Developer shall be responsible for submitting an "Application for Nonpotable Water Availability" form to Colorado Springs Utilities. A copy of this form can be found in Section 8.15 and is available at www.csu.org for download.

After Colorado Springs Utilities issues a *Notice of Acceptance of Application for Availability*, the potential User must submit Nonpotable Water Construction Plans to Colorado Springs Utilities for approval as outlined in Chapter 3.1 of these *Water LESS*. The Nonpotable Water System shall not be installed, extended, expanded, modified, or interconnected without the written approval of Colorado Springs Utilities. This shall include installations, extensions, expansions, modifications, repairs and interconnections of customer-owned Nonpotable Water Systems and equipment, including Nonpotable Water Service Lines, irrigation main lines, and irrigation lateral lines.

A. Sizing of Distribution Mains

The size of Nonpotable Distribution Mains within the Colorado Springs Utilities Nonpotable Water System shall be determined by Colorado Springs Utilities.

All mains shall be sized large enough to provide for flows to the service area. Existing mains may be required to be upsized by the Owner/Developer to meet demands for a larger service area. Colorado Springs Utilities reserves the right to prescribe the size of mains in order to provide service for projected future needs.

Available service pressure to serve Customers will be determined by Colorado Springs Utilities. If additional pressure is needed, the Owner/Developer will be

required to design and install a booster pump station after the meter and Approved Backflow Prevention Assembly. The booster pump station shall be owned and maintained by the Customer. It is also at Colorado Springs Utilities' discretion to require the owner to install a storage tank or pond located at the Customers' Site, to meet peak demands.

8.8 Nonpotable Water Main Design

Nonpotable Water Mains shall be designed in accordance with Chapter 2.1 of these *Water LESS* with the following exceptions and additions. Nonpotable Water Main Extensions shall be designed and stamped by a professional engineer registered in the State of Colorado before being submitted to Colorado Springs Utilities for approval.

There shall be no connections between the Potable Water System and any piping containing Nonpotable Water.

A. Nonpotable Water Main Isolation Valves

Isolation Valves shall be the same size as the Nonpotable Main or fitting it is adjacent to. Valves installed on Nonpotable Mains shall open to the left (counter-clockwise) with a black operating nut and a purple valve lid**.**

8.9 Nonpotable Water Service Line Design

Nonpotable Water Service Lines shall be designed in accordance with Chapter 2.1 of these *Water LESS* with the following exceptions and additions. Nonpotable Water Service Lines shall be designed and stamped by a professional engineer registered in the State of Colorado. Detailed Construction Plans for new and replacement Nonpotable Water Service Lines shall be prepared in accordance with these *Water LESS*.

A. Nonpotable Water Taps and Service Line Sizing

Nonpotable Water Taps and Service Lines shall be Type K Copper or HDPE for service lines less than 4 inches. The minimum size tap for a Nonpotable Water Service is 1-1/2 inch Type K Copper or 2 inch HDPE. Colorado Springs Utilities, as a part of the tapping fee, shall supply 1 ½ and 2 inch sized taps, including both the Corporation and the Curb Stop. The Corporation Stop shall be installed by Colorado Springs Utilities and the Curb Stop shall be issued to the Contractor for installation. Nonpotable Water Service Lines 4 inch and greater shall be designed as a Nonpotable Water Main per Section 8.8.

B. Crossings

Where a Nonpotable Water Service Line crosses another utility or any underground Structure the following requirements shall be met:

- The Nonpotable Water Service Line shall pass under Potable Water Service Lines with a minimum of 18 inches of clearance.
- The Nonpotable Water Service Line shall pass over Wastewater Mains and Service Lines with a minimum of 18 inches of clearance.
- Where the Nonpotable Water Service Line passes under a Wastewater Main, Wastewater Service Line, or storm sewer pipe, it shall be encased in a sleeve per Detail Drawing B1-14**.**
- When a Nonpotable Water Service Line passes over a Potable Water Main or Water Service Line the Nonpotable Water Service Line must be sleeved,

approximately 9 feet each side of the pipeline being crossed, with a section of pipe to be centered over the pipe being crossed. Reference Detail Drawing A7-3.

C. Strainers

Due to the presence of solids in the Nonpotable Water Distribution System, Colorado Springs Utilities strongly encourages all Nonpotable Water Users to install and maintain the appropriate screening or straining equipment to reduce or prevent solid debris from disrupting irrigation activities and achieve the best results on the Site. The strainer should be located before the pressure reducing valve and rated to a minimum working pressure of 250 psi. Colorado Springs Utilities may be contacted for guidance on screening equipment and proper installation.

D. Water Meters

Nonpotable Water meters placed in service on January 1, 1999, and after shall be owned, supplied, installed, and maintained by Colorado Springs Utilities. Nonpotable Water meters installed and placed in service prior to January 1, 1999, may be owned and maintained by either the property owner or Colorado Springs Utilities, depending upon the original service agreement at the time of installation.

All Nonpotable Water meters shall be designated to be used solely for Nonpotable Water applications.

Nonpotable Water meters shall not be installed within a building or Structure.

8.10 Irrigation Mains and Laterals

A. General

All irrigation mains and laterals shall be designed by a professional engineer registered in the State of Colorado or a licensed landscape architect registered in the State of Colorado or a full member of the American Society of Landscape Architects (ASLA).

B. Pipe Pressure Rating Requirements

All Nonpotable Irrigation Mains and Lateral fittings shall be designed to meet or exceed the design pressure provided by Colorado Springs Utilities. Design pressures for Nonpotable Irrigation Mains and Laterals should be designed, including control valves, for a working pressure of at least 80 psi.

C. Material Requirements

Landscape Irrigation Mains and Laterals less than 2 inches in diameter shall be PVC or Type K copper, of appropriate pressure class, or of materials approved by Colorado Springs Utilities.

All 2-1/2 inch and larger Nonpotable Irrigation Mains and Laterals shall be one of the following materials:

- PVC Schedule 40 and 80 pipes, of appropriate pressure class
- High Density Polyethylene Pipe of appropriate pressure class
- Type K Copper Tubing
- Ductile Iron Pipe and Fittings

All Nonpotable Irrigation Mains and Laterals shall be identified as Nonpotable Water per Section 8.13A.

1. Golf Course Applications Only

Fittings shall be Ductile Iron, iron pipe sized, slanted, deep bell, gasket style made in accordance with *ASTM A-536,* Grade 65-45-12 manufactured for golf course irrigation systems, commercial turf irrigation and rural water systems as outlined in Section 4.7.

D. Horizontal and Vertical Design

1. Horizontal Separations

- The design should include a buffer between the spray zone and picnic areas, playground equipment, water fountains, buildings and areas not under control of the Nonpotable Water User.
- The irrigation systems shall maintain a minimum clearance of 100 feet from any domestic water supply well.
- Nonpotable Irrigation Mains and Laterals shall not be run or laid in the same trench as Potable Water Mains or Service Lines. A 10 foot horizontal separation shall be maintained between pressurized buried Nonpotable and Potable Water Mains and Service Lines. See Section 2.6G.2.

2. Depth of Bury

Nonpotable Irrigation Mains may be located close to the surface with depths varying from approximately 2 to 3 feet.

Nonpotable Irrigation Laterals may be located close to the surface with depths varying from approximately 1 foot to 1 foot 6 inches.

Nonpotable Irrigation Mains and Laterals are required to be blown out with air during winter and non-irrigation seasons to prevent freezing.

3. Crossings

Nonpotable Irrigation Mains and Laterals shall be located a minimum of 18 inches vertically from all other utility infrastructure. Nonpotable Irrigation Mains and Laterals installed above Potable Mains and Service Lines must be sleeved in purple pipe for 9 feet on each side of the crossing (centered on utility crossing, per Detail Drawing A7-3). Laterals that do not remain pressurized between irrigation cycles may not require a sleeve, at Colorado Springs Utilities discretion.

4. Public Safety

There shall be no hose bib connections accessible to the public at any existing or new piping connected to the Nonpotable Water System in conformance with *International Plumbing Code*.

There shall be no drinking water outlets between the Potable Water supply and any piping containing Nonpotable Water, in conformance with *International Plumbing Code*.

8.11 Conversion of Potable and Nonpotable Water Mains and Service Lines

Construction Plans shall be submitted to Colorado Springs Utilities for review and approval where the Owner/Developer proposes the conversion of a Potable or Nonpotable Water System to a Nonpotable or Potable Water System respectively per the following sections.

A. Interim Use of Potable Water

Where a project is proposed within an area that does not have a Nonpotable Water Main but is planned for a Nonpotable Water Main Extension, the Owner/Developer may install a Water System according to these Nonpotable Water requirements in the anticipation of a future connection to the Nonpotable Water Distribution System.

Developments installing irrigation systems per these *Water LESS* can be connected to the Potable Water System, with the approval of Colorado Springs Utilities, on a interim basis until Nonpotable Water Mains are available within the area, at which point the irrigation system (at the owner's request) may be connected to the Nonpotable Water Main provided that, prior to connection of the irrigation system to the Nonpotable Water System, the Potable Water System connections are permanently disconnected in accordance with these *Water LESS* and inspected and approved by Colorado Springs Utilities.

B. Converting from Potable Water to Nonpotable Water

All irrigation facilities converted from a Potable Water Supply to a Nonpotable Water Supply shall be retrofitted to conform to these *Water LESS*. The facilities to be converted shall be investigated in detail including review of any Record Drawings, preparation of required reports, and any necessary measures determined by Colorado Springs Utilities to bring it up to these *Water LESS*. Installation of an approved Reduced Pressure Principle Backflow Prevention Assembly shall be required on any and all Potable Water Service Lines serving a proposed conversion property where both potable and Nonpotable Service connections are maintained.

The Owner/Developer shall pay all necessary costs associated with converting the Water System and shall be responsible for the following:

- Obtaining Record Drawings that identify both the horizontal and vertical location of the existing Potable Water System including connection points to the Public Water System
- Disconnection of all Potable Water connections and uses (The converted system shall be disconnected from the Potable Water System and permanently capped. The caps on all ends of the Nonpotable portion of the converted Water System shall be purple in color.)
- Potholing to document depth and location of crossing utilities (if necessary)
- Replacement of all clockwise valves with Nonpotable counter-clockwise valves
- Installation of approved Reduced Pressure Principle Backflow Prevention Assembly on any and all meter connections serving a proposed conversion property where both Potable and Nonpotable Water Service Line connections are maintained (with the approval of the Colorado Springs Utilities)
- Placement of warning signs and labels in accordance with these *Water LESS*
- Sleeving Nonpotable Water Main crossings over existing Potable Water Mains and Service Lines (Reference Detail Drawing A7-3)

- Designation of the pipe as Nonpotable Water in accordance with Section 8.13 of these *Water LESS*
- Removal of any and all "quick connects" from the newly Nonpotable to the Potable Water System unless otherwise instructed by Colorado Springs Utilities
- Preparing Construction Plans and Specifications showing how the above requirements have been met, submitted per Section 8.12.
- Notification to all personnel involved regarding the Potable to Nonpotable Water System change, including Colorado Springs Utilities
- Payment of all connection fees due per Colorado Springs Utilities *URR's*

C. Converting from a Nonpotable Water System to Potable Water System

Conversion of a Nonpotable Water Distribution System or Service Line to a Potable Water Distribution System or Service Line is not allowed by Colorado Springs Utilities. Because the supply was originally Nonpotable Water, the Water Distribution System and Service Line will always be considered Nonpotable and may not be used to distribute Potable Water for human consumption.

D. Converting from Nonpotable Water Supply to Potable Water Supply

Conversion of an existing Water Distribution System, Service Line, or irrigation system dedicated to a Nonpotable Water Use from a Nonpotable Water Supply to a Potable Water Supply may be allowed on a case by case basis at the discretion of Colorado Springs Utilities. However, because the water supply was originally Nonpotable Water, the Water Distribution System, Service Line, and irrigation system will always be considered Nonpotable and may not be used to distribute Potable Water. The Owner/Developer shall be responsible for all costs necessary to meet Cross Connection control requirements to protect the Potable Water System as defined in *City Code § 12.4.1201 et seq*.

8.12 Plan Submittal

Nonpotable Water Construction Plans shall be submitted to Colorado Springs Utilities for review and approval prior to construction per Chapter 3.1 with the following additional requirements:

A. Additional Nonpotable Water Construction Plan Notes

1. Nonpotable Water shall only be utilized for Nonpotable Water purposes. It is neither suitable nor intended for human consumption.
2. All Nonpotable Water piping, valves, outlets and fixtures, and other appurtenances shall be color coded in conformance with the National Industrial Color Code (NICC) and Section 4.7 of these *Water LESS*.
3. All new buried distribution piping in the Nonpotable Water Distribution System shall be colored purple pipe and embossed or be stamped/marked "CAUTION-NONPOTABLE WATER DO NOT DRINK"; or be installed with purple identification tape, or a purple polyethylene vinyl wrap, as approved by Colorado Springs Utilities.
4. All Nonpotable Water valves, outlets, public entrances and boundaries of areas irrigated with Nonpotable Water, and any portable equipment used to

distribute Nonpotable Water shall be tagged or signed with the following words "NONPOTABLE WATER-DO NOT DRINK."

5. Valves shall be the same size as the Nonpotable Main/fitting. Valves installed on Nonpotable Water Mains shall open to the left (counter-clockwise) with a black operating nut and a purple valve lid**.**

B. Additional Construction Plan Requirements for Irrigation Systems

A legend showing the pertinent data for materials used in the irrigation system shall be shown on the plans. The legend shall include a pipe schedule listing pipe sizes and materials of construction, a listing of valve types and spray head configurations.

The following information for each type of sprinkler head:

a. Manufacturer's name and model number
b. Sprinkler radius range (feet)
c. Sprinkler pattern

For each valve, the following information is required:

a. Controller station number
b. Flow through the valve (GPM)
c. Control valve size (inches)

8.13 Construction

A. Nonpotable Water System Identification

All Nonpotable Water controllers, valves, outlets, fixtures and other appurtenances shall be:

- Tagged or signed with the following words: "NONPOTABLE WATER – DO NOT DRINK",
- Color-coded in conformance with the NICC, or
- Marked in accordance with these *Water LESS.*

All aboveground facilities shall be consistently color-coded purple per NICC and Section 4.7, or as otherwise approved by Colorado Springs Utilities, and be marked to suitably differentiate the Nonpotable Water System facilities from Potable Water and the Wastewater System.

Purple identification tape, or a purple polyethylene vinyl wrap with black printing, color to be per NICC and Section 4.7, as approved by Colorado Springs Utilities, shall be used on ductile iron pipe installation only.

Identification tape shall be prepared with white or black printing on purple per Section 4.7, or as otherwise approved by Colorado Springs Utilities, having the words: "CAUTION: NONPOTABLE WATER – DO NOT DRINK", OR "RECLAIMED WATER". The overall width of the tape shall be at least 3 inches.

Identification tape shall be installed on the top of the transmission pipe longitudinally and should be centered. The identification should be continuous in coverage on the pipe and should be fastened to each pipe length at 10 foot intervals. Tape attached to sections of pipe before the pipe is placed in the trench shall have flaps sufficient for continuous coverage. Other satisfactory means of securing the tape during backfill of

the trench may be used if suitable for the work, as determined by Colorado Springs Utilities.

Potable water piping that has been retrofitted for use in the Nonpotable Water System shall be marked with purple identification tape or polyethylene vinyl wrap as described above when possible.

B. Pipeline Markers

When a Colorado Springs Utilities Nonpotable Water Distribution Main is to be installed outside of the public street Right-of-Way and within an easement, the limits of the easement or Right-of-Way shall be marked with permanent monuments placed by a licensed surveyor. The pipeline route shall be marked with purple pipeline line markers provided by the Contractor and labeled with labels provided by Colorado Springs Utilities per Section 4.6B.

The pipeline markers must be:

- Placed at 250 foot intervals
- Placed at changes in horizontal alignment
- Constructed of carsonite or Colorado Springs Utilities approved material (see Section 4.6B)
- 66 inches in length
- Designated with a purple post and label for Nonpotable Water Mains, Colorado Springs Utilities labels shall be obtained from a Colorado Springs Utilities warehouse or a Colorado Springs Utilities Approved Manufacturer
- Installed per the manufacturer's Specifications

8.14 Separate Raw Water Systems for Nonpotable Use

This section applies to Nonpotable Water Users whose supply is from a Customer drilled and maintained well or a Customer maintained surface water connection where Colorado Springs Utilities owns the water right. These Water Systems shall be reviewed and approved by Colorado Springs Utilities on a case by case basis prior to construction or establishment of use.

A. Stand Alone Surface Water Systems

For a Customer owned stand alone Nonpotable Raw Water System, the owner assumes all responsibility and liability for proper operation, maintenance, and use of the Water System. Stand alone Nonpotable Raw Water Systems, shall conform to all applicable sections of these *Water LESS*.

B. Customer Drilled and Maintained Wells

1. General

This section applies to the Nonpotable use of Groundwater as defined by these *Water LESS*.

All new uses of Groundwater within the City of Colorado Springs must be authorized by Colorado Springs Utilities and approved through the "Application for Nonpotable Water Availability" form in available at www.csu.org and in Section 8.15. The service provided by Colorado Springs Utilities under the

"Miscellaneous Service – Augmentation Tariff" is the legal framework for a Customer to develop and use Groundwater on their own property for their own use according to the terms of the *Colorado Springs Blanket Augmentation Plan* as decreed by the Division 2 Water Court in *Case No. D2-89CW36*. Because of the legal limitations of this court decree, all Groundwater available from Colorado Springs Utilities under this Tariff are strictly limited in location. All wells and all Groundwater use must be located both within the Colorado Springs Corporate boundary and the *Colorado Springs Augmentation Plan* area, without exception. Inclusion within one boundary does not guarantee inclusion within the other. Colorado Springs Utilities will determine the availability of service at any location.

The requirements of these *Water LESS* regarding Nonpotable Water Service shall generally apply to Customer Drilled and Maintained Wells.

2. Responsibility for Well Installations

The Customer shall own all pumps, control equipment, and piping. The well permit, augmentation plan, water rights, and meter shall be owned by Colorado Springs Utilities. The Customer is responsible for meeting all applicable well installation and water quality requirements.

a) Customer Responsibilities

- The Customer shall be responsible for the engineering studies to determine the size, feasibility, location on the Customer's property, and appropriate aquifer to be tapped.
- The Customer shall also be responsible for the installation, operation and maintenance of the proposed well. Previously existing wells may be included in the Colorado Springs Utilities Augmentation Plan on a case-by-case basis.
- The Customer shall also be responsible for the cost of all equipment, construction, installation, operation, and permitting.

b) Colorado Springs Utilities Responsibilities

- Colorado Springs Utilities shall obtain well permits for the Customer-proposed well installations when it is determined that the proposed project meets the minimum requirements of *Colorado Water Law, City Council Resolution 233-86*, and other applicable policies, standards, and regulations. At no time does Colorado Springs Utilities guarantee the feasibility or production of a proposed well, and is not responsible for wells which do not meet the Customer's needs.
- Colorado Springs Utilities will be responsible for the augmentation, related accounting, and meter verification required to comply with the State Engineer's rules and regulations.

3. Permits

Colorado Springs Utilities shall obtain all required well permits from the State Engineer. The Contractor and the Owner/Developer shall be responsible for obtaining all other permits or approvals as required by local, county, state or federal agencies. Such permits and approvals may include but not be limited to excavation permits, Colorado Department of Transportation or railroad permits, Site approval, building permits, and U.S. Army Corps of Engineers 404 permits.

4. Well Drilling and Construction

All wells shall be drilled and constructed by a licensed driller, in accordance with the State Engineer's rules and regulations regarding well construction and pump installation. Well drillers shall be licensed through the State Board of Examiners of Water Well Construction and Pump Installation Contractors through the Office of the State Engineer.

5. Well Completion

After the licensed driller has completed installation of the well, the completion report, well log, the well construction and test report, the pump installation and test report, and all other related engineering reports shall be submitted by the licensed driller to the State Engineer. Copies of the reports shall also be submitted to Colorado Springs Utilities.

6. Well Metering and Verification

All well installations must include a totalizing flow meter, meter pit, and appropriate plumbing as described in Section 2.7J. The meter will be supplied, installed and tested by Colorado Springs Utilities following verification that the meter pit and plumbing is accurately in place and inspected before any Groundwater is pumped for beneficial use. Inspection of the meter pit and plumbing shall be performed by Colorado Springs Utilities in accordance with these *Water LESS*. No Groundwater shall be pumped by the Customer until the meter installation is properly verified, except for the purposes of initial well and pump testing. By Colorado State Law under the *Amendments to Rules Governing the Measurement of Tributary Groundwater Diversions Located in the Arkansas River Basin*, no water may be pumped for beneficial use until such meter testing has been performed. Colorado Springs Utilities shall retest the meter for verification of accuracy every 4 years and each time the meter is serviced, swapped out or otherwise altered, as required by law.

8.15 Forms

Application for Nonpotable Water Availability

Submit to:

Colorado Springs Utilities

Attn: Account Management Nonpotable Water Coordinator

111 S. Cascade Ave., P.O. Box 1103, Mail Code 1025

Colorado Springs, CO 80947-1015

Project: _____ **Date**:_____

(Subdivision, address, or description of project)

Type of Use: _____

(Irrigation or non-residential use)

Applicant: _____

Individual ( ) Partnership ( ) Corporation ( ) Limited Liability Company ( ) Other ( )

APPLICATION REQUIREMENTS FOR PROJECT REVIEW

___Nonpotable water demand per building (GPM)

___Nonpotable irrigation water demand per site (GPM)

___Preliminary landscape plan include sq ft (irrigation only)

___Internal plumbing plans(industrial use only)

___Nonpotable water system plan

___Nonpotable site irrigation plan

Projected date that site will be ready for Nonpotable water service _____

Applicant agrees to provide Colorado Springs Utilities with a recorded plat or acceptable easements prior to construction. The Applicant agrees to notify Colorado Springs Utilities of any changes following submittal of application that may affect the need for nonpotable water service.

_____ NOTES: _____

Applicant's Signature

_____

Applicant's Name (Please type or print)

_____

Address

_____

_____ _____

Telephone Number FAX Number

Internal Use

Work Order Number _____ RMS Number _____

NOTICE OF PRIVATE NONPOTABLE WATER SYSTEM

This Notice of Private Nonpotable Water System, dated _____, 20 , is executed by _____ as the present owner of Lot(s) _____, El Paso County, Colorado, as reflected on the plat recorded at reception number _____ with the Clerk and Recorder of El Paso County, Colorado (the "Property").

All parties who now have, or who may hereafter acquire, any interest in the Property, or any portion thereof, are hereby notified that the entire Nonpotable Water System which services the Property is privately owned by the owner(s) of the Property, or any portion thereof, and such system shall continue to be so owned upon the sale or other transfer of all or any portion of the Property.

The Nonpotable Water System, for purposes of this notice, shall include, but is not limited to, all Nonpotable water pipes, valves, manholes, conduits, and any other items which are necessary, including all appurtenances (the "Improvements"), in order to enable Nonpotable water to be transferred from Colorado Springs Utilities' (an enterprise of the City of Colorado Springs, a home rule city and municipal corporation) Nonpotable water distribution mains to the Property, or any portion thereof, regardless of whether such items are located on the Property or within rights-of-way, easements, or roadways held by Colorado Springs Utilities, the City of Colorado Springs, or others. Nothing contained herein shall, however require the owners of the Property to be responsible for any public Nonpotable water distribution mains, public pipelines, or other public items, which are necessary to service properties other than, or in addition to, the Property.
Due to the private nature of the Nonpotable Water System, owner(s) of the property shall collectively be responsible for all matters regarding the Nonpotable Water System, including, but not limited to, all repairs and maintenance.

Until such other agreement is reached by the owner(s) of the Property and properly recorded with the Clerk and Recorder of El Paso County, Colorado, all matters regarding the Nonpotable Water System, including, but not limited to, all repairs and maintenance related to the Nonpotable Water System shall be borne and equitably shared by the owner(s) of the Property, or any portion thereof.

This Notice shall be deemed to run with the land and touch and concern the land.

Executed as of the date first written above.

_____
Signed

STATE OF COLORADO)
) ss.
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this _____ day of _____, 200 , by _____. Witness my hand and official seal.

My Commission Expires: _____

_____
Notary Public

WATER LESS TABLE OF CONTENTS

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