



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT
CURRENT PLANNING DIVISION

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Hearing Date: March 19, 2020
To: Humboldt County Zoning Administrator
From: John H. Ford, Director of Planning and Building Department
Subject: MCSD Hiller Sewer Lift Station Upgrades Coastal Development Permit
Case Number PLN-2019-15999
Assessor Parcel Number 510-271-015
675 and 795 Hiller Road, McKinleyville

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Please contact Tricia Shortridge, Planner at 268-3704 if you have any questions about the scheduled public hearing item.

cc: Applicant, Agent, California Coastal Commission

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
March 19, 2020	Coastal Development Permit	Tricia Shortridge

Project: A Coastal Development Permit for lift station pump upgrades for the McKinleyville Community Services District (MCSD) Wastewater Management Facility (WWMF). The Hiller Street Lift Station facility will be treated with minor alterations to improve energy and operational efficiency. Applicable project components include installation of new submersible pumps in the existing wet well, transformer, concrete pad, and a prefabricated concrete control enclosure. The work is to occur within the facility grounds in a 400 sq. ft. area and over a two-month period commencing June 2020. Work hours would be Monday-Friday 7:00 a.m. to 7:00 p.m. and possibly an occasional Saturday. Less than 50 cubic yards of excavating/trenching is proposed and there will be no vegetation removal.

Project Location: The project site is located in Humboldt County, in the McKinleyville area, north of Hiller Road, approximately 500 feet north east from the intersection of Ocean Drive with Hiller Road, on the property known as 675 and 795 Hiller Road.

Present Plan Designation: Residential Estates (RE) McKinleyville Area Plan (MCAP). Density: 0-2 dwelling units per acre. Slope: Relatively Stable.

Present Zoning: Public Facility-Urban with a combining zone for Alquist-Priolo Fault Hazard Area (PF1/G).

Case Number: PLN-2019-15999

Assessor Parcel Number: 510-271-015

Applicant	Owner(s)	Agent
McKinleyville Community Services District Greg Orsini, General Manager PO Box 2037 McKinleyville, CA 95519	same as applicant	GHD Andrea Hilton 718 Third St. Eureka, CA 95501

Environmental Review: CEQA Exemptions: 15301 Class 1, Existing Facilities and 15302 Class 2, Replacement or Reconstruction.

Major Issues:
None

State Appeals Status:
Project is appealable to the California Coastal Commission

MCSD Hiller Sewer Lift Station Upgrades
Coastal Development Permit
Case Number: PLN-2019-15999
Assessor Parcel Number: 510-271-015

Recommended Zoning Administrator Action:

1. Describe the application as part of the Consent Agenda;
2. Survey the audience for any person who would like to discuss the application; and
3. If no one requests discussion, make the following motion to approve the application as a part of the consent agenda:

Find the project exempt from environmental review pursuant to Sections 15301 Class I and 15302 Class 2 of the State CEQA Guidelines, make all of the required findings for approval of the Coastal Development Permit, based on evidence in the staff report and adopt the Resolution approving the MCSD Coastal Development Permit subject to the recommended conditions of approval.

Executive Summary:

The District obtained an energy efficiency grant from the State Water Resources Control Board to install new, energy efficient, submersible pumps in the station's existing wet well which will replace the dry-well Gorman Rupp pumps that are reaching the end of their useful service lives. The new pumps will be connected to the same discharge that the Gorman Rupp pumps are connected to. The upgrades will involve the decommissioning and abandonment of the dry well and removal of the Gorman-Rupp pumps, and necessary modifications in the wet well including the installation of piping, electrical wiring, and controls required for the new pumps. The new electrical and controls equipment will be housed in a new 24 sq. ft. enclosure on a concrete pad. enclosure. Less than 50 cubic yards of excavating is proposed for new pipes and vaults. Vegetation in the 400 sq. ft. work area consists of sod grass and there is no natural vegetation or trees proposed for removal.

Traffic control on Hiller Road will not be necessary given the small-scale nature and short duration of the project. If the project is approved all work is scheduled to occur on over a two-month period commencing in June 2020, all within the grounds of the WWMF. Hours of operation are anticipated to be from 7:00 a.m. to 7:00 p.m. Monday through Friday with an occasional Saturday.

The parcel is located within the Appeals Jurisdiction of the California Coastal Commission and therefore requires a public hearing. The parcel is located east of the Mad River surrounded by residential areas on the north and south and the Hiller Sports Complex to the east.

All of the reviewing agencies have either recommended approval or conditional approval of the project. Accordingly, the Department has determined that the project, as proposed and conditioned, will not have a significant effect on the environment.

Staff Recommendations: Following a review of Planning Division reference sources, and a review of comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approving the Coastal Development Permit and Conditional Use Permit.

Alternatives: Several alternatives may be considered: 1) The Zoning Administrator could elect not to hear this item and refer the application to the Planning Commission. Any decision to place this matter before the Planning Commission must be done before opening the public hearing on this project; 2) The Zoning Administrator could elect to add or delete conditions of approval; 3) The Zoning Administrator could deny approval of the requested permits if the Zoning Administrator is unable to make all of the required findings. Planning Division staff is confident that the required

findings can be made based on the submitted evidence and subject to the recommended conditions of approval. Consequently, planning staff does not recommend further consideration of these alternatives.

**RESOLUTION OF THE ZONING ADMINISTRATOR
OF THE COUNTY OF HUMBOLDT
Resolution Number 20-
Case Number PLN-2019-15999
Assessor Parcel Numbers 400-131-002**

Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the MCSD Coastal Development Permit.

WHEREAS, GHD, on behalf of McKinleyville Community Services District, submitted an application and evidence in support of approving a Coastal Development Permit for improvements to the McKinleyville Community Services District (MCSD) Hiller Sewer Lift Station Upgrades; and

WHEREAS, the County Planning Division has reviewed the submitted application and evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

WHEREAS, the project is categorically exempt from environmental review pursuant to CEQA Exemptions: 15301 Class 1, Existing Facilities and 15302 Class 2, Replacement or Reconstruction.

WHEREAS, GHD, on behalf of the McKinleyville Community Services District as the Lead Agency prepared a Notice of Exemption for the subject proposal in accordance with the California Environmental Quality Act (CEQA); and

WHEREAS, Attachment 2 in the Planning Division staff report includes evidence in support of making all of the required findings for approving the Coastal Development Permit for the proposed project; and

WHEREAS, a public hearing was held on the matter before the Humboldt County Zoning Administrator on March 19, 2020.

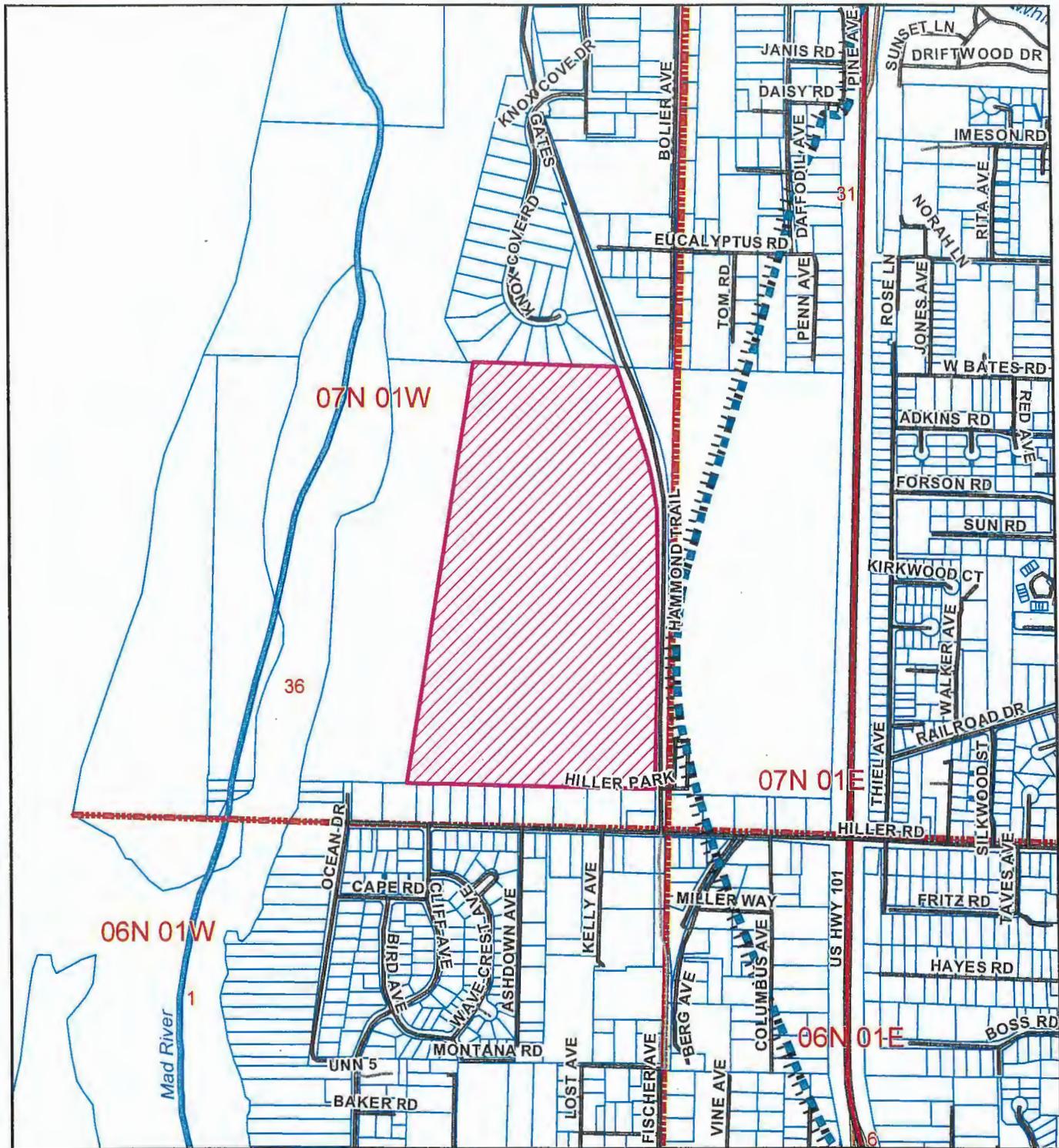
NOW, THEREFORE, be it resolved, determined, and ordered by the Zoning Administrator that:

1. That the application is categorically exempt from environmental review pursuant to Sections 15302 Class 2 and 15303 Class 3 of the CEQA Guidelines; and
2. Makes the findings in Attachment 2 of the Planning Division staff report for Case Number PLN-2019-15999 based on the submitted evidence; and
3. Approves the Coastal Development Permit applied for as recommended and conditioned for Case Number PLN-2019-15999

Adopted after review and consideration of all the evidence on March 19, 2020.

I, John H. Ford, Zoning Administrator of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the entitled matter by said Zoning Administrator at a meeting held on the date noted above.

John H. Ford
Zoning Administrator, Planning and Building Department



LOCATION MAP

**PROPOSED MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
COASTAL DEVELOPMENT PERMIT**

MCKINLEYVILLE AREA

PLN-2019-15999

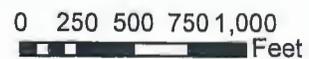
APN: 510-271-015

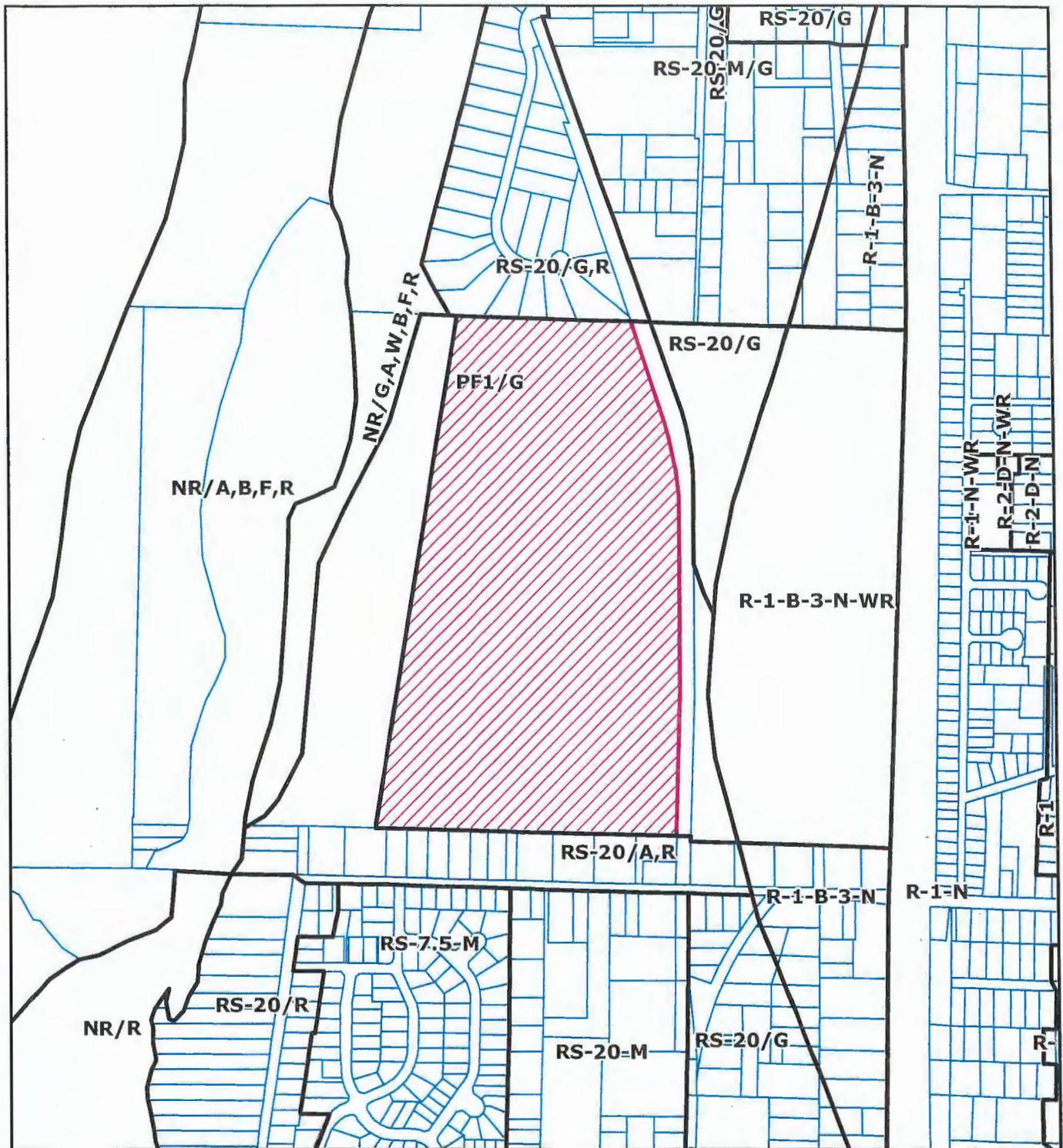
T07N R01W S36 HB&M (Arcata North)

Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.





ZONING MAP

**PROPOSED MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
COASTAL DEVELOPMENT PERMIT**

MCKINLEYVILLE AREA

PLN-2019-15999

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)

Project Area = 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



Assessor's Map Bk. 510, Pg. 27
 County of Humboldt, CA.

PTN SEC 36, T2N R1W, HB&M

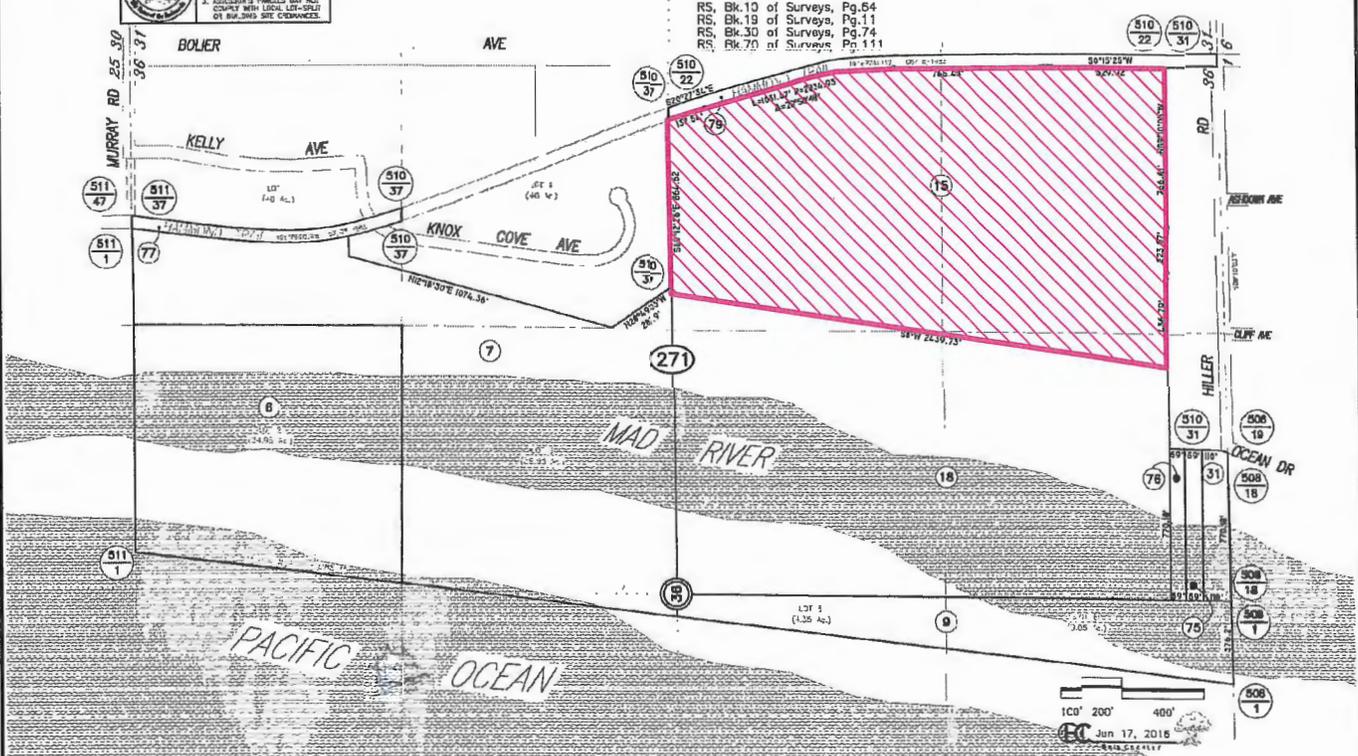
510-27



NOTE - Assessor's Block Numbers Shown in Ellipses
 Assessor's Parcel Numbers Shown in Small Circles



RS, Bk. 10 of Surveys, Pg. 54
 RS, Bk. 19 of Surveys, Pg. 11
 RS, Bk. 30 of Surveys, Pg. 74
 RS, Bk. 70 of Surveys, Pg. 111



ASSESSOR PARCEL MAP

**PROPOSED MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
 COASTAL DEVELOPMENT PERMIT**

MCKINLEYVILLE AREA

PLN-2019-15999

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)



Project Area =

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

MAP NOT TO SCALE



AERIAL MAP

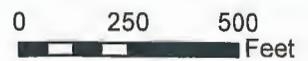
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COASTAL DEVELOPMENT PERMIT
MCKINLEYVILLE AREA**

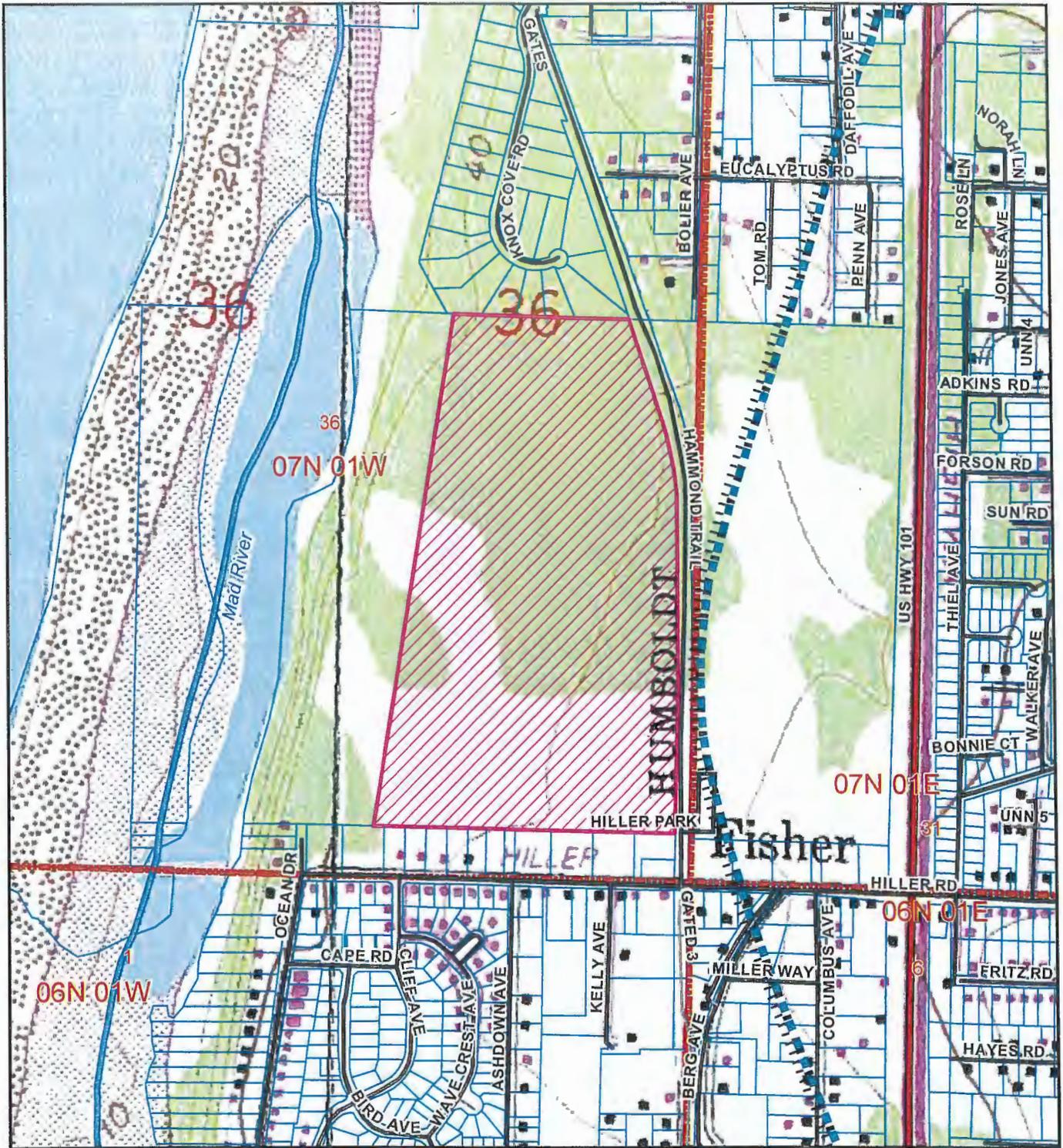
**PLN-2019-15999
APN: 510-271-015**

T07N R01W S36 HB&M (Arcata North)

Project Area = 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.





TOPO MAP

**PROPOSED MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
COASTAL DEVELOPMENT PERMIT
MCKINLEYVILLE AREA**

PLN-2019-15999

APN: 510-271-015

T07N R01W S36 HB&M (Arcata North)

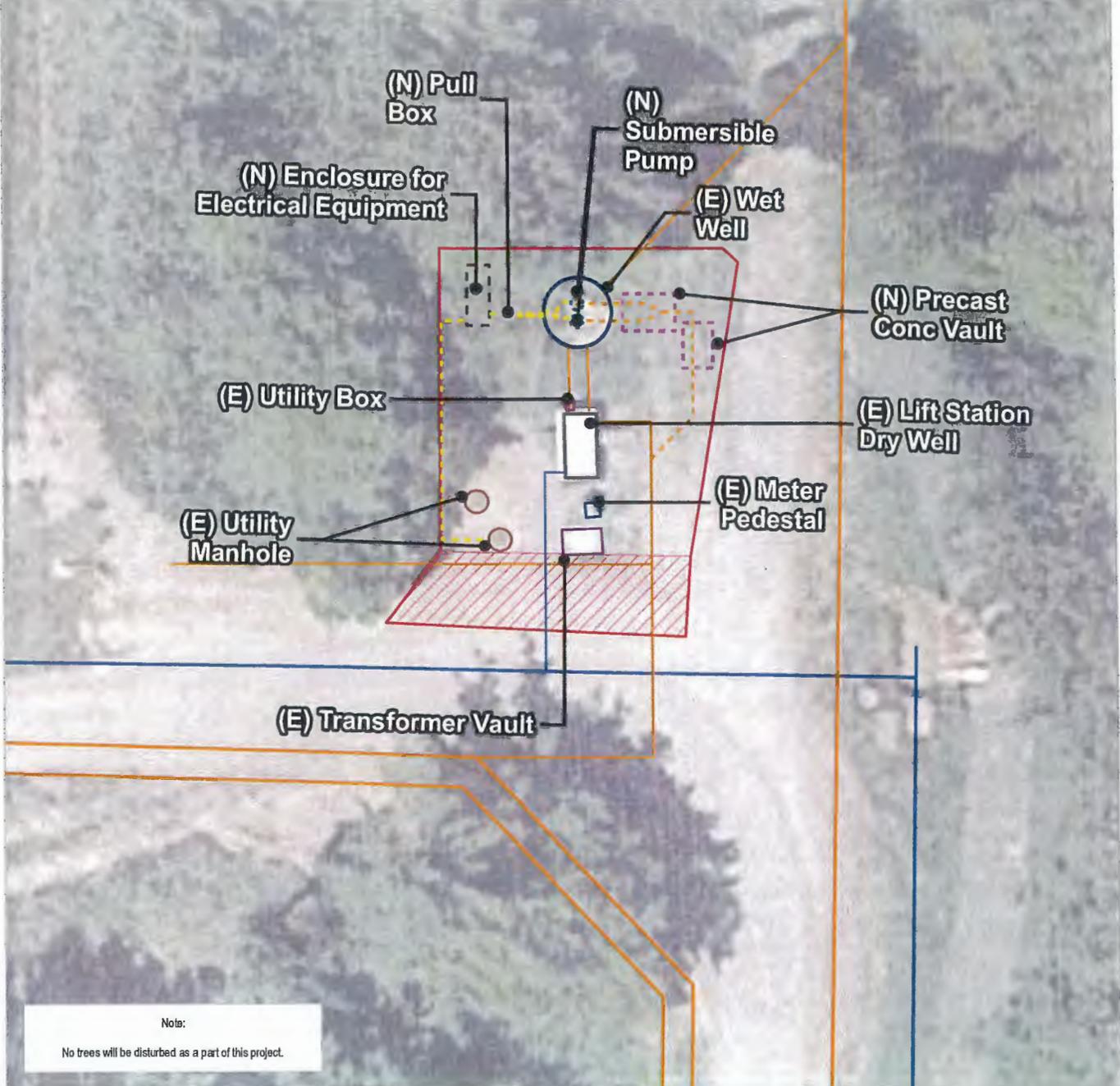
Project Area = 

Coastal Zone Boundary 

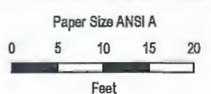
This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.



Legend			
(E) Lift Station Dry Well	(E) Utility Manhole	(N) Precast Conc Vault	Water Line
(E) Meter Pedestal	(E) Wet Well	(N) Sewer Line	Project Boundary
(E) Transformer Vault	(N) Electrical Line	(N) Submersible Pump	Staging Area
(E) Utility Box	(N) Enclosure for Electrical Equipment	Sewer Line	



Note:
No trees will be disturbed as a part of this project.



Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

McKinleyville Community Services District
Hiller Lift Station Upgrades Project

Project No. 11202856
Revision No. -
Date Nov 2019

Site Map

FIGURE 2

**ATTACHMENT 1
RECOMMENDED CONDITIONS OF APPROVAL**

Approval of the Coastal Development Permit is conditioned upon the following terms and requirements which must be fulfilled before the use is initiated.

1. The project shall be developed in conformance with Attachment B Design Plan set (30%) and Attachment A Section 5 of Hiller Sewer Lift Station Upgrades Project description (GHD, November 2019).
2. Work hours shall be limited to Monday-Friday 7:00 a.m. to 7:00 p.m. and possibly an occasional Saturday.
3. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.

The applicant is responsible for ensuring compliance with this condition.

On-going Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. Changes to the project, other than Minor Deviations to the Plot Plan as provided in Section 312-11.1 of the Humboldt County Code, shall require modification to the approved Coastal Development Permit.

Informational Notes:

1. The applicant is responsible for receiving all necessary permits and/or approvals from other state and local agencies.
2. This permit shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. The period within which construction or use must be commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.

ATTACHMENT 2
Staff Analysis of the Evidence Supporting the Required Findings

Required Findings: To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

The Coastal Zoning Ordinance, Section 312-17.1 of the Humboldt County Code (Required Findings for All Discretionary Permits) specifies the findings that are required to grant a Coastal Development Permit:

1. The proposed development is in conformance with the County General Plan;
2. The proposed development is consistent with the purposes of the existing zone in which the site is located;
3. The proposed development conforms with all applicable standards and requirements of these regulations; and
4. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare; or materially injurious to property or improvements in the vicinity.
5. The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the midpoint of the density range specified in the plan designation) unless the following written findings are made supported by substantial evidence: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.
6. In addition, the California Environmental Quality Act (CEQA) states that one of the following findings must be made prior to approval of any development which is subject to the regulations of CEQA. The project either:
 - a) is categorically or statutorily exempt; or
 - b) has no substantial evidence that the project will have a significant effect on the environment and a negative declaration has been prepared; or
 - c) has had an environmental impact report (EIR) prepared and all significant environmental effects have been eliminated or substantially lessened, or the required findings in Section 15091 of the CEQA Guidelines have been made.

Staff Analysis of the Evidence Supporting the Required Findings

To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making **all** of the following required findings.

1. The proposed development must be consistent with the General Plan.

The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards of the McKinleyville Area Plan (MCAP) and the General Plan (FMWK).

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
Land Use §5.20 (MCAP)	Residential Estates, (RE), Density: 0-2 dwelling units per acre.	The treatment facility is located on a parcel with a land use designation of Residential Estates (RE). The RE designation does not specifically include wastewater treatment facilities as principally or conditionally permitted uses. A review of the Public Facilities (PF) designation also does not specifically address wastewater treatment facilities. However, Section 3.22B of the McKinleyville Area Plan, "Wastewater Treatment Facilities" indicates that the development of a wastewater treatment facility at this site is "...consistent with this plan."
Hazards §3.28 (MCAP)	New development shall minimize risks to life and property in areas of high geologic, flood and fire hazard.	The project site is located in an area of low geologic instability, low fire hazard and within an area of minimal flooding according to FIRM Map # 060060 0625 B. All referral agencies have recommended approval of the proposed project.
Biological Resource §3.30 (MCAP)	Protect designated sensitive and critical resource habitats.	The project site is fully developed as the McKinleyville Wastewater Treatment Management plant. The proposed work would occur within the existing facility. No natural habitats remain on this site. Furthermore, staff did not receive any comments or concerns from either the California Coastal Commission or the California Department of Fish and Wildlife.

<p>Cultural Resources §3.29.1 (MCAP)</p>	<p>Protect cultural, archeological and paleontological resources.</p>	<p>During the previously approved expansion of the plant (CDP-14-074, CUP-15-003), Roscoe and Associates conducted a cultural resource study on the site and determined that there is a low likelihood of discovering buried archaeological resources in the project area. The project was also reviewed by the Blue Lake Rancheria, the Bear River Band of the Rohnerville Rancheria and the Wiyot Tribe who all concurred with the study results. The study recommended that the standard condition regarding inadvertent discovery be made a mitigation measure. This mitigation measure has been included as a condition of approval. For the lift station improvement project, the Tribes have recommended the inadvertent discovery protocol language to be included as a condition of approval.</p>
<p>Visual Resources §3.42 (MCAP)</p>	<p>Protect and conserve scenic and visual qualities of coastal areas.</p>	<p>The site is not within a coastal scenic/coastal view area. The proposed development is consistent with existing development in the area.</p>

2. The proposed development is consistent with the purposes of the existing zone in which the site is located; and 3. The proposed development conforms with all applicable standards and requirements of these regulations. The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Humboldt County Coastal Zoning Regulations.

Zoning Section	Summary of Applicable Requirement	Evidence That Supports the Zoning Finding
§313-4.1 Public Facility (Urban)	Extensive Impact Civic Uses are conditionally permitted uses.	The project is for improvements of a pump lift station within the previously approved (CDP-14-074, CUP-15-003) wastewater treatment facility.
Min. Lot Size	5,000 square feet	Approximately 60 acres
Min. Lot Width	50 feet	Average of 1,230 feet
Max. Density	None specified	Not applicable
Max. Lot Depth	3 x lot width = 3,690 feet	Approximately 2,660 feet
Yard Setbacks	Front: 20 feet Rear: 15 feet Side: 20 feet	Front: 580 feet Rear: 95 feet Side: greater than 100 feet
Max. Lot Coverage	None specified	Approximately 50% pond coverage
Max. Bldg. Height	45 feet	12 feet (control building)
Combining Zones		
§313-22.1 Alquist-Priolo Fault Hazard	Address potential hazards resulting from surface faulting or fault creep.	The purpose of the Alquist-Priolo Fault Hazard combining zone is to implement the provisions of the Alquist-Priolo Special Studies Zones Act (Public Resource Code, Section 2621 et seq.). Development may be approved in an area subject to the Alquist-Priolo Fault Hazard Regulations upon approval of a Special Permit, unless the development is exempt from the fault evaluation report requirements. The "Act" applies to all projects or structures intended for human occupancy. Accordingly, the proposed project is not subject to the requirements of the "Act".

4. Public Health, Safety, and Welfare and 6. Environmental Impact: The following table identifies the evidence which supports finding that the proposed project will not be detrimental to the public health, safety and welfare, and will not adversely impact the environment.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.4	Proposed development will not be detrimental to the public health, safety and welfare or materially injurious to properties or improvements in the vicinity.	No detrimental effects to public health, safety and welfare were identified. The proposed development will not be materially injurious to property or improvements in the vicinity.
CEQA Guidelines	Categorically exempt from State environmental review.	The McKinleyville Community Services District filed a Notice of Exemption on November 6, 2019 finding the project categorically exempt from environmental review pursuant to CEQA Exemptions: 15301 Class 1, Existing Facilities and 15302 Class 2, Replacement or Reconstruction. Section 15301 (b) is applicable as the Hiller Sewer Lift Station is an existing publicly owned sewerage facility. The facility will be treated with minor alterations to improve energy and operational efficiencies, principally through the installation of new submersible pumps and telemetry. The project will involve negligible or no expansion of use. Section 15302(c) is also applicable as the Hiller Sewer Lift Station will involve construction of existing structures and the facility is located on the same site with the same purpose as prior to reconstruction.

5. Residential Density Target: The following table identifies the evidence which supports finding that the proposed project will not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
<p>312-17.1.5 Housing Element Densities</p>	<p>The proposed development shall not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the midpoint of the density range specified in the plan designation), except where: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.</p>	<p>The parcel is currently zoned for public facilities and developed with the McKinleyville Community Services District Wastewater Treatment Facility. Because the parcel is not zoned for residential uses, it was not included in the 2019 Regional Housing Needs Assessment and is not located within a Housing Opportunity Zone.</p>

ATTACHMENT 3

Applicant's Evidence In Support of the Required Findings

Attachment 3 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division:

- Application Form [in file]
- Plot Plan/Tentative Map Checklist [in file]
- Operations and Site Plan [attached]
- Location Maps [attached]



Humboldt County Coastal Development Permit Application McKinleyville Community Services District Hiller Sewer Lift Station Upgrades Project

GHD | 718 3rd Street, Eureka, CA 95501

11202856 (03) | November 2019



Summary of Attachments

- Attachment A Project Description
- Attachment B Design Planset (30%)



Attachment A. Project Description



Hiller Sewer Lift Station Upgrades Project

Coastal Development
Permit Project Description



McKinleyville Community Services District



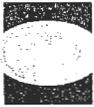


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- Figure 2 Project Site Map





1. Background

The McKinleyville Community Services District (District) provides water, sewer, parks and recreation, and streetlight services to the community of McKinleyville. Wastewater from a portion of the northern half of McKinleyville flows south through a 24-inch sanitary sewer main under the Hammond Trail/Fischer Road. This main terminates at the Fischer Lift Station. Wastewater is pumped north from the Fischer Lift Station to the District's Wastewater Management Facility (WWMF) at Hiller Park. To make the District's system more energy-efficient, a diversionary manhole was installed in this sewer main in 1985 to divert a portion of the flows to a new lift station at Hiller Park. A weir in the manhole diverts a portion of the flow in the sewer main to the Hiller Lift Station, from which it is pumped approximately 700 feet to the headworks of the WWMF. However, the Hiller Lift Station was constructed in 1985, and the District seeks to further improve the efficiency of this lift station by installing new submersible pumps in the existing wet well. Currently, two Gorman-Rupp centrifugal pumps in an adjacent dry well lift station, pump wastewater from this wet well to the WWMF. The upgrades will include decommissioning the existing dry well lift station and associated Gorman-Rupp pumps, and installing new, energy-efficient submersible pumps in the existing wet well, hereafter referred to as the "project". Other upgrades and modifications will be required as described in Section 4. The District obtained an energy efficiency grant from the State Water Resources Control Board (SWRCB) to implement this project.

2. Purpose and Need

The existing Gorman-Rupp pumps are coming to the end of their useful service lives. The purpose of the project is to provide new pumps and increase the efficiency of the Hiller Lift Station. Improvements to the Hiller Lift Station will improve the facility's energy efficiency by replacing the existing pumps with more energy-efficient submersible pumps.

Project improvements include installing new submersible pumps in the station's existing wet well and connecting the discharge of those pumps to the existing discharge from the Gorman-Rupp pumps. The existing electrical feed from the WWMF will be utilized to power the new pumps, and the pump controls will be integrated into the existing Supervisory Control and Data Acquisition (SCADA) system. The project will include the necessary modifications to the existing wet well, piping, electrical wiring, and controls required for the new pumps. A new enclosure will be installed on a small concrete slab at the northwest end of the site to house new electrical and controls equipment. The project will also include the abandonment of the existing dry well and removal of the existing pumps and other appurtenances from it prior to its abandonment.

3. Project Location

The project is located near Hiller Park and the WWMF adjacent to the Hammond Trail in McKinleyville, California (see Figure 1 – Vicinity Map). The total project area is approximately 1,870 square feet. The site is accessed on Fischer Road north of Hiller Road and is accessed via Hiller Road.



4. Project Elements

Project elements detailing the abandonment of the existing dry well lift station and installation of the new pumps in the existing wet well, as well as associated modifications and upgrades, are described below (see Figure 2 – Project Site Map).

Abandon Existing Dry Well Lift Station

The existing dry well lift station will be abandoned. Sewer lines to/from the dry well will be cut and capped. All of the current equipment that is in the dry well will be removed prior to abandonment of the dry well. The digital equipment (programmable logic controller, radio, antenna cable) will be reused for the project. There is also a transformer in the well that will be returned to MCSD along with the pumps so that the parts can be used for other compatible stations. The dry well will be abandoned once all of the equipment within it is removed. Abandonment of the dry well will include cutting it at three feet below the ground surface, backfilling the portion that remains, and placing topsoil at the top 12 inches of the disturbed area. There is an existing concrete vault surrounding the dry well hatch above ground that will also be removed.

Construct New Concrete Pad and Enclosure

A new electrical enclosure will be required to house the programmable logic controller (PLC), a mini-load center that power will be distributed through, and a motor control center for the new pumps. The enclosure will be approximately 8 feet long by 3 feet wide and will be placed on a new concrete pad of similar dimensions.

Reroute Existing Water Line

There is an existing two-inch water line onsite that is currently located within the existing concrete vault that surrounds the dry well hatch. Because the vault is being removed, the waterline will be slightly modified and re-routed for continued use. This re-routed line will continue to be used for the purpose of cleaning the wet well.

New Pumps in Existing Wet Well and Wet Well Modifications

New submersible pumps will be installed in the existing wet well. Prior to installing the new pumps, the existing wet well will be pressure washed and either coated or lined to protect it from future exposure to hydrogen sulfide gas. After this, the two new pumps will be installed in the wet well. The existing wet well lid does not allow for the installation or removal of the new pumps. Because of this, the existing wet well lid will be removed, and a new lid will be installed that accommodates the pumps.

Install new Sewer Force Main and Appurtenances and Connect to Existing Sewer Force Main

New discharge piping from the pumps will be installed, and the discharge pipes from the two pumps will come together in a new vault. A second vault will be installed downstream of the confluence of the two pipes that will house a new meter. New piping will be installed from this second vault to connect the new discharge piping to the existing sewer force main that conveys wastewater to the WWMF. A total of approximately 40 linear feet of new sewer pipe will be installed.

Modifications to Electrical and Communication Systems

Three-phase, 480 volt (V) power is provided to the Hiller site via an electrical line that runs from the WWMF. This existing power will be intercepted in an existing electrical vault at the site. A new power line will be installed from this vault to the new electrical/controls enclosure, and power lines will also



be installed from the enclosure to the pumps in the wet well. New communication signal lines will also be installed from the enclosure to instrumentation in the wet well and to the new meter.

5. Project Construction

5.1 Construction Schedule

Construction is anticipated to occur over a two-month construction window planned to commence in June 2020. No vegetation clearing will occur other than the disturbance of grassy areas at the site; thus the construction window is not constrained to avoid potential impacts to nesting birds. Anticipated daytime work hours are 7:00 a.m. to 7:00 p.m., Monday through Friday with occasional work on Saturdays. Construction on Sunday or legal and county holidays is not currently anticipated except for emergencies or with prior approval from the District.

5.2 Construction Staging, Activities, and Equipment

Construction staging will be located adjacent to the lift station (see Figure 2). The staging area will be approximately 40 feet by 10 feet. Equipment to be used during project construction includes a boom truck, backhoe, mini-excavator, trench compactor, and pickup trucks. Construction activities will include:

- Removal of the existing pumps and other equipment in the existing dry well lift station
- Demolishing/removing the vault that surrounds the dry well hatch and abandoning the existing dry well lift station and abandoning the existing dry well lift station
- Removing the existing wet well lid and installing a new wet well lid
- Cutting and capping existing sewer lines at the site
- Slightly modifying/rerouting the existing 2-inch waterline that is used for cleaning the wet well
- Excavation of approximately 60 linear feet of electrical conduit trench and 40 linear feet of sewer line trench. Trenches will be backfilled with suitable excavated material.
- Installation of the following: new pumps in the existing wet well; new power and controls conduits; new sewer pipe, a new vault where the discharge pipes from the pumps come together, a new meter vault, and an electrical/controls enclosure with an associated concrete pad.
- Connecting the new sewer force main to the existing sewer force main.

Upon completion of construction, the site's topographical contours will match pre-project conditions. It is anticipated that the vast majority of excavated material will be used for backfill. Any spoils and demolished items that are removed from the site will be legally disposed of by the contractor. The contractor will be required to provide written permission from facilities stating the facilities are willing and qualified to accept the disposed materials.



5.3 Traffic and Access Control

The project area is located on District property outside of a residential area and does not receive local traffic. Traffic control will not be necessary. Given the small-scale nature of the project and short duration, the project will result in a minimal number of trips for heavy equipment mobilization and construction personnel that is not expected to impact the users of Hiller Park's nearby parking area or residences on Hiller Road, the nearest of which is approximately 0.1 miles from the project area. Because the project area is located adjacent to the Hammond Trail, exclusionary fencing will be installed to secure the project site and avoid safety risks to trail users. Additionally, all excavations will be covered at the end of each work day.

5.4 Groundwater Dewatering

Because this work will be performed in the summer time, it is not anticipated that groundwater dewatering will be required. However, if needed, temporary groundwater dewatering will be conducted to provide a dry work area. Dewatering would involve pumping water out of a trench or excavation. If required, groundwater will be pumped to a grassy field area on MCSD property near the site. This will be done over 200 feet from any drainage course, watercourse, or wetland. Pumped quantities will be small enough to allow infiltration into the vegetated area and to not cause any erosion or sedimentation issues.

5.5 Site Restoration and Closure

Following construction, the contractor will demobilize and remove equipment, supplies, and construction wastes. The disturbed areas along the project alignment will be restored to pre-construction conditions and stabilized with a combination of grass seed (broadcast or hydroseed) and straw mulch. Topsoil that is disturbed during construction will be set aside and stockpiled throughout the project and will be replaced upon project completion.

6. Maintenance and Operation

Maintenance of the retrofitted lift station will require:

- Annual inspections of the pumps, impellers, and check valves that will be installed on the discharge side of each pump;
- Annual inspections of electrical equipment to identify poor connections and replace worn out parts;
- Annual wet well cleaning to avoid odor emanating solids and grease build-up.

None of the maintenance activities described above will include ground disturbance. Day-to-day operation will include running the pumps at the lift station, which will not require anyone to be onsite or any disturbances of any kind.



7. Permits Required

The following permits and approvals are required prior to construction:

- CEQA compliance via a Categorical Exemption
- Humboldt County Coastal Development Permit

A cultural resources investigation is not required for this site because all excavation is occurring within the limits of previously excavated areas. These areas were formerly disturbed during the initial installation of the lift station, other wastewater system improvements, and the construction of the adjacent Hammond Trail. Standard protocols for inadvertent discovery will be implemented.

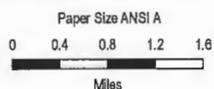
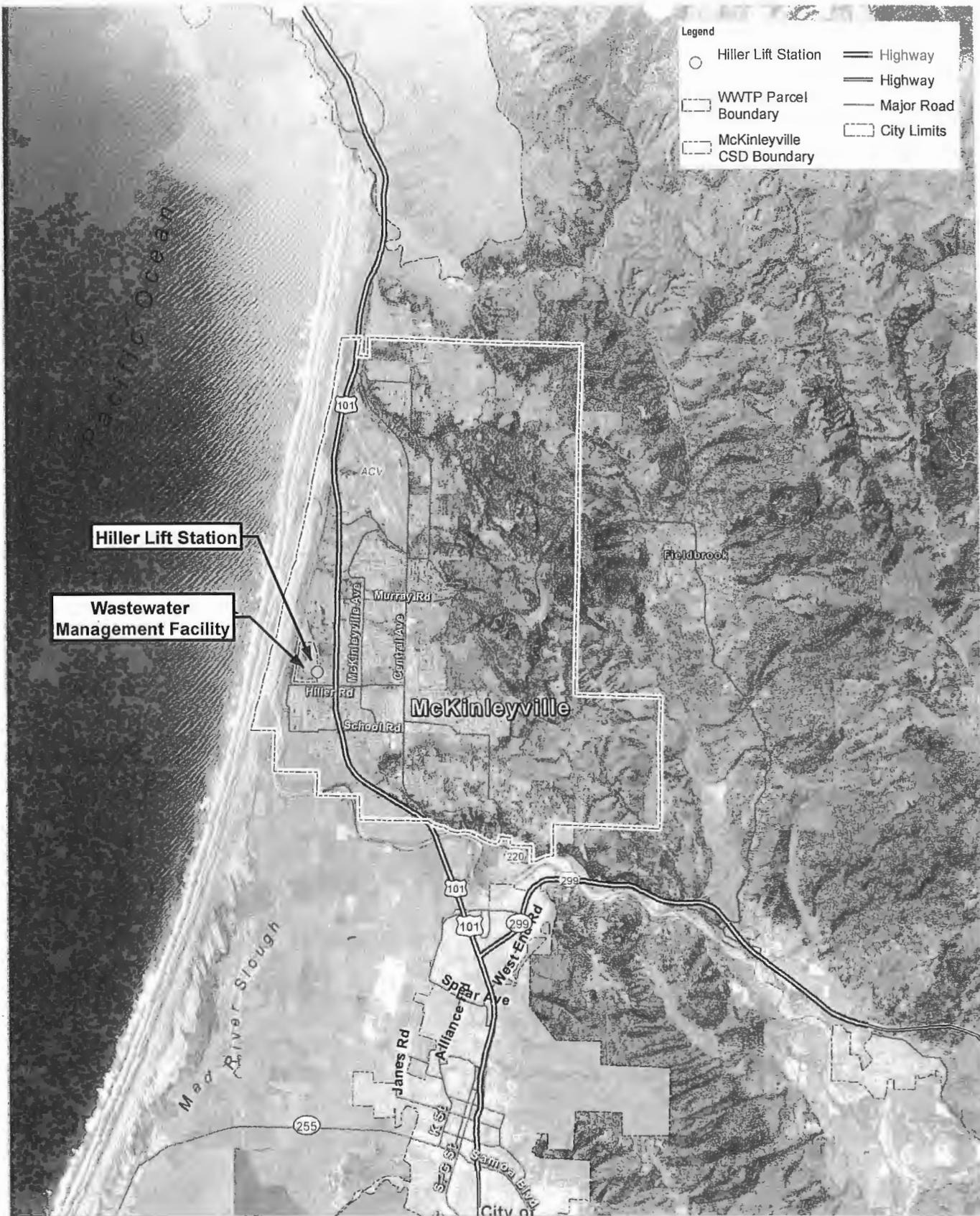
A biological resources site visit conducted in April 2017 did not detect any wetlands, drainage courses, or other waters; thus coverage under Clean Water Act Section 404 and Section 401 will not be sought for this project. Impacts or modifications to surrounding trees, include Sitka spruce, will not occur.



about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

www.ghd.com



Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



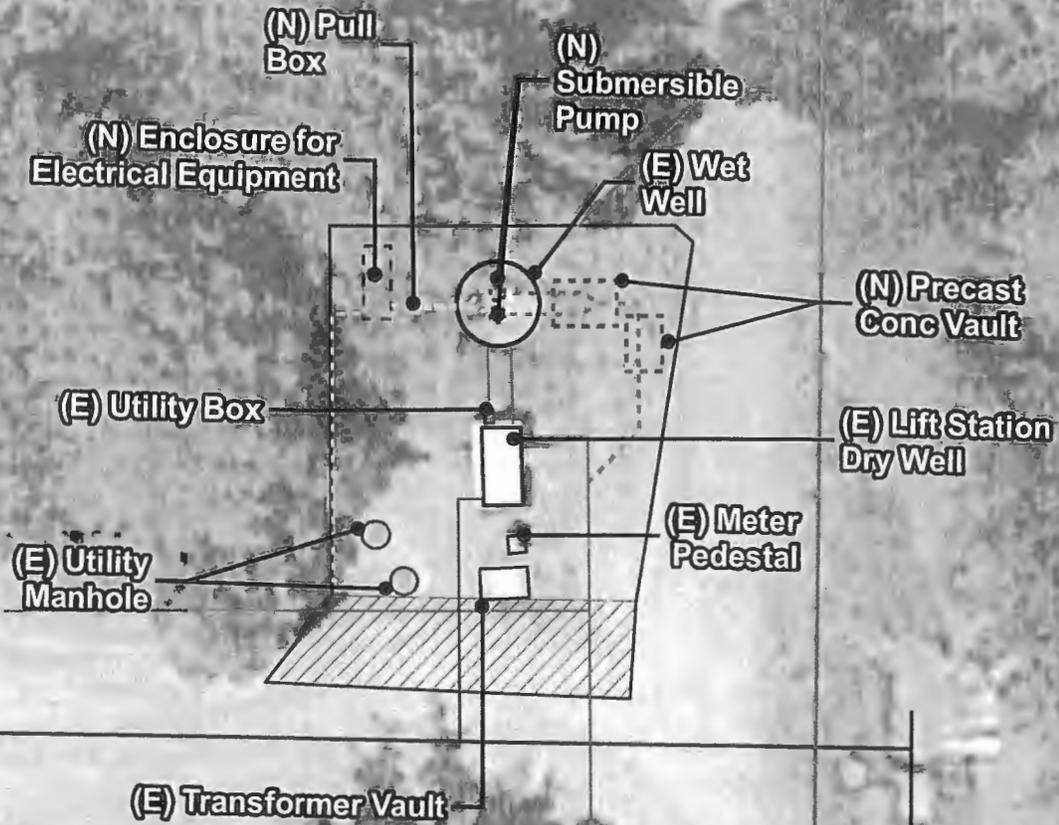
McKinleyville Community Services District
 Hiller Lift Station Upgrades Project

Project No. 11202856
 Revision No. -
 Date Nov 2019

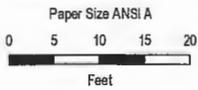
Vicinity Map

FIGURE 1

Legend			
— (E) Lift Station Dry Well	— (E) Utility Manhole	--- (N) Precast Conc Vault	— Water Line
— (E) Meter Pedestal	— (E) Wet Well	--- (N) Sewer Line	□ Project Boundary
— (E) Transformer Vault	(N) Electrical Line	(N) Submersible Pump	▨ Staging Area
— (E) Utility Box	(N) Enclosure for Electrical Equipment	— Sewer Line	



Note:
No trees will be disturbed as a part of this project.



McKinleyville Community Services District
Hiller Lift Station Upgrades Project

Project No. 11202856
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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
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Site Map

FIGURE 2



Attachment B. Design Planset (30%)

McKINLEYVILLE COMMUNITY SERVICES DISTRICT HILLER LIFT STATION UPGRADES PROJECT

OCTOBER 2019

PREPARED BY



AREA MAP



LOCATION MAP



APPROVALS

GENERAL MANAGER

GREGORY ORSHAN

SIGNED

BOARD OF DIRECTORS

JOHN CORSEY

MARY BURKE

DAVID COUGH

DENNIS MAYO

SHEL BARSANTI

PRESIDENT

VICE PRESIDENT

DIRECTOR

DIRECTOR

DIRECTOR

ENGINEER, GHD Inc.

NATHAN STEVENS PE

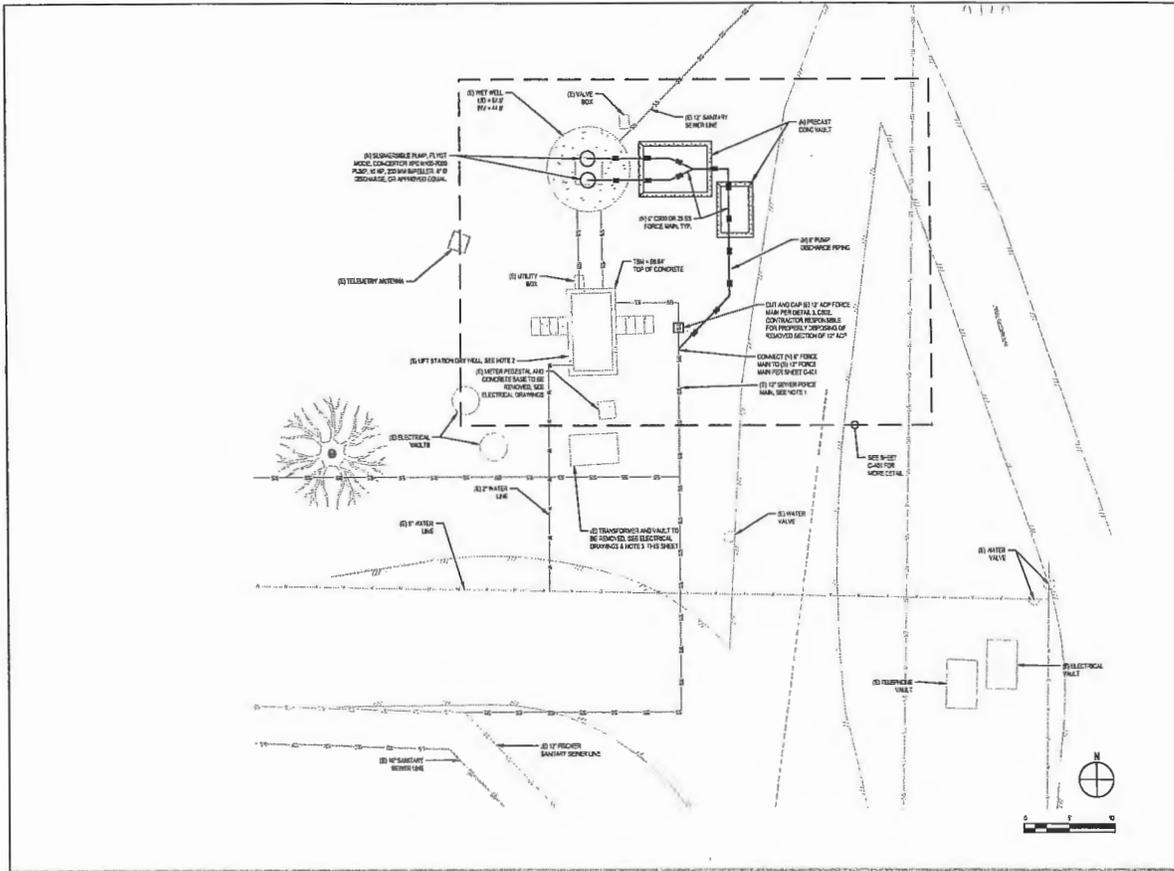
SIGNED

SHEET INDEX

GENERAL		INSTRUMENTATION	
1	G-001 COVER SHEET	11	E-202 ELECTRICAL DETAILS - II
2	G-002 NOTES, SYMBOLS, & ABBREVIATIONS	12	E-501 ELECTRICAL SINGLE LINE, CONDUIT & CABLE SCHEDULE AND PANEL SCHEDULE
CIVIL		INSTRUMENTATION	
3	C-101 CIVIL SITE PLAN	13	I-001 PAID ABBREVIATIONS, SYMBOLS AND NOTES
4	C-401 PUMP DISCHARGE & FORCE MAIN CONNECTION PLAN	14	JD-101 PROCESS & INSTRUMENTATION DIAGRAM - DEMOLITION
5	C-501 WET WELL & DISCHARGE SECTIONS	15	I-101 PROCESS & INSTRUMENTATION DIAGRAM
ELECTRICAL			
7	E-001 ELECTRICAL NOTES, SYMBOLS, & ABBREVIATIONS		
8	ED-101 ELECTRICAL DEMOLITION		
9	E-101 ELECTRICAL SITE PLAN		
10	E-501 ELECTRICAL DETAILS - I		

30% SUBMITTAL

<p>Drawn: M. SONDAL</p> <p>Checked: R. STEVENS</p> <p>Project Manager: R. STEVENS</p>		<p>Design: M. SONDAL</p> <p>Checked: R. STEVENS</p> <p>City: 959218</p> <p>Scale: AS SHOWN</p>		<p>McKINLEYVILLE COMMUNITY SERVICES DISTRICT HILLER LIFT STATION UPGRADES COVER SHEET</p> <p>Project No: 15202956</p> <p>Sheet No: G-001</p>	
<p>Scale: 1" = 100'</p>		<p>Scale: 1" = 100'</p>		<p>Sheet: 1 of 18</p>	

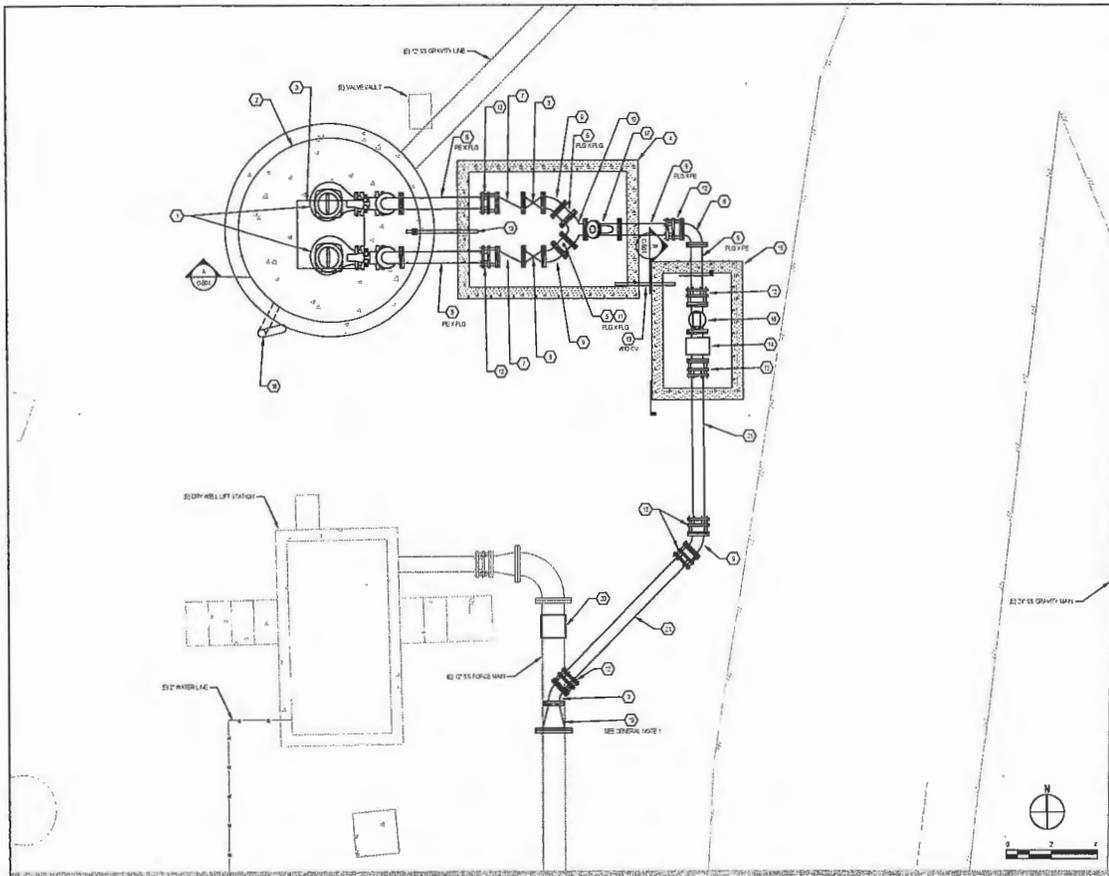


SHEET GENERAL NOTES

1. CONTRACTOR TO PROVIDE TO VERIFY LOCATION, SIZE, DEPTH AND MATERIAL OF 30\"/>

30% SUBMITTAL

		All of the work on original size sheet is to be completed by 11/19/2020.		Drawn: M. GONZALES Checked: M. STOVINE Project Manager: M. STOVINE	Design: M. GONZALES Design Check: M. STOVINE Date: 10/20/20	Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT Project: HILLER LIFT STATION UPGRADES Title: CIVIL SITE PLAN
				Date: 11/19/2020 Sheet: 3 of 18		



SHEET GENERAL NOTES

- 1 CONTRACTOR TO VERIFY LOCATION TO VERIFY LOCATION SIZE DEPTH AND MATERIAL OF DISCHARGE MAIN TO MATCH TO ALL EXISTING DISCHARGE PIPES
- 2 LOCATION OF EXISTING UTILITIES STRUCTURES FROM INFORMATION AVAILABLE AT TIME OF CONSTRUCTION TO BE COORDINATED WITH ALL EXISTING UTILITIES CONTRACTOR SHALL NOTIFY THE OWNER AND RECORDING AGENCIES AT LEAST 30 DAYS BEFORE CONSTRUCTION TO ALLOW FOR ANY NECESSARY RELOCATION OF EXISTING UTILITIES
- 3 CONTRACTOR TO VERIFY ACTUAL PIPE CONDITIONS BEFORE PERFORMANCE WORK
- 4 ALL BOLLARDS AND ASSOCIATED HARDWARE TO BE STAINLESS STEEL
- 5 FINAL LOCATION AND CONFIGURATION OF PIPES AND BOLLARDS TO BE FIELD VERIFIED WITH OWNER
- 6 CONTRACTOR TO HAVE 4" x 4" TOP SOLE BOARD AND ALSO COATED WITH ASPHALT

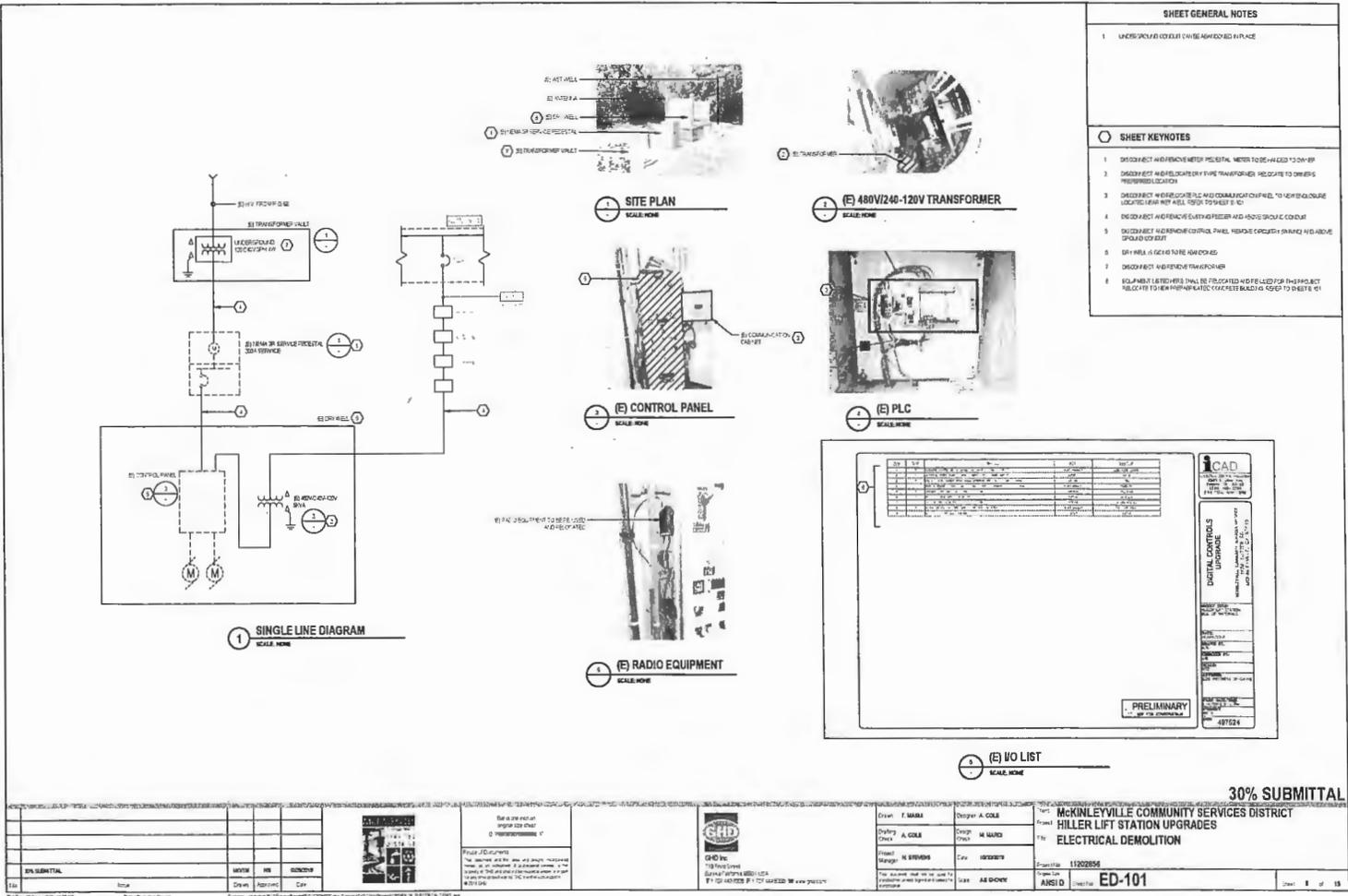
SHEET KEYNOTES

- 1 18" 150 LB. RIB PUMP PRECAST CONCRETE VALVE WITH 12" 150 LB. RIB RING 20" MANHOLE, 18" 150 LB. RIB, OR APPROVED EQUAL
- 2 18" 150 LB. RIB PUMP PRECAST CONCRETE VALVE WITH 12" 150 LB. RIB RING 20" MANHOLE, 18" 150 LB. RIB, OR APPROVED EQUAL
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- 21 18" 150 LB. RIB PUMP PRECAST CONCRETE VALVE WITH 12" 150 LB. RIB RING 20" MANHOLE, 18" 150 LB. RIB, OR APPROVED EQUAL

30% SUBMITTAL

				McKINLEYVILLE COMMUNITY SERVICES DISTRICT HILLER LIFT STATION UPGRADES PUMP DISCHARGE & FORCE MAIN CONNECTION DETAIL - PLAN	
Drawn: M. STOVING Check: M. STOVING Project: 15202556 Date: 03/20/20 Scale: AS SHOWN	Designer: M. GONZALES Design: M. STOVING Date: 03/20/20 Author: AS SHOWN	Sheet No: C-401	Total Sheets: 4 of 18	Project: 15202556 Date: 03/20/20 Scale: AS SHOWN	

ABBREVIATIONS:	DIAGRAM	ELECTRICAL SYMBOLS LEGEND	ANNOTATION	GENERAL ELECTRICAL NOTES
<p> AB ALUMINUM AC AIR CONDITIONING AD AIR DUCT AE AIR EXHAUST AF AIR FLOW AG AIR GROUND AH AIR HEAT AI AIR INLET AL AIR LIFT AM AIR MOUNT AN AIR NETWORK AO AIR OUTLET AP AIR PRESSURE AR AIR RETURN AS AIR SUPPLY AT AIR TREATMENT AV AIR VENT AW AIR WASH AX AIR EXHAUST AY AIR YIELD AZ AIR ZONE BA BATTERY BB BATTERY BANK BC BATTERY CHARGE BD BATTERY DISCHARGE BE BATTERY EQUALIZER BF BATTERY FUSE BG BATTERY GROUND BH BATTERY HEAT BI BATTERY INLET BJ BATTERY JUNCTION BK BATTERY KITCHEN BL BATTERY LIGHT BM BATTERY MOUNT BN BATTERY NETWORK BO BATTERY OUTLET BP BATTERY PRESSURE BQ BATTERY RETURN BR BATTERY ROOM BS BATTERY SUPPLY BT BATTERY TREATMENT BV BATTERY VENT BW BATTERY WASH BX BATTERY EXHAUST BY BATTERY YIELD BZ BATTERY ZONE CA CABLE CB CABLE BANK CC CABLE CHARGE CD CABLE DISCHARGE CE CABLE EQUALIZER CF CABLE FUSE CG CABLE GROUND CH CABLE HEAT CI CABLE INLET CJ CABLE JUNCTION CK CABLE KITCHEN CL CABLE LIGHT CM CABLE MOUNT CN CABLE NETWORK CO CABLE OUTLET CP CABLE PRESSURE CQ CABLE RETURN CR CABLE ROOM CS CABLE SUPPLY CT CABLE TREATMENT CV CABLE VENT CW CABLE WASH CX CABLE EXHAUST CY CABLE YIELD CZ CABLE ZONE DA DAMPER DB DAMPER BANK DC DAMPER CHARGE DD DAMPER DISCHARGE DE DAMPER EQUALIZER DF DAMPER FUSE DG DAMPER GROUND DH DAMPER HEAT DI DAMPER INLET DJ DAMPER JUNCTION DK DAMPER KITCHEN DL DAMPER LIGHT DM DAMPER MOUNT DN DAMPER NETWORK DO DAMPER OUTLET DP DAMPER PRESSURE DQ DAMPER RETURN DR DAMPER ROOM DS DAMPER SUPPLY DT DAMPER TREATMENT DV DAMPER VENT DW DAMPER WASH DX DAMPER EXHAUST DY DAMPER YIELD DZ DAMPER ZONE EA EARTH EB EARTH BANK EC EARTH CHARGE ED EARTH DISCHARGE EE EARTH EQUALIZER EF EARTH FUSE EG EARTH GROUND EH EARTH HEAT EI EARTH INLET EJ EARTH JUNCTION EK EARTH KITCHEN EL EARTH LIGHT EM EARTH MOUNT EN EARTH NETWORK EO EARTH OUTLET EP EARTH PRESSURE EQ EARTH RETURN ER EARTH ROOM ES EARTH SUPPLY ET EARTH TREATMENT EV EARTH VENT EW EARTH WASH EX EARTH EXHAUST EY EARTH YIELD EZ EARTH ZONE FA FAN FB FAN BANK FC FAN CHARGE FD FAN DISCHARGE FE FAN EQUALIZER FF FAN FUSE FG FAN GROUND FH FAN HEAT FI FAN INLET FJ FAN JUNCTION FK FAN KITCHEN FL FAN LIGHT FM FAN MOUNT FN FAN NETWORK FO FAN OUTLET FP FAN PRESSURE FQ FAN RETURN FR FAN ROOM FS FAN SUPPLY FT FAN TREATMENT FV FAN VENT FW FAN WASH FX FAN EXHAUST FY FAN YIELD FZ FAN ZONE GA GEAR GB GEAR BANK GC GEAR CHARGE GD GEAR DISCHARGE GE GEAR EQUALIZER GF GEAR FUSE GG GEAR GROUND GH GEAR HEAT GI GEAR INLET GJ GEAR JUNCTION GK GEAR KITCHEN GL GEAR LIGHT GM GEAR MOUNT GN GEAR NETWORK GO GEAR OUTLET GP GEAR PRESSURE GQ GEAR RETURN GR GEAR ROOM GS GEAR SUPPLY GT GEAR TREATMENT GV GEAR VENT GW GEAR WASH GX GEAR EXHAUST GY GEAR YIELD GZ GEAR ZONE HA HANGAR HB HANGAR BANK HC HANGAR CHARGE HD HANGAR DISCHARGE HE HANGAR EQUALIZER HF HANGAR FUSE HG HANGAR GROUND HH HANGAR HEAT HI HANGAR INLET HJ HANGAR JUNCTION HK HANGAR KITCHEN HL HANGAR LIGHT HM HANGAR MOUNT HN HANGAR NETWORK HO HANGAR OUTLET HP HANGAR PRESSURE HQ HANGAR RETURN HR HANGAR ROOM HS HANGAR SUPPLY HT HANGAR TREATMENT HV HANGAR VENT HW HANGAR WASH HX HANGAR EXHAUST HY HANGAR YIELD HZ HANGAR ZONE IA IDENTIFICATION IB IDENTIFICATION BANK IC IDENTIFICATION CHARGE ID IDENTIFICATION DISCHARGE IE IDENTIFICATION EQUALIZER IF IDENTIFICATION FUSE IG IDENTIFICATION GROUND IH IDENTIFICATION HEAT II IDENTIFICATION INLET IJ IDENTIFICATION JUNCTION IK IDENTIFICATION KITCHEN IL IDENTIFICATION LIGHT IM IDENTIFICATION MOUNT IN IDENTIFICATION NETWORK IO IDENTIFICATION OUTLET IP IDENTIFICATION PRESSURE IQ IDENTIFICATION RETURN IR IDENTIFICATION ROOM IS IDENTIFICATION SUPPLY IT IDENTIFICATION TREATMENT IV IDENTIFICATION VENT IW IDENTIFICATION WASH IX IDENTIFICATION EXHAUST IY IDENTIFICATION YIELD IZ IDENTIFICATION ZONE JA JUNCTION JB JUNCTION BANK JC JUNCTION CHARGE JD JUNCTION DISCHARGE JE JUNCTION EQUALIZER JF JUNCTION FUSE JG JUNCTION GROUND JH JUNCTION HEAT JI JUNCTION INLET JJ JUNCTION JUNCTION JK JUNCTION KITCHEN JL JUNCTION LIGHT JM JUNCTION MOUNT JN JUNCTION NETWORK JO JUNCTION OUTLET JP JUNCTION PRESSURE JQ JUNCTION RETURN JR JUNCTION ROOM JS JUNCTION SUPPLY JT JUNCTION TREATMENT JV JUNCTION VENT JW JUNCTION WASH JX JUNCTION EXHAUST JY JUNCTION YIELD JZ JUNCTION ZONE KA KITCHEN KB KITCHEN BANK KC KITCHEN CHARGE KD KITCHEN DISCHARGE KE KITCHEN EQUALIZER KF KITCHEN FUSE KG KITCHEN GROUND KH KITCHEN HEAT KI KITCHEN INLET KJ KITCHEN JUNCTION KK KITCHEN KITCHEN KL KITCHEN LIGHT KM KITCHEN MOUNT KN KITCHEN NETWORK KO KITCHEN OUTLET KP KITCHEN PRESSURE KQ KITCHEN RETURN KR KITCHEN ROOM KS KITCHEN SUPPLY KT KITCHEN TREATMENT KV KITCHEN VENT KW KITCHEN WASH KX KITCHEN EXHAUST KY KITCHEN YIELD KZ KITCHEN ZONE LA LABORATORY LB LABORATORY BANK LC LABORATORY CHARGE LD LABORATORY DISCHARGE LE LABORATORY EQUALIZER LF LABORATORY FUSE LG LABORATORY GROUND LH LABORATORY HEAT LI LABORATORY INLET LJ LABORATORY JUNCTION LK LABORATORY KITCHEN LL LABORATORY LIGHT LM LABORATORY MOUNT LN LABORATORY NETWORK LO LABORATORY OUTLET LP LABORATORY PRESSURE LQ LABORATORY RETURN LR LABORATORY ROOM LS LABORATORY SUPPLY LT LABORATORY TREATMENT LV LABORATORY VENT LW LABORATORY WASH LX LABORATORY EXHAUST LY LABORATORY YIELD LZ LABORATORY ZONE MA MACHINERY MB MACHINERY BANK MC MACHINERY CHARGE MD MACHINERY DISCHARGE ME MACHINERY EQUALIZER MF MACHINERY FUSE MG MACHINERY GROUND MH MACHINERY HEAT MI MACHINERY INLET MJ MACHINERY JUNCTION MK MACHINERY KITCHEN ML MACHINERY LIGHT MM MACHINERY MOUNT MN MACHINERY NETWORK MO MACHINERY OUTLET MP MACHINERY PRESSURE MQ MACHINERY RETURN MR MACHINERY ROOM MS MACHINERY SUPPLY MT MACHINERY TREATMENT MV MACHINERY VENT MW MACHINERY WASH MX MACHINERY EXHAUST MY MACHINERY YIELD MZ MACHINERY ZONE NA NAIL NB NAIL BANK NC NAIL CHARGE ND NAIL DISCHARGE NE NAIL EQUALIZER NF NAIL FUSE NG NAIL GROUND NH NAIL HEAT NI NAIL INLET NJ NAIL JUNCTION NK NAIL KITCHEN NL NAIL LIGHT NM NAIL MOUNT NN NAIL NETWORK NO NAIL OUTLET NP NAIL PRESSURE NQ NAIL RETURN NR NAIL ROOM NS NAIL SUPPLY NT NAIL TREATMENT NV NAIL VENT NW NAIL WASH NX NAIL EXHAUST NY NAIL YIELD NZ NAIL ZONE OA OIL OB OIL BANK OC OIL CHARGE OD OIL DISCHARGE OE OIL EQUALIZER OF OIL FUSE OG OIL GROUND OH OIL HEAT OI OIL INLET OJ OIL JUNCTION OK OIL KITCHEN OL OIL LIGHT OM OIL MOUNT ON OIL NETWORK OO OIL OUTLET OP OIL PRESSURE OQ OIL RETURN OR OIL ROOM OS OIL SUPPLY OT OIL TREATMENT OV OIL VENT OW OIL WASH OX OIL EXHAUST OY OIL YIELD OZ OIL ZONE PA PANEL PB PANEL BANK PC PANEL CHARGE PD PANEL DISCHARGE PE PANEL EQUALIZER PF PANEL FUSE PG PANEL GROUND PH PANEL HEAT PI PANEL INLET PJ PANEL JUNCTION PK PANEL KITCHEN PL PANEL LIGHT PM PANEL MOUNT PN PANEL NETWORK PO PANEL OUTLET PP PANEL PRESSURE PQ PANEL RETURN PR PANEL ROOM PS PANEL SUPPLY PT PANEL TREATMENT PV PANEL VENT PW PANEL WASH PX PANEL EXHAUST PY PANEL YIELD PZ PANEL ZONE QA QUANTITY QB QUANTITY BANK QC QUANTITY CHARGE QD QUANTITY DISCHARGE QE QUANTITY EQUALIZER QF QUANTITY FUSE QG QUANTITY GROUND QH QUANTITY HEAT QI QUANTITY INLET QJ QUANTITY JUNCTION QK QUANTITY KITCHEN QL QUANTITY LIGHT QM QUANTITY MOUNT QN QUANTITY NETWORK QO QUANTITY OUTLET QP QUANTITY PRESSURE QQ QUANTITY RETURN QR QUANTITY ROOM QS QUANTITY SUPPLY QT QUANTITY TREATMENT QV QUANTITY VENT QW QUANTITY WASH QX QUANTITY EXHAUST QY QUANTITY YIELD QZ QUANTITY ZONE RA RAMP RB RAMP BANK RC RAMP CHARGE RD RAMP DISCHARGE RE RAMP EQUALIZER RF RAMP FUSE RG RAMP GROUND RH RAMP HEAT RI RAMP INLET RJ RAMP JUNCTION RK RAMP KITCHEN RL RAMP LIGHT RM RAMP MOUNT RN RAMP NETWORK RO RAMP OUTLET RP RAMP PRESSURE RQ RAMP RETURN RR RAMP ROOM RS RAMP SUPPLY RT RAMP TREATMENT RV RAMP VENT RW RAMP WASH RX RAMP EXHAUST RY RAMP YIELD RZ RAMP ZONE SA SIGNAL SB SIGNAL BANK SC SIGNAL CHARGE SD SIGNAL DISCHARGE SE SIGNAL EQUALIZER SF SIGNAL FUSE SG SIGNAL GROUND SH SIGNAL HEAT SI SIGNAL INLET SJ SIGNAL JUNCTION SK SIGNAL KITCHEN SL SIGNAL LIGHT SM SIGNAL MOUNT SN SIGNAL NETWORK SO SIGNAL OUTLET SP SIGNAL PRESSURE SQ SIGNAL RETURN SR SIGNAL ROOM SS SIGNAL SUPPLY ST SIGNAL TREATMENT SV SIGNAL VENT SW SIGNAL WASH SX SIGNAL EXHAUST SY SIGNAL YIELD SZ SIGNAL ZONE TA TANK TB TANK BANK TC TANK CHARGE TD TANK DISCHARGE TE TANK EQUALIZER TF TANK FUSE TG TANK GROUND TH TANK HEAT TI TANK INLET TJ TANK JUNCTION TK TANK KITCHEN TL TANK LIGHT TM TANK MOUNT TN TANK NETWORK TO TANK OUTLET TP TANK PRESSURE TQ TANK RETURN TR TANK ROOM TS TANK SUPPLY TT TANK TREATMENT TV TANK VENT TW TANK WASH TX TANK EXHAUST TY TANK YIELD TZ TANK ZONE UA UNDERGROUND UB UNDERGROUND BANK UC UNDERGROUND CHARGE UD UNDERGROUND DISCHARGE UE UNDERGROUND EQUALIZER UF UNDERGROUND FUSE UG UNDERGROUND GROUND UH UNDERGROUND HEAT UI UNDERGROUND INLET UJ UNDERGROUND JUNCTION UK UNDERGROUND KITCHEN UL UNDERGROUND LIGHT UM UNDERGROUND MOUNT UN UNDERGROUND NETWORK UO UNDERGROUND OUTLET UP UNDERGROUND PRESSURE UQ UNDERGROUND RETURN UR UNDERGROUND ROOM US UNDERGROUND SUPPLY UT UNDERGROUND TREATMENT UV UNDERGROUND VENT UW UNDERGROUND WASH UX UNDERGROUND EXHAUST UY UNDERGROUND YIELD UZ UNDERGROUND ZONE VA VALVE VB VALVE BANK VC VALVE CHARGE VD VALVE DISCHARGE VE VALVE EQUALIZER VF VALVE FUSE VG VALVE GROUND VH VALVE HEAT VI VALVE INLET VJ VALVE JUNCTION VK VALVE KITCHEN VL VALVE LIGHT VM VALVE MOUNT VN VALVE NETWORK VO VALVE OUTLET VP VALVE PRESSURE VQ VALVE RETURN VR VALVE ROOM VS VALVE SUPPLY VT VALVE TREATMENT VV VALVE VENT VW VALVE WASH VX VALVE EXHAUST VY VALVE YIELD VZ VALVE ZONE WA WALL WB WALL BANK WC WALL CHARGE WD WALL DISCHARGE WE WALL EQUALIZER WF WALL FUSE WG WALL GROUND WH WALL HEAT WI WALL INLET WJ WALL JUNCTION WK WALL KITCHEN WL WALL LIGHT WM WALL MOUNT WN WALL NETWORK WO WALL OUTLET WP WALL PRESSURE WQ WALL RETURN WR WALL ROOM WS WALL SUPPLY WT WALL TREATMENT WV WALL VENT WW WALL WASH WX WALL EXHAUST WY WALL YIELD WZ WALL ZONE XA X-RAY XB X-RAY BANK XC X-RAY CHARGE XD X-RAY DISCHARGE XE X-RAY EQUALIZER XF X-RAY FUSE XG X-RAY GROUND XH X-RAY HEAT XI X-RAY INLET XJ X-RAY JUNCTION XK X-RAY KITCHEN XL X-RAY LIGHT XM X-RAY MOUNT XN X-RAY NETWORK XO X-RAY OUTLET XP X-RAY PRESSURE XQ X-RAY RETURN XR X-RAY ROOM XS X-RAY SUPPLY XT X-RAY TREATMENT XV X-RAY VENT XW X-RAY WASH XX X-RAY EXHAUST XY X-RAY YIELD XZ X-RAY ZONE YA YARD YB YARD BANK YC YARD CHARGE YD YARD DISCHARGE YE YARD EQUALIZER YF YARD FUSE YG YARD GROUND YH YARD HEAT YI YARD INLET YJ YARD JUNCTION YK YARD KITCHEN YL YARD LIGHT YM YARD MOUNT YN YARD NETWORK YO YARD OUTLET YP YARD PRESSURE YQ YARD RETURN YR YARD ROOM YS YARD SUPPLY YT YARD TREATMENT YV YARD VENT YW YARD WASH YX YARD EXHAUST YY YARD YIELD YZ YARD ZONE ZA ZONE ZB ZONE BANK ZC ZONE CHARGE ZD ZONE DISCHARGE ZE ZONE EQUALIZER ZF ZONE FUSE ZG ZONE GROUND ZH ZONE HEAT ZI ZONE INLET ZJ ZONE JUNCTION ZK ZONE KITCHEN ZL ZONE LIGHT ZM ZONE MOUNT ZN ZONE NETWORK ZO ZONE OUTLET ZP ZONE PRESSURE ZQ ZONE RETURN ZR ZONE ROOM ZS ZONE SUPPLY ZT ZONE TREATMENT ZV ZONE VENT ZW ZONE WASH ZX ZONE EXHAUST ZY ZONE YIELD ZZ ZONE ZONE </p>	<p> DIAGRAM AA ALUMINUM INDICATOR LIGHT, EQUAL LIGHT OR STROKE AB CROUCH BREAKER - SEE AND TYPE AS INDICATED AC CROUCH BREAKER - 2 INEMA BOLD TYPE AND PIPE AS INDICATED AD METAL INGROUND RELAY AE COMBINATION MOTOR CONTROLLER, STARTER, CROUCH BREAKER TYPE AF BULB TYPE AG CROUCH BREAKER AH CROUCH BREAKER AI CROUCH BREAKER AJ CROUCH BREAKER AK CROUCH BREAKER AL CROUCH BREAKER AM CROUCH BREAKER AN CROUCH BREAKER AO CROUCH BREAKER AP CROUCH BREAKER AQ CROUCH BREAKER AR CROUCH BREAKER AS CROUCH BREAKER AT CROUCH BREAKER AV CROUCH BREAKER AW CROUCH BREAKER AX CROUCH BREAKER AY CROUCH BREAKER AZ CROUCH BREAKER BA BATTERY BB BATTERY BANK BC BATTERY CHARGE BD BATTERY DISCHARGE BE BATTERY EQUALIZER BF BATTERY FUSE BG BATTERY GROUND BH BATTERY HEAT BI BATTERY INLET BJ BATTERY JUNCTION BK BATTERY KITCHEN BL BATTERY LIGHT BM BATTERY MOUNT BN BATTERY NETWORK BO BATTERY OUTLET BP BATTERY PRESSURE BQ BATTERY RETURN BR BATTERY ROOM BS BATTERY SUPPLY BT BATTERY TREATMENT BV BATTERY VENT BW BATTERY WASH BX BATTERY EXHAUST BY BATTERY YIELD BZ BATTERY ZONE CA CABLE CB CABLE BANK CC CABLE CHARGE CD CABLE DISCHARGE CE CABLE EQUALIZER CF CABLE FUSE CG CABLE GROUND CH CABLE HEAT CI CABLE INLET CJ CABLE JUNCTION CK CABLE KITCHEN CL CABLE LIGHT CM CABLE MOUNT CN CABLE NETWORK CO CABLE OUTLET CP CABLE PRESSURE CQ CABLE RETURN CR CABLE ROOM CS CABLE SUPPLY CT CABLE TREATMENT CV CABLE VENT CW CABLE WASH CX CABLE EXHAUST CY CABLE YIELD CZ CABLE ZONE DA DAMPER DB DAMPER BANK DC DAMPER CHARGE DD DAMPER DISCHARGE DE DAMPER EQUALIZER DF DAMPER FUSE DG DAMPER GROUND DH DAMPER HEAT DI DAMPER INLET DJ DAMPER JUNCTION DK DAMPER KITCHEN DL DAMPER LIGHT DM DAMPER MOUNT DN DAMPER NETWORK DO DAMPER OUTLET DP DAMPER PRESSURE DQ DAMPER RETURN DR DAMPER ROOM DS DAMPER SUPPLY DT DAMPER TREATMENT DV DAMPER VENT DW DAMPER WASH DX DAMPER EXHAUST DY DAMPER YIELD DZ DAMPER ZONE EA EARTH EB EARTH BANK EC EARTH CHARGE ED EARTH DISCHARGE EE EARTH EQUALIZER EF EARTH FUSE EG EARTH GROUND EH EARTH HEAT EI EARTH INLET EJ EARTH JUNCTION EK EARTH KITCHEN EL EARTH LIGHT EM EARTH MOUNT EN EARTH NETWORK EO EARTH OUTLET EP EARTH PRESSURE EQ EARTH RETURN ER EARTH ROOM ES EARTH SUPPLY ET EARTH TREATMENT EV EARTH VENT EW EARTH WASH EX EARTH EXHAUST EY EARTH YIELD EZ EARTH ZONE FA FAN FB FAN BANK FC FAN CHARGE FD FAN DISCHARGE FE FAN EQUALIZER FF FAN FUSE FG FAN GROUND FH FAN HEAT FI FAN INLET FJ FAN JUNCTION FK FAN KITCHEN FL FAN LIGHT FM FAN MOUNT FN FAN NETWORK FO FAN OUTLET FP FAN PRESSURE FQ FAN RETURN FR FAN ROOM FS FAN SUPPLY FT FAN TREATMENT FV FAN VENT FW FAN WASH FX FAN EXHAUST FY FAN YIELD FZ FAN ZONE GA GEAR GB GEAR BANK GC GEAR CHARGE GD GEAR DISCHARGE GE GEAR EQUALIZER GF GEAR FUSE GG GEAR GROUND GH GEAR HEAT GI GEAR INLET GJ GEAR JUNCTION GK GEAR KITCHEN GL GEAR LIGHT GM GEAR MOUNT GN GEAR NETWORK GO GEAR OUTLET GP GEAR PRESSURE GQ GEAR RETURN GR GEAR ROOM GS GEAR SUPPLY GT GEAR TREATMENT GV GEAR VENT GW GEAR WASH GX GEAR EXHAUST GY GEAR YIELD GZ GEAR ZONE HA HANGAR HB HANGAR BANK HC HANGAR CHARGE HD HANGAR DISCHARGE HE HANGAR EQUALIZER HF HANGAR FUSE HG HANGAR GROUND HH HANGAR HEAT HI HANGAR INLET HJ HANGAR JUNCTION HK HANGAR KITCHEN HL HANGAR LIGHT HM HANGAR MOUNT HN HANGAR NETWORK HO HANGAR OUTLET HP HANGAR PRESSURE HQ HANGAR RETURN HR HANGAR ROOM HS HANGAR SUPPLY HT HANGAR TREATMENT HV HANGAR VENT HW HANGAR WASH HX HANGAR EXHAUST HY HANGAR YIELD HZ HANGAR ZONE IA IDENTIFICATION IB IDENTIFICATION BANK IC IDENTIFICATION CHARGE ID IDENTIFICATION DISCHARGE IE IDENTIFICATION EQUALIZER IF IDENTIFICATION FUSE IG IDENTIFICATION GROUND IH IDENTIFICATION HEAT II IDENTIFICATION INLET IJ IDENTIFICATION JUNCTION IK IDENTIFICATION KITCHEN IL IDENTIFICATION LIGHT IM IDENTIFICATION MOUNT IN IDENTIFICATION NETWORK IO IDENTIFICATION OUTLET IP IDENTIFICATION PRESSURE IQ IDENTIFICATION RETURN IR IDENTIFICATION ROOM IS IDENTIFICATION SUPPLY IT IDENTIFICATION TREATMENT IV IDENTIFICATION VENT IW IDENTIFICATION WASH IX IDENTIFICATION EXHAUST IY IDENTIFICATION YIELD IZ IDENTIFICATION ZONE JA JUNCTION JB JUNCTION BANK JC JUNCTION CHARGE JD JUNCTION DISCHARGE JE JUNCTION EQUALIZER JF JUNCTION FUSE JG JUNCTION GROUND JH JUNCTION HEAT JI JUNCTION INLET IJ JUNCTION JUNCTION JK JUNCTION KITCHEN JL JUNCTION LIGHT JM JUNCTION MOUNT JN JUNCTION NETWORK JO JUNCTION OUTLET JP JUNCTION PRESSURE JQ JUNCTION RETURN JR JUNCTION ROOM JS JUNCTION SUPPLY JT JUNCTION TREATMENT JV JUNCTION VENT JW JUNCTION WASH JX JUNCTION EXHAUST JY JUNCTION YIELD JZ JUNCTION ZONE KA KITCHEN KB KITCHEN BANK KC KITCHEN CHARGE KD KITCHEN DISCHARGE KE KITCHEN EQUALIZER KF KITCHEN FUSE KG KITCHEN GROUND KH KITCHEN HEAT KI KITCHEN INLET KJ KITCHEN JUNCTION KK KITCHEN KITCHEN KL KITCHEN LIGHT KM KITCHEN MOUNT KN KITCHEN NETWORK KO KITCHEN OUTLET KP KITCHEN PRESSURE KQ KITCHEN RETURN KR KITCHEN ROOM KS KITCHEN SUPPLY KT KITCHEN TREATMENT KV KITCHEN VENT KW KITCHEN WASH KX KITCHEN EXHAUST KY KITCHEN YIELD KZ KITCHEN ZONE LA LABORATORY LB LABORATORY BANK LC LABORATORY CHARGE LD LABORATORY DISCHARGE LE LABORATORY EQUALIZER LF LABORATORY FUSE</p>			



SHEET GENERAL NOTES

- UNLESS OTHERWISE NOTED, ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE ALARM AND SIGNAL CODE (NFPA 72).

SHEET KEYNOTES

- INDICATED AND IDENTIFIED METER SHALL BE INSTALLED TO MONITOR ENERGY CONSUMPTION AND TO VERIFY PROPER OPERATION OF THE TRANSFORMER.
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- EQUIPMENT MOUNTING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.

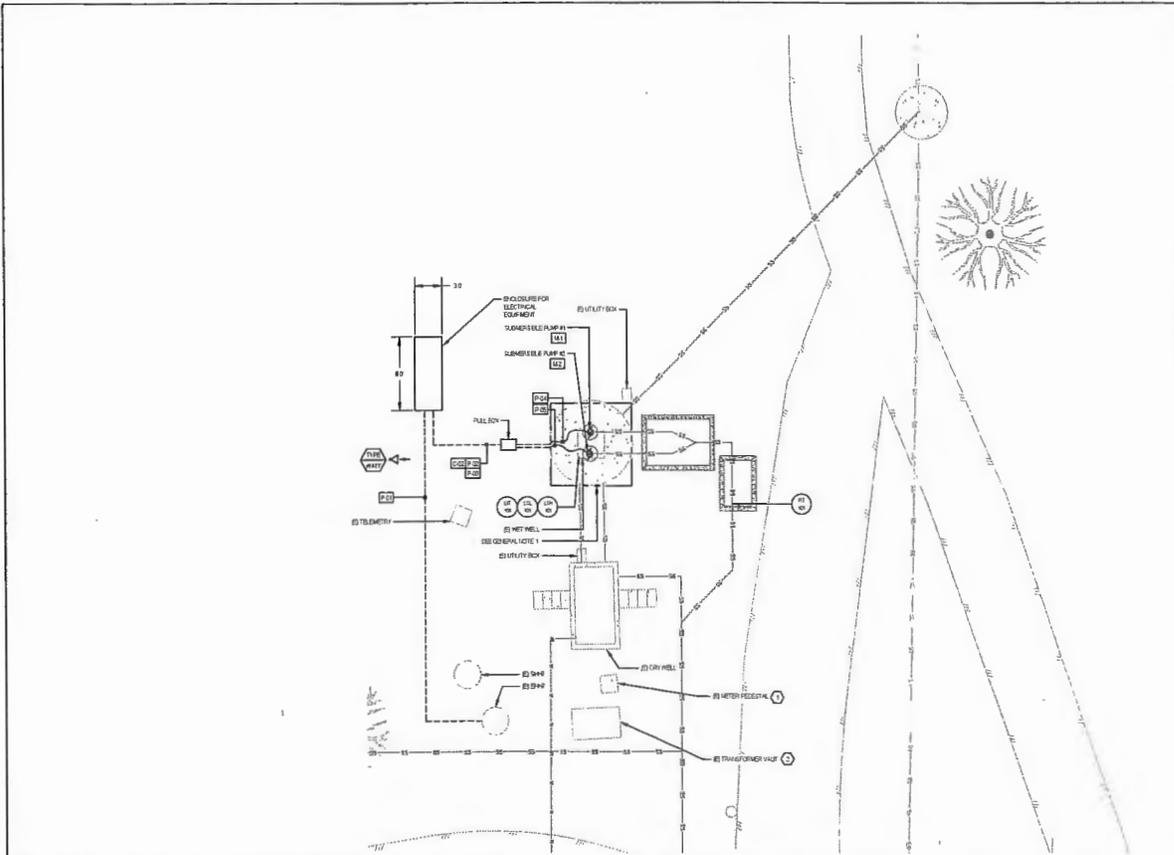
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NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	480V/240-120V TRANSFORMER	1	EA	1200.00	1200.00
2	CONTROL PANEL	1	EA	1500.00	1500.00
3	PLC	1	EA	1000.00	1000.00
4	RADIO EQUIPMENT	1	EA	800.00	800.00
5	WIRING MATERIAL	1	LOT	500.00	500.00
6	CONCRETE FOUNDATION	1	EA	1000.00	1000.00
7	CONCRETE WALL	1	EA	1000.00	1000.00
8	CONCRETE FLOOR	1	EA	1000.00	1000.00
9	CONCRETE ROOF	1	EA	1000.00	1000.00
10	CONCRETE CURB	1	EA	1000.00	1000.00
11	CONCRETE WALKWAY	1	EA	1000.00	1000.00
12	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
13	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
14	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
15	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
16	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
17	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
18	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
19	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
20	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
21	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
22	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
23	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
24	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
25	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
26	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
27	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
28	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00
29	CONCRETE SIDEWALK	1	EA	1000.00	1000.00
30	CONCRETE DRIVEWAY	1	EA	1000.00	1000.00

30% SUBMITTAL

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
HILLER LIFT STATION UPGRADES
ELECTRICAL DEMOLITION

<p>DATE: 03/19/2020</p> <p>PROJECT: HILLER LIFT STATION UPGRADES</p> <p>PROJECT NO: 15202856</p> <p>PROJECT LOCATION: HILLER LIFT STATION</p> <p>PROJECT OWNER: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT</p> <p>PROJECT MANAGER: A. G. GIBSON</p> <p>PROJECT ENGINEER: A. G. GIBSON</p> <p>PROJECT ARCHITECT: A. G. GIBSON</p> <p>PROJECT ELECTRICAL: A. G. GIBSON</p> <p>PROJECT MECHANICAL: A. G. GIBSON</p> <p>PROJECT PLUMBING: A. G. GIBSON</p> <p>PROJECT ROOFING: A. G. GIBSON</p> <p>PROJECT CONCRETE: A. G. GIBSON</p> <p>PROJECT PAINTING: A. G. GIBSON</p> <p>PROJECT LANDSCAPE: A. G. GIBSON</p> <p>PROJECT SIGNAGE: A. G. GIBSON</p> <p>PROJECT FURNITURE: A. G. GIBSON</p> <p>PROJECT LIGHTING: A. G. GIBSON</p> <p>PROJECT SECURITY: A. G. GIBSON</p> <p>PROJECT ACCESSIBILITY: A. G. GIBSON</p> <p>PROJECT ENERGY EFFICIENCY: A. G. GIBSON</p> <p>PROJECT SUSTAINABILITY: A. G. GIBSON</p> <p>PROJECT COMMUNITY ENGAGEMENT: A. G. GIBSON</p> <p>PROJECT TRANSPORTATION: A. G. GIBSON</p> <p>PROJECT UTILITIES: A. G. 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SHEET GENERAL NOTES

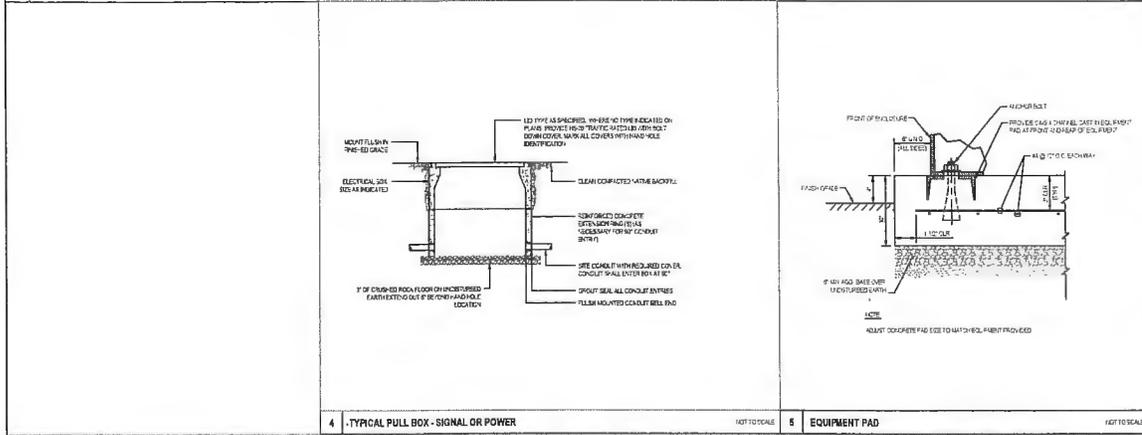
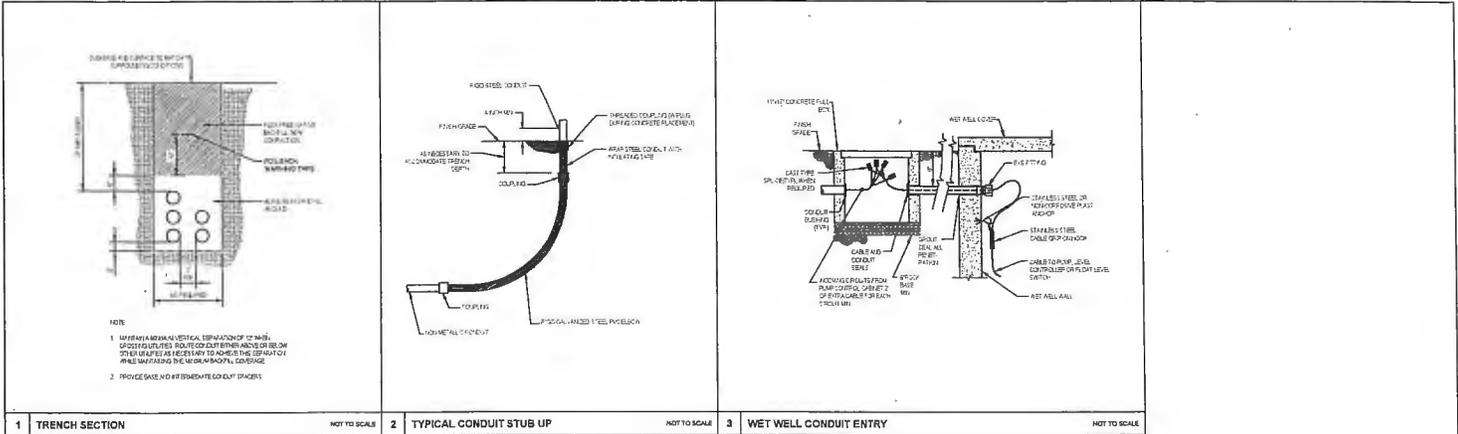
1. THE WET WELL IS 42" DIA. (30" DIA.) IN DIAMETER AND THE PUMP HOUSE IS 6' DIA. (4' DIA.) IN DIAMETER. CONDUIT SIZES AND RATED METERS SHALL BE AS SHOWN ON SHEET E-101.
2. LOCATION OF ELECTRICAL UTILITIES AND TELEPHONE UTILITIES SHALL BE AS SHOWN ON SHEET E-101. EXACT LOCATION AND DEPT. SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION.
3. REFER TO SHEET E-101 FOR EQUIPMENT SIZES AND SIZES.
4. REFER TO CONDUIT AND CABLE SCHEDULE ON SHEET E-101 FOR SIZES.

SHEET KEYNOTES

1. CHECK METER AND METER PEDestal, PUMP HOUSE METER TO OWNER.
2. CHECK METER AND METER PEDestal.

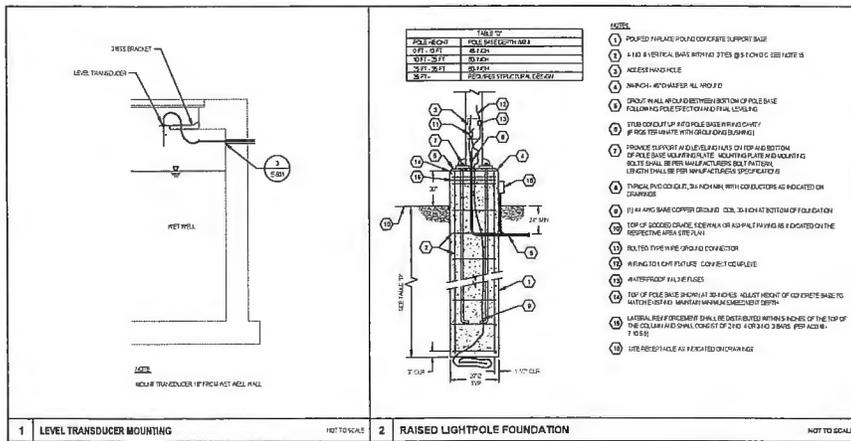


				Drawn: T. BARR Design: A. COLE Check: A. COLE Project Manager: R. STEVENS Date: 10/20/19		Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT Project: HILLER LIFT STATION UPGRADES Title: ELECTRICAL SITE PLAN Project No: 1722856 Revision: ANS10 Sheet: E-101	
Date: 10/20/19 Project: HILLER LIFT STATION UPGRADES		Project of Comments: The owner has the site and the project is in progress. The owner has the site and the project is in progress.		Scale: 1" = 4'		Date: 10/20/19	



30% SUBMITTAL

<p>30% SUBMITTAL</p> <p>DATE: 02/19/20</p> <p>NO. 15999</p> <p>DATE: 02/19/20</p>	<p>McKINLEYVILLE COMMUNITY SERVICES DISTRICT HILLER LIFT STATION UPGRADES ELECTRICAL DETAILS - I</p>	<p>Drawn: T. BASSA</p> <p>Checked: A. COLE</p> <p>Design: A. COLE</p> <p>Client: W. MARKS</p> <p>Project Manager: R. STEVENS</p> <p>Date: 02/02/20</p> <p>Scale: AS SHOWN</p>	<p>Sheet No: 11202858</p> <p>Project No: E-501</p> <p>Date: 02/19/20</p>
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1 LEVEL TRANSDUCER MOUNTING NOT TO SCALE 2 RAISED LIGHTPOLE FOUNDATION NOT TO SCALE

30% SUBMITTAL

				Draw: E. KASBA Design: A. COLE Check: M. WARD Project Manager: R. STEVENS Date: 03/19/2020		Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT Project: HILLER LIFT STATION UPGRADES Title: ELECTRICAL DETAILS Project No: 11202856 Revision: E-502	
Title: 30% SUBMITTAL Date:		Scale: AS SHOWN Project No: 11202856 Revision: E-502		The printed and electronic files shall be used to construct and install all electrical equipment.		Sheet 11 of 18	

INSTRUMENTATION IDENTIFICATION

EXAMPLE SYMBOLS

FUNCTION CODE TABLE

FUNCTION CODE	DESCRIPTION
1	CONTROL PANEL
2	CONTROL PANEL
3	CONTROL PANEL
4	CONTROL PANEL
5	CONTROL PANEL
6	CONTROL PANEL
7	CONTROL PANEL
8	CONTROL PANEL
9	CONTROL PANEL
0	CONTROL PANEL
10	CONTROL PANEL
11	CONTROL PANEL
12	CONTROL PANEL
13	CONTROL PANEL
14	CONTROL PANEL
15	CONTROL PANEL
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98	CONTROL PANEL
99	CONTROL PANEL
00	CONTROL PANEL

INSTRUMENT SOCIETY OF AMERICA TABLE

LETTER	PROCESS OR INSTRUMENT VARIABLE	MODIFIER	RESEARCH OR PARAMETER FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALOG SIGNAL		ALARM	ALARM	
B	BI-PHASE LINE		BI-PHASE (3-Ø)	BI-PHASE (3-Ø)	
C	CONNECTIVITY		CONTROL	CONTROL	
D	DESTINATION SHEET		DESTINATION SHEET (D)	DESTINATION SHEET (D)	
E	EMERGENCY		EMERGENCY (E)	EMERGENCY (E)	
F	FULL SCALE		FULL SCALE (F)	FULL SCALE (F)	
G	GRADE		GRADE (G)	GRADE (G)	
H	HAND-OPERATED		HAND-OPERATED (H)	HAND-OPERATED (H)	
I	INSTRUMENT		INSTRUMENT (I)	INSTRUMENT (I)	
J	JUNCTION		JUNCTION (J)	JUNCTION (J)	
K	KEY		KEY (K)	KEY (K)	
L	LEVEL		LEVEL (L)	LEVEL (L)	
M	METER		METER (M)	METER (M)	
N	NORMAL POSITION		NORMAL POSITION (N)	NORMAL POSITION (N)	
O	ORIGIN		ORIGIN (O)	ORIGIN (O)	
P	POWER		POWER (P)	POWER (P)	
Q	QUANTITY		QUANTITY (Q)	QUANTITY (Q)	
R	RANGE		RANGE (R)	RANGE (R)	
S	SCALE		SCALE (S)	SCALE (S)	
T	TEMPERATURE		TEMPERATURE (T)	TEMPERATURE (T)	
U	UNIT		UNIT (U)	UNIT (U)	
V	VARIABLE		VARIABLE (V)	VARIABLE (V)	
W	WATER		WATER (W)	WATER (W)	
X	EXHAUST		EXHAUST (X)	EXHAUST (X)	
Y	YIELD		YIELD (Y)	YIELD (Y)	
Z	ZONE		ZONE (Z)	ZONE (Z)	

SELF-CONTAINED VALVE AND EQUIPMENT TAG NUMBERS

CP = CONTROL PANEL
 F = FLOW METER
 FM = FLOW METER
 G = GATE
 GR = GRT REMOVAL
 M = MECHANICAL EQUIPMENT
 P = PUMP
 PCV = PRESSURE CONTROL VALVE
 PRV = PRESSURE RELIEF VALVE
 RB = REFUSE BIN
 S = AUTOMATIC SCREEN
 T = TANK
 TCV = TEMPERATURE CONTROL VALVE
 UV = ULTRAVIOLET TREATMENT
 WP = WASH PRESS

1 = UNIT NUMBER
 XXX = LOOP NUMBER
 = FACILITY OR STRUCTURE IDENTIFIER
 = EQUIPMENT IDENTIFIER

VALVE SYMBOLS

—○— GATE
 —K— KNEE GATE
 —S— BUTTERFLY
 —G— GLOBE
 —B— BALL
 —P— PLUG
 —H— HAND WHEEL OPERATED
 —M— MUSHROOM
 —E— ECCENTRIC PLUG
 —P— PINCH
 —N— NEEDLE

—D— DIAPHRAGM
 —S— SWING CHECK
 —B— BALL CHECK
 —M— MULTIPORT
 —P— PRESSURE RELEASE
 —A— AIR AND/OR VACUUM RELEASE
 —R— REGULATED SIDE
 —P— PRESSURE CONTROL BYPASS (IN-LINE)

GATE SYMBOLS

—S— SLIDE GATE
 —W— WEIR GATE

PRIMARY ELEMENT SYMBOLS

—P— ORIFICE PLATE
 —T— TRAPPED AIR PRESSURE TRANSDUCER
 —E— ELECTROMAGNETIC FLOWMETER
 —L— LEVEL (FLOAT)
 —T— THERMAL MASS FLOWMETER
 —S— STATIC TANKER
 —F— FLOAT VALVE

—P— PROPELLER OR TURBINE METER
 —S— TURBIDITY SENSOR
 —P— SUBMERSIBLE PRESSURE TRANSDUCER
 —L— LEVEL (ULTRASONIC)
 —R— ROTAMETER

EQUIPMENT SYMBOLS

NOTE: XX AS = ADJUSTABLE SPEED

—C— CENTRIFUGAL PUMP (SAY P1)
 —W— CENTRIFUGAL WET PUMP OR TURBINE PUMP
 —C— CHEMICAL FEED PUMP
 —D— DIAPHRAGM PUMP
 —C— PROCESSING CAVITY PUMP

—M— SIGNAL METER OPERATED EQUIPMENT
 —A— AERATOR
 —E— EJECTOR
 —S— SUBMERSIBLE SLURRY PUMP
 —C— COMPRESSOR
 —B— CENTRIFUGAL BLOWER
 —P— PERISTALTIC PUMP

MISCELLANEOUS SYMBOLS

—V— AIR GAP
 —D— DRAIN
 —V— VENT TO ATMOSPHERE
 —S— DIAPHRAGM SEAL
 —A— ANNULAR SEAL
 —L— DRIP LEG
 —T— AUTOMATIC DRAIN TRAP
 —I— INTERLOCK, SEE CONTROL DIAGRAMS
 —F— FLEXIBLE CONNECTION
 —W— WATERLINE
 —C— CALIBRATION COLUMN
 —D— AIR DRIVER

120V = 120V, 1Ø POWER
 208V = 208V, 3Ø POWER
 480V = 480V, 3Ø POWER

—S— WYE STRAINER
 —I— INTRINSICALLY SAFE RELAY
 —T— MANUAL DRAIN TRAP
 —D— RUPTURE DISK
 —S— SEAL WATER SET
 —C— FLEXIBLE CONNECTION
 —A— HOSE ADAPTOR
 —S— AIR SET
 —M— MIXER
 —C— MOTOR CONTROLLER
 —P— CONTROL PANEL MOUNTED ALPHA INDICATOR LAMP
 —P— POLYMER ACTIVATION UNIT

FLOW STREAM IDENTIFICATION

LETTER	SERVICE
AW	POTABLE WATER
RS	RETURN ACTIVATED SLUDGE
RS	RAW SEWAGE
SA	SAMPLE
SE	SECONDARY EFFLUENT
SH	SODIUM HYPOCHLORITE
SW	STORM WATER
TE	TERTIARY EFFLUENT
TI	TERTIARY INFILTRANT
UW	UTILITY WATER
VAC	VACUUM AIR
WAS	WASTE ACTIVATED SLUDGE

ABBREVIATIONS

AHU	AIR HANDLING UNIT
BW	BACKWASH
CF	CHEMICAL FEED
CL	CL
DF	DRAIN
FW	FILTER BACKWASH
FTW	FILTER TO WASTE
FE	FINAL EFFLUENT
OP	OVERFLOW
P	POLYMER
PT	POND TRANSFER
OC	OPEN-CLOSE (D)
OCA	OPEN-CLOSE-AUTO
OS	ON-OFF-AUTO
OCC	OPEN-STOP-CLOSE
OS	ON-OFF-STOP
PF	PUBLIC FREQUENCY
PH	HYDROPHOBIC
CON	CONCENTRATION
PLC	PROGRAMMABLE LOGIC CONTROLLER
QTY	QUANTITY
TR	THERMAL OVERLOAD
TYP	TYPICAL
VFD	VARIABLE FREQUENCY DRIVE

GENERAL NOTES

- THIS IS A STANDARD LEGEND, THEREFORE NOT ALL OF THIS INFORMATION MAY BE REQUIRED ON THIS PROJECT.
- COMPONENTS AND PANELS SHOWN WITH ONE OR MORE ASTERISKS * ARE PART OF A PACKAGE SYSTEM, SEE EQUIPMENT SPECIFICATIONS.

INTERFACE SYMBOLS AND LINE LEGEND

—○— PROCESS INTERFACE
 —○— SIGNAL INTERFACE
 —A— ANALOG SIGNAL
 —D— DISCRETE SIGNAL
 —F— FILLED SYSTEM SIGNAL
 —S— SCALED PULSE SIGNAL
 —D— DIGITAL COMMUNICATION LINK

—○— PROCESS INTERFACE
 —○— SIGNAL INTERFACE
 —A— INTERFACE LETTER
 —D— DESTINATION SHEET NO.
 —S— SOURCE SHEET NO.

—○— CONNECTING LINES
 —○— PROCESS INTERFACE OR CONTINUATION

ACTUATOR SYMBOLS

—E— ELECTRIC W/ POSITIONER	—E— ELECTRIC	—S— SOLENOID
—H— HYDRAULIC	—P— PNEUMATIC W/ SOLENOID	—M— MOTOR OPERATED

NOTE: LOSS OF PRIMARY POWER (PNEUMATIC, ELECTRICAL OR HYDRAULIC)
 OO: FO = FAIL OPEN
 FC = FAIL CLOSED
 FLP = FAIL TO LAST POSITION

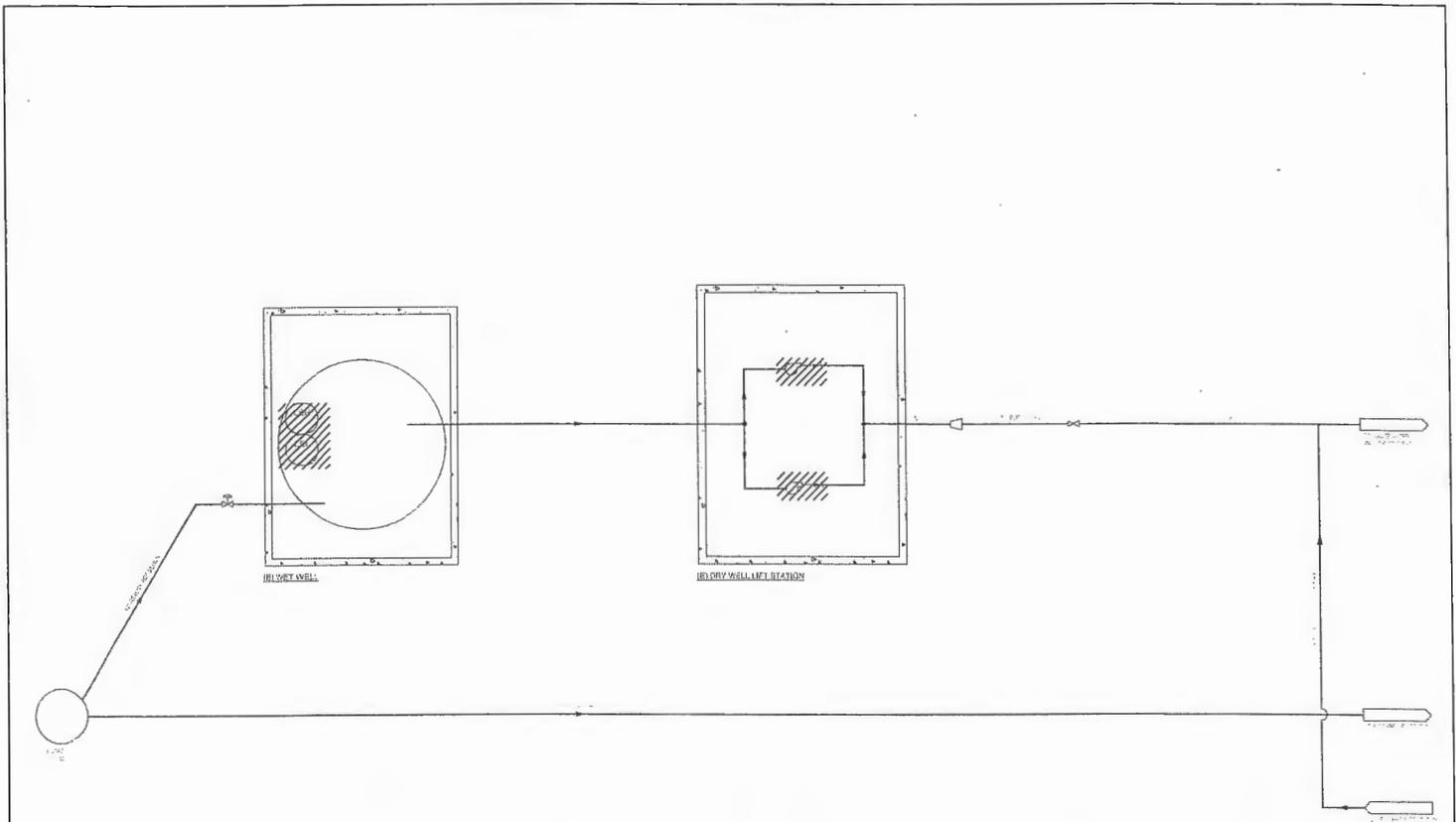
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GHD
 11700 JACKSON ST. SUITE 1000 WEST VALLEY, CO 80057
 TEL: 303.440.1400 FAX: 303.440.1401

Drawn: E. BROWN	Checked: A. COLE
Design: A. COLE	Design: A. COLE
Project Manager: A. BROWN	Date: 10/20/19
Scale: AS SHOWN	Project No: 12020358
Sheet: 1-001	Sheet: 13 of 15

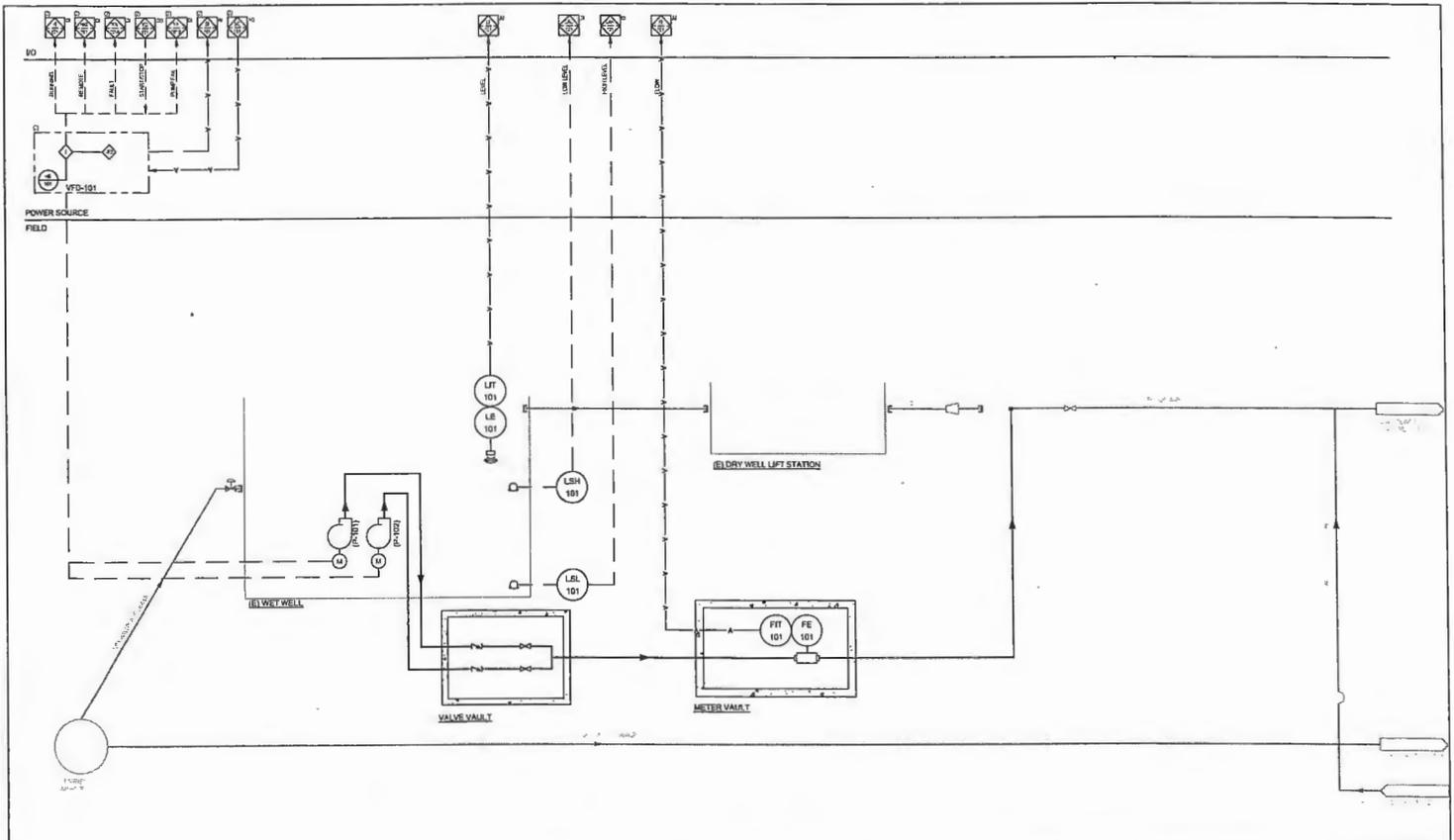
30% SUBMITTAL

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
HILLER LIFT STATION UPGRADES
PAID ABBREVIATIONS, SYMBOLS AND NOTES



30% SUBMITTAL

				McKINLEYVILLE COMMUNITY SERVICES DISTRICT HILLER LIFT STATION UPGRADES PROCESS & INSTRUMENTATION DIAGRAM - DEMOLITION	
Date: 11/20/2018 Drawn: A. COLE Checked: M. WARD Project Manager: M. STEVENS Date: 11/20/2018 Checked: A. B. SHOWN	Designer: A. COLE Designer: M. WARD Date: 11/20/2018 Checked: A. B. SHOWN	Project: 11202856 Client: ANEID Sheet: ID-101			



30% SUBMITTAL

				McKINLEYVILLE COMMUNITY SERVICES DISTRICT HILLER LIFT STATION UPGRADES PROCESS & INSTRUMENTATION DIAGRAM	
Project: HILLER LIFT STATION UPGRADES Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT Date: 11/20/2019	Designer: A. COLE Checker: M. WARD Project Manager: A. STEVENS Scale: AS SHOWN	Sheet No: 1-101 Project No: 19222856 Date: 11/20/2019	Title: HILLER LIFT STATION UPGRADES Project: HILLER LIFT STATION UPGRADES Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT Date: 11/20/2019		

ATTACHMENT 4

Categorical Exemption adopted by MCSD as CEQA Lead Agency

Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044
County Clerk
County of: Humboldt

From: (Public Agency):
McKinleyville Community Services District
1656 Sutter Road, McKinleyville, CA 95519
(Address)

mcsdgm@mckinleyvillecsd.com

Project Title: Hiller Sewer Lift Station Upgrade

Project Applicant: McKinleyville Community Services District

Project Location - Specific:

Located at the existing Hiller Lift Station at the northern end of Fischer Road near Hiller Park.

Project Location - City: McKinleyville Project Location - County: Humboldt

Description of Nature, Purpose and Beneficiaries of Project:
Please see attached.

Name of Public Agency Approving Project: McKinleyville Community Services District

Name of Person or Agency Carrying Out Project: McKinleyville Community Services District

Exempt Status: (check one):

- Ministerial (Sec. 21080(b)(1); 15268);
Declared Emergency (Sec. 21080(b)(3); 15269(a));
Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
Categorical Exemption. State type and section number: 15301 (b), 15302
Statutory Exemptions. State code number:

Reasons why project is exempt:
Please see attached.

POSTED THROUGH
JAN 03 2020
Humboldt County Clerk

Lead Agency Contact Person: Greg Orsini, General Manager Area Code/Telephone/Extension: 707-839-3251

If filed by applicant:

- 1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: Date: 6 Nov 2019 Title: General Manager

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

FILED

County of Humboldt
Kelly E. Sanders
County Clerk
12-2019-379
11/07/2019
sc

RECEIVED
JAN -6 2020

McK. C.S.D.

PAID
JAN 6 2020
McK. C.S.D.

RECEIVED
JAN - 8/2020
McK. C.S.D.

McKinleyville CSD Hiller Sewer Lift Station Upgrade Project

Description, Nature, Purpose, and Beneficiaries of Project:

The McKinleyville Community Services District will upgrade the existing Hiller Sewer Lift Station to improve its efficiency. There is an existing wet well in the current system, and two Gorman-Rupp pumps in an adjacent package dry well lift station pump wastewater from this wet well to the Wastewater Management Facility (WWMF). The upgrades will include decommissioning the existing dry well lift station and associated Gorman-Rupp pumps, and installing new, more energy-efficient submersible pumps in the existing wet well.

The discharge of the proposed submersible pumps in the station's existing wet well will be connected to the existing discharge force main from the Gorman-Rupp pumps. The existing electrical feed from the WWMF that currently powers the Gorman-Rupp pumps will be utilized to power the new pumps. The new pumps and other associated components will be integrated into the existing Supervisory Control and Data Acquisition (SCADA) system. The project will include the necessary wet well modifications for installing the new pumps and discharge piping, and re-routing existing water and electrical transmission lines. Minor modifications to sewer lines, force mains, man holes, and controls required for successful installation and use of the new pumps will also occur. The project will also include removal of the existing pumps and other appurtenances from the dry well prior to its abandonment.

Beneficiaries of the project include the community residents and businesses who rely on McKinleyville's wastewater infrastructure. These residents and businesses will continue to benefit from a functional wastewater lift station, including benefits resulting from increased energy efficiency, which will result in minimized costs to the McKinleyville Community Services District and contributing ratepayer base.

Reasons why project is exempt:

All project components are categorically exempt under Section 15301 (b) – Existing Facilities and Section 15302 (c) – Replacement or Reconstruction.

- Section 15301 (b) is applicable as the Hiller Sewer Lift Station is an existing publicly-owned sewerage facilities. The facility will be treated with minor alternations to improve energy and operational efficiencies. Applicable project components include the installation of new submersible pumps in the existing wet well, transformer, concrete pad, and a prefabricated concrete control enclosure. The lift station is an existing public facility, and implementation of the project will involve negligible or no expansion of use.
- Section 15302 (c) is applicable as the Hiller Sewer Lift Station will involve reconstruction of existing structures and a facility located on the same site with the same purpose and capacity as prior to reconstruction. The lift station is an integral part of an existing utility system (public sewer) involving negligible or no expansion capacity. Applicable project components include minor re-routing of existing water and electrical lines necessary for operation of the lift station, minor modifications to sewer lines, force mains, and man holes. Additional applicable project components include abandonment of the existing dry well and capping of lines to/from the dry well.

ATTACHMENT 5

Referral Agency Comments and Recommendation

Referral Agency	Response	Recommendation	Attached	On File
County Building Inspection Division	✓	Conditional Approval		✓
Department of Public Works	✓	Comments – does not affect any DPW maintained facilities		✓
Division of Environmental Health	✓	Approval		✓
McKinleyville Community Services District	✓	Approval		✓
California Coastal Commission				
Blue Lake Rancheria	✓	Conditional Approval		✓
Wiyot Tribe	✓	Conditional Approval		✓
Bear River Band of the Rohnerville Rancheria	✓	Conditional Approval		✓