File No. EA2021-123

CITY OF RICHLAND
Determination of Non-Significance

Description of Proposal: Fermi Avenue road widening – replace approximately 1,800 lineal feet of existing asphalt roadway with new asphalt, curbs and sidewalks to meet City of Richland Standards.

Proponent: Port of Benton
Attn: Roger Wright
3250 Port of Benton Blvd.
Richland, WA 99354

Location of Proposal: The project site is located at Fermi Avenue, between Curie Street and Smartpark Street, Richland, WA.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

( ) There is no comment for the DNS.

(**X**) This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

( ) This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens
Position/Title: Planning Manager
Address: 625 Swift Blvd., MS #35, Richland, WA 99352
Date: April 30, 2021

Signature _____

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [HELP]

1. Name of proposed project, if applicable: **Fermi Avenue Road Widening**

2. Name of applicant: **Port of Benton**

3. Address and phone number of applicant and contact person:

   Email: roger@rgwenterprises.com

4. Date checklist prepared: **April 6th, 2021**

5. Agency requesting checklist: **City of Richland**

6. Proposed timing or schedule (including phasing, if applicable): **Proposed widening project completed June- October 2021.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. **No**

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. **Storm Water infiltration trenches scheduled for project**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. **No**

10. List any government approvals or permits that will be needed for your proposal, if known. **Washington State Department of Ecology - Storm Water Permit**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) **This application is for a project to widen Fermi Avenue to meet current City of Richland Code requirements.**

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. **NW 1/4 of S.26, T.10N.,R.28 E. (see plans)**

B. Environmental Elements [HELP]

1. *Earth* [help]

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other **Flat**

b. What is the steepest slope on the site (approximate percent slope)? **Flat**

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. **Site has been developed for more than 70 years, no agricultural soils.**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. **No**

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. **This project will replace approximately 1,800 LF of existing asphalt with new asphalt, curbs and sidewalks.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **During the excavation of old road and installation of Infiltration Trenches. Contractor to control erosion during construction.**

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? **This a Road Right of Way, 90% will be roadway, sidewalk and landscaping.**

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: **Contractor will be responsible for all erosion during construction.**

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. **Normal Construction emissions during construction. After completed air emissions are not anticipated.**

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **No**

c. Proposed measures to reduce or control emissions or other impacts to air, if any: **None Planned**

3. Water [help]

a. Surface Water: [help]

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. **~ 1,300 ft east of this project are two ponds owned by the City of Richland used as infiltration basins.**

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. **No**

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. **None**

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. **No**

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. **No**

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. **No**

b. Ground Water: [help]

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

Site is on City Water so no groundwater will be withdrawn.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Site currently served by City of Richland Sewer.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
This project will be installing 2 infiltration trenches along with roadside swales.

2) Could waste materials enter ground or surface waters? If so, generally describe. **Not likely.**

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. **No**

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: **See plans for details on infiltration trenches and roadside swale construction.**

4. Plants [help]

a. Check the types of vegetation found on the site: None, existing road.

____deciduous tree: alder, maple, aspen, other
____evergreen tree: fir, cedar, pine, other
____shrubs
____grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

b. What kind and amount of vegetation will be removed or altered?
Some Landscaping will be replaced with new Landscaping to meet City of Richland Code.

c. List threatened and endangered species known to be on or near the site. **None Known**

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Landscaping will be installed if removed to meet City of Richland Landscaping Code requirements.

e. List all noxious weeds and invasive species known to be on or near the site. **Unknown**

5. Animals [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other: **Seagulls, Pheasants, Ducks, Doves, Sparrows**
mammals: deer, bear, elk, beaver, other: **Rabbits, Skunks, Rodents**
fish: bass, salmon, trout, herring, shellfish, other **Nearest fish would be Columbia River 1 mile to the east.**

b. List any threatened and endangered species known to be on or near the site. **None Known**

c. Is the site part of a migration route? If so, explain. **Yes, Richland is within the Pacific Flyway.**

d. Proposed measures to preserve or enhance wildlife, if any: **None**

e. List any invasive animal species known to be on or near the site. **None Known**

6. Energy and Natural Resources [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

This site is an existing developed area with existing infrastructure including Electrical, Natural Gas, Public Water and Sewer.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **No**

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **None Planned.**

7. Environmental Health [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe any known or possible contamination at the site from present or past uses. **Unknown**

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. **None Known.**

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. **Normal Construction equipment fuel etc. Usually not stored on site**

4) Describe special emergency services that might be required. **Ambulance, Fire Truck**

5) Proposed measures to reduce or control environmental health hazards, if any: **None Planned**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **Some Local Traffic.**

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. **Local Traffic, Construction noise during working hours limited to City of Richland construction curfew.**

3) Proposed measures to reduce or control noise impacts, if any: **Required to follow City of Richland Construction curfew for all construction work.**

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

Existing Industrial Lots. Land uses will not change with this project.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? **No**

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: **No**

c. Describe any structures on the site.

There are approximately 5 buildings adjacent to this site with varying sizes, mostly used for office space and industrial sites.

d. Will any structures be demolished? If so, what? **No**

e. What is the current zoning classification of the site? **I-M Industrial**

f. What is the current comprehensive plan designation of the site? **Industrial**

g. If applicable, what is the current shoreline master program designation of the site? **N/A**

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. **No**

i. Approximately how many people would reside or work in the completed project? **None**

j. Approximately how many people would the completed project displace? **None**

k. Proposed measures to avoid or reduce displacement impacts, if any: **N/A**

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **The site is for Right of Way improvements.**

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
There are no nearby agriculture or forest lands located within the vicinity of this site.

9. Housing [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **N/A**

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **N/A**

c. Proposed measures to reduce or control housing impacts, if any: **N/A**

10. Aesthetics [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
N/A

b. What views in the immediate vicinity would be altered or obstructed? **None**

b. Proposed measures to reduce or control aesthetic impacts, if any: **None**

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **N/A**

b. Could light or glare from the finished project be a safety hazard or interfere with views? **N/A**

c. What existing off-site sources of light or glare may affect your proposal? **N/A**

d. Proposed measures to reduce or control light and glare impacts, if any: **N/A**

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity?
N/A

b. Would the proposed project displace any existing recreational uses? If so, describe. **No**

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **N/A**

13. Historic and cultural preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.
The road serves the former Hanford 1100 area and buildings have been here for more than 70 years. However, the road has existed for most of that time. We are improving the existing roadway only.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
The site has been reviewed by Northwest Anthropology for past projects and this location was found to not likely contain cultural or historical artifacts.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
N/A

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.
N/A

14. Transportation [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
Fermi Avenue, Curie Street, Smart Park, University Avenue. Stevens Drive George Washington Way.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?
Ben Franklin Transit Stop is located .5 miles south at Stevens Center Pl. and Garlic Blvd.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? **N/A**

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). **Yes, this project will be widening Fermi Avenue and replacing existing landscaping. Completed Fermi Road will be 34' wide. Includes a 60' Right of Way.**

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? **No additional trips would be generated by this project**

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. **No**

h. Proposed measures to reduce or control transportation impacts, if any: **None planned**

15. Public Services [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. **No**

b. Proposed measures to reduce or control direct impacts on public services, if any. **None**

16. Utilities [help]

a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

There will be storm water swale construction and 2 infiltration trenches installed, all other utilities are existing.

C. Signature [HELP]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Roger G. Wright

Name of signee Roger G. Wright, P.E.

Position and Agency/Organization Port Contractor Engineer

Date Submitted: April 6, 2021

D. Supplemental sheet for nonproject actions [HELP]

(**IT IS NOT NECESSARY** to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks,

wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

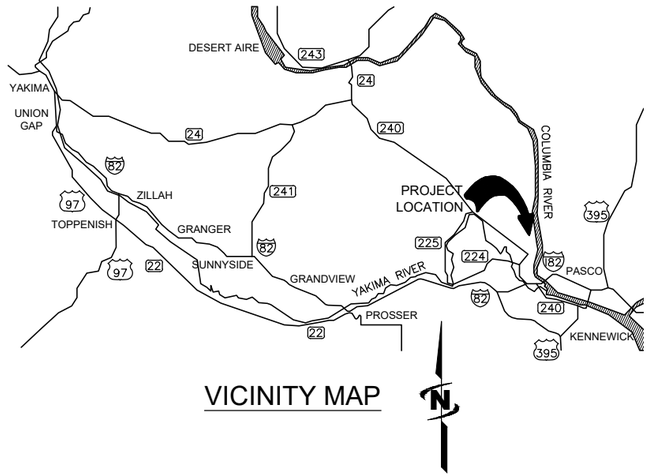
Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

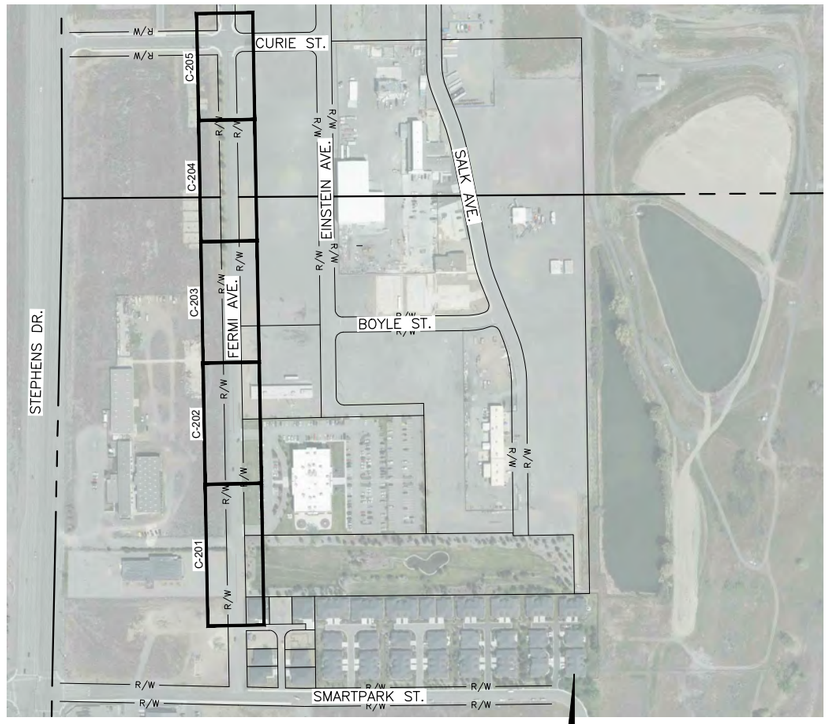
PORT OF BENTON

FERMI AVENUE WIDENING

NW 1/4 OF S.26,T.10N.,R.28 E.



VICINITY MAP



SITE AERIAL MAP

0 250 500

SCALE IN FEET

CONTACTS:

POWER
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RICHLAND, WA 99352
JOE BIRCHER
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800-424-5555

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RICHLAND, WA 99354
ROGER G. WRIGHT, P.E.
509-375-3565 OFFICE
509-366-7455 CELL

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06	SP-02	SITE PREPARATION PLAN
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APRIL 2021

PROJECT NO. 30-20-079

J-U-B ENGINEERS, INC.

PORT OF BENTON

LAST UPDATED: 4/14/2021

SHEET NUMBER: 01

Plot Date:4/15/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_G-001.DWG

LEGEND

DESCRIPTION	PROPOSED	EXISTING
Overhead Power, Tele, Cable TV, Gas	OHP,OHT,OHCTV,OHG	OHP,OHT,OHCTV,OHG
Underground Power, COMMUNICATIONS, Gas)	P,COM,G	P,COM,G
Ditch		
Road Asphalt	EP	EP
Road Gravel	EG	EG
Road Center Line		
Major Contour	2125	2125
Minor Contour	2126	2126
Fence	X	X
Silt Fence		
Edge of Landscaping	LS	LS
Cut Limits	CUT	
Fill Limits	FILL	
Top of Bank	TOB	TOB
Toe of Bank	TOE	TOE
Property Line	P/L	P/L
Property R/W	R/W	R/W
Temporary Easement	T/E	T/E
Permanent Easement	P/E	P/E
Sanitary Sewer	SS	SS
Sanitary Sewer Service	SS	SS
Force Main	FM	FM
Water	W	W
Water Service Line	WS	WS
Irrigation	IRR	IRR
Storm Drain	SD	SD
Foundation Drain Pipe	FD	FD
Drain Pipe	DL	DL
Chlorine Pipe	C	
Underground Power	UP	UP
Sanitary Sewer Manhole		S
Catch Basin		
Dry Well	DW	DW
Street Light		
Transformer Vault	E	E
Junction Box	J	J
Utility Pole		
Television Riser	TV	TV
Telephone Riser	T	T
Utility Pole Anchor		
Tee		
Fire Hydrant Assembly		
Valve		
Water Meter		
Blowoff Assembly	A	B
Air Relief Assembly	A	
Section Corner		
Monument		
Fiber Optic Riser	FO	FO
Two Pole Sign		
Single Pole Sign		
Roadway Marker		
Bollard		
Irrigation Blowoff	IRR A	IRR B
Irrigation Box	I	I
Electrical Transformer	E	E
Mailbox	M	M
Bench		
Traffic Barrier		

LEGEND

DESCRIPTION	PROPOSED	EXISTING
Sidewalk		
AC Paving	EP	
Gate		
Coupling		
Cross		
Reducer (Concentric)		
Reducer (Eccentric)		
True Union		
Wye		
11.25 Bend		
22.5 Bend		
45 Bend		
90 Bend		
Cap		
Survey Monument		
Yard Hydrant		
Check Valve		
Electrical Manhole	E	E
Irrigation Valve	IRR	IRR
Sprinkler Head		
Spigot		
Light Pole		
Demolition or Salvage Removal		

SHEET NUMBERING

EXAMPLE

SHEET NUMBER

C-101

C-1 01

- DISCIPLINE DESIGNATOR
- SHEET TYPE DESIGNATOR
- SHEET SEQUENCE NUMBER

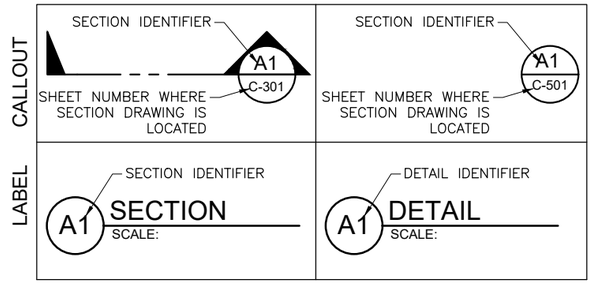
DISCIPLINE DESIGNATORS

DISCIPLINE	DESIGNATOR	DESCRIPTION
GENERAL	G	ALL GENERAL
SURVEY/MAPPING	V	ALL SURVEY
CIVIL	C	ALL CIVIL
ADDITIVE BID	AO	ALL ADDITIVE BID

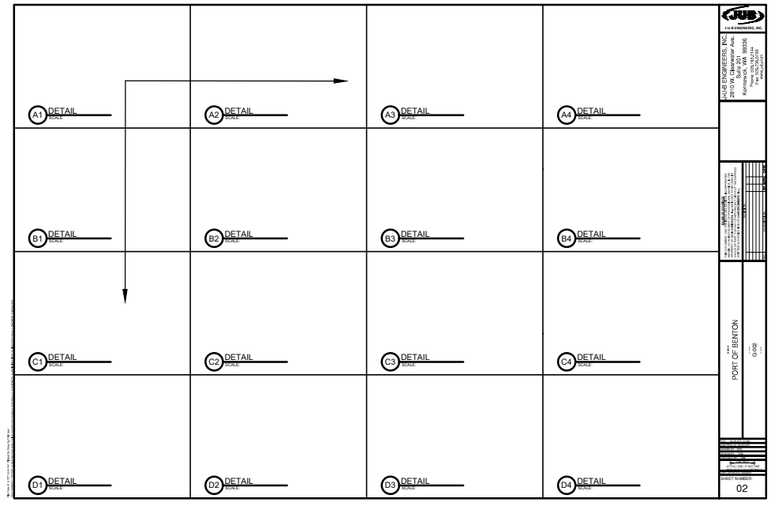
SHEET TYPE DESIGNATORS

DESIGNATOR	SHEET TYPE
0	GENERAL (SYMBOLS, LEGENDS, NOTES, ETC.)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS, PROFILES, COMBINED PLAN AND PROFILES
3	SECTIONS (SECTIONAL VIEWS)
4	LARGE-SCALE VIEWS (PLANS, ELEVATIONS, ECT.)
5	DETAILS OR COMBINED DETAILS AND SECTIONS
6	SCHEDULES OR DIAGRAMS

SECTION AND DETAIL IDENTIFIERS



NOTE:
A DASH MAY BE PLACED IN THE LOWER PORTION OF THE IDENTIFIER IF THE DETAIL DRAWING OR SECTION VIEW IS LOCATED ON THE SAME SHEET



NOTE:
THE DRAWING MODULES ARE ARRANGED BY COLUMNS AND ROWS. COLUMNS ARE IDENTIFIED WITH NUMBERS STARTING ON THE LEFT WITH 1 AND INCREASING TO THE RIGHT. ROWS ARE IDENTIFIED WITH ALPHABETICAL CHARACTERS BEGINNING AT THE TOP WITH A AND INCREASING TOWARDS THE BOTTOM. EACH MODULE IS IDENTIFIED WITH A LETTER AND NUMBER BASED ON THE UPPER LEFT HAND LOCATION. IF A DRAWING LOCATED IN THE UPPER LEFT HAND CORNER OF THE DRAWING AREA IS TWO MODULES HIGH BY TWO MODULES WIDE, IT WOULD BE IDENTIFIED AS A1.

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39882
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PROFESSIONAL ENGINEER
4/14/2021

NO.	DESCRIPTION	BY	APP.	DATE
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FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

SHEET LAYOUT, LINETYPES AND SYMBOLS

FILE : 30-20-079_G-002
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/6/2021
SHEET: 02
DRAWING: G-002

Plot Date:4/15/2021 8:46 AM Plotted By: Mary M. Wilkinson
Date Created:11/18/2020 U:\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_G-002.DWG

ABBREVIATIONS

ASSY	ASSEMBLY
>	ANGLE
@	AT (MEASUREMENTS)
BLDG	BUILDING
BM	BENCH MARK
BSC	BITUMINOUS SURFACE COURSE
BSW	BACK OF SIDEWALK
BV	BUTTERFLY VALVE
BW	BOTH WAYS
C	CHANNEL (STRUCTURAL)
C/L	CENTER LINE
CDF	CONTROLLED DENSITY FILL
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUOUS
CPLG	COUPLING
CU FT	CUBIC FEET
CU YD	CUBIC YARD
DEG OR °	DEGREE
DET	DETAIL
DI	DUCTILE IRON
DIA OR ø	DIAMETER
DIST	DISTRIBUTION
DWG	DRAWING
EA	EACH
ELB	ELBOW
ELEV	ELEVATION
EW	EACH WAY
EXIST	EXISTING
FCA	FLANGE COUPLING ADAPTER
FG	FINISH GRADE
FH	FIRE HYDRANT
FLG OR FL	FLANGE
FT OR '	FEET
GV	GATE VALVE
HORIZ	HORIZONTAL
HWL	HIGH WATER LEVEL
ID	INSIDE DIAMETER
IN OR "	INCH
INV	INVERT
IRR	IRRIGATION
LB OR #	POUND
LF	LINEAL FEET
LN	LINEAL
LS	LIFT STATION
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
NO OR #	NUMBER
PE	POLYETHYLENE
PL	PLATE
PL	PROPERTY LINE
PVC	POLYVINYL–CHLORIDE
R	RADIUS
RP	RADIUS POINT
R&R	REMOVE & REPLACE
REM	REMOVE
REQ'D	REQUIRED
REV	REVISION
RFCA	RESTRAINED FLANGE COUPLING ADAPTER

RT	RIGHT
R/W	RIGHT–OF–WAY
S	SLOPE
SD	STORM DRAIN
SH	SHEET
SPEC	SPECIFICATION
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
STL	STEEL
ST STL	STAINLESS STEEL
SSMH	SANITARY SEWER MANHOLE
SY	SQUARE YARDS
TBC	TOP BACK OF CURB
TYP	TYPICAL
TFC	TOP FACE OF CONCRETE
W	WATER
W/	WITH
W/O	WITHOUT
W/REQ'D	WHERE REQUIRED

D1 ABBREVATIONS
SCALE:NTS

PIPING SCHEDULE

SERVICE	LEGEND	SIZE(S) (INCHES) (NOTE 1)	EXPOSURE (NOTE 2)	PIPING MATERIAL (NOTE 3)	JOINT TYPE (NOTE 4)	LINING (NOTE 5)	COATING (NOTE 5)	TEST PRESSURE (PSI), AND TYPE (NOTE 6)	PIPE COLOR	REMARKS
POTABLE WATER	W	2"	BUR	PVC SCH 40	SW	NONE	NONE	180, H	NONE	
		6"	BUR	DI AWWA C151 CLASS 50	P, MJ, OR FL	CM	ASPH	180, H	NONE	DI FITTINGS REQUIRED
		≥10"	BUR	PVC AWWA C–900 DR 18	P, MJ OR FL	NONE	NONE	180, H	BLUE	DI FITTINGS REQUIRED, ENCASE WHERE SHOWN
SANITARY SEWER	SS	ALL	ALL	PVC ASTM D3034 SDR 35	P	NONE	NONE	G	GREEN	
IRRIGATION CULVERT	IRR	ALL	ALL	CMP	NO JOINTS	NONE	NONE	N/A	NONE	
CASING	NONE	ALL	BUR	DI, CMP, OR SCH 40 STEEL SEE SPECS	P OR NONE	NONE	NONE	N/A	NONE	

NOTES:

1. SYMBOLS
   - > GREATER THAN
   - < LESS THAN
   - ≥ GREATER THAN OR EQUAL TO
   - ≤ LESS THAN OR EQUAL TO
2. EXPOSURE
   - ALL ALL
   - BUR BURIED
   - EXP EXPOSED
   - SUB SUBMERGED
3. PIPE MATERIALS
   - PVC POLYVINYL CHLORIDE
   - DI DUCTILE IRON
   - ELDI EPOXY LINED DUCTILE IRON
   - PE POLYETHYLENE OR FLEXIBLE TUBING
   - ST ST STAINLESS STEEL
   - CO COPPER
   - CMP CORRUGATED METAL
4. JOINT TYPE
   - COM COMPRESSION
   - FL FLANGED
   - P PUSH–ON RUBBER GASKETED
   - MJ MECHANICAL JOINT
   - S SCREWED
   - SW SOLVENT WELDED
   - FW FUSION WELDED
5. LINING/COATING TYPE:
   - CM CEMENT MORTOR
   - PA PAINTED
   - ASPH ASPHALT
   - EPOX EPOXY
6. TESTING TYPE:
   - G GRAVITY (LOW PRESSURE AIR TEST)
   - H HYDROSTATIC (REQUIRES RJ OR THRUST BLOCKING)
   - PC PER PLUMBING CODE
   - V VISUAL INSPECTION AT NORMAL PUMP OPERATION

NOTE:
A. ALL PRESSURE PIPE REQUIRES CONCRETE THRUST BLOCKING PER DETAILS ON SHEET X–XXX.
B. WHERE MORE THAN ONE TYPE OF PIPING IS SHOWN, REFER TO THE PLANS FOR THE LOCATION OF EACH MATERIAL TYPE.

D3 PIPING SCHEDULE
SCALE:NTS

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4/14/2021

NO.	DESCRIPTION	BY	APP.	DATE
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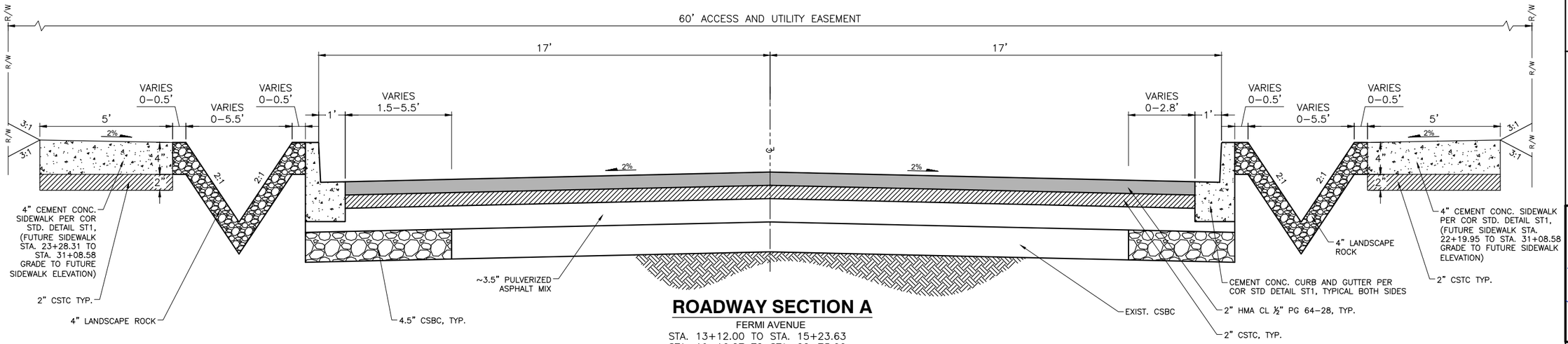
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

ABBREVIATIONS AND SCHEDULES

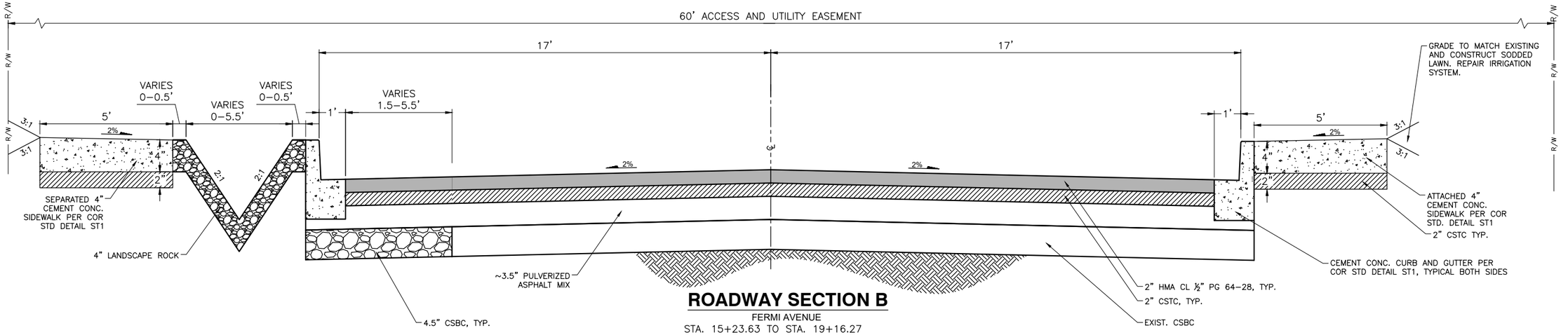
FILE : 30-20-079_G-003
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/15/2021
SHEET: 03
DRAWING: G-003

Plot Date:4/15/2021 8:46 AM Plotted By: Mary M. Wilkinson
Date Created:11/18/2020 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_G-003.DWG



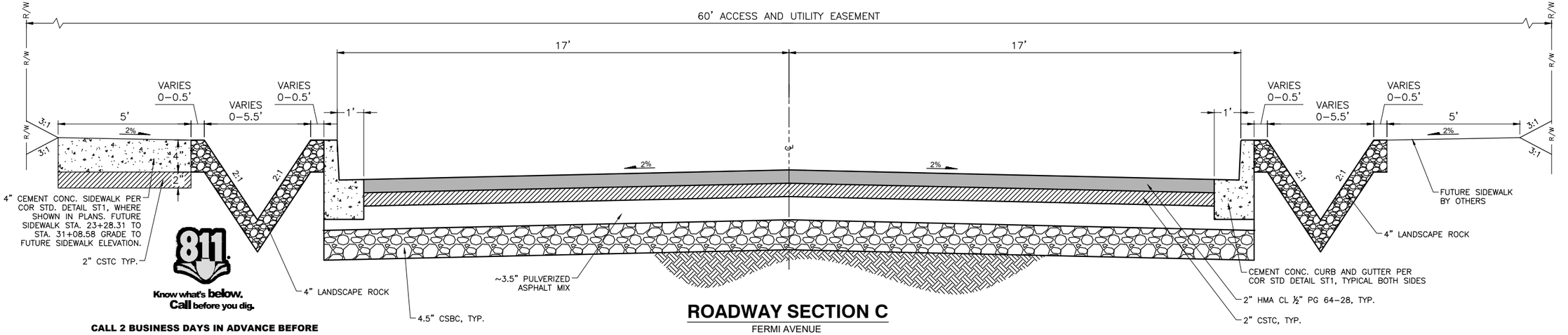
ROADWAY SECTION A

FERMI AVENUE
STA. 13+12.00 TO STA. 15+23.63
STA. 19+16.27 TO STA. 22+75.00
STA. 25+50.00 TO STA. 31+08.58



ROADWAY SECTION B

FERMI AVENUE
STA. 15+23.63 TO STA. 19+16.27



ROADWAY SECTION C

FERMI AVENUE
STA. 22+75.00 TO STA. 25+50.00

811
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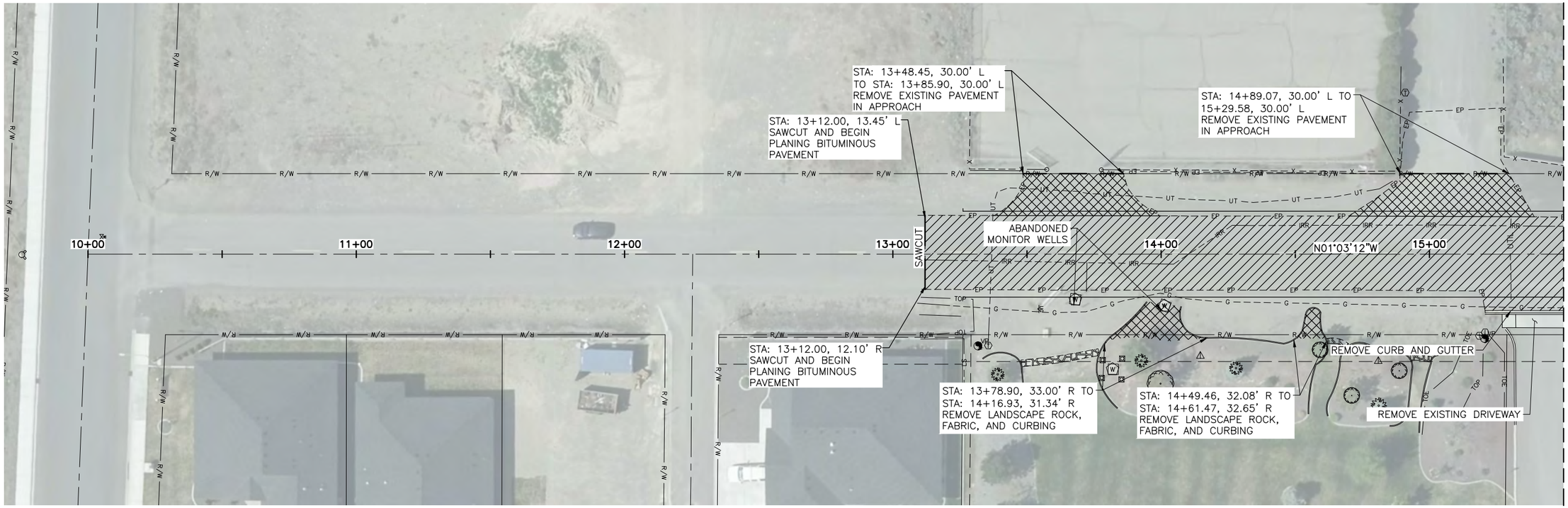
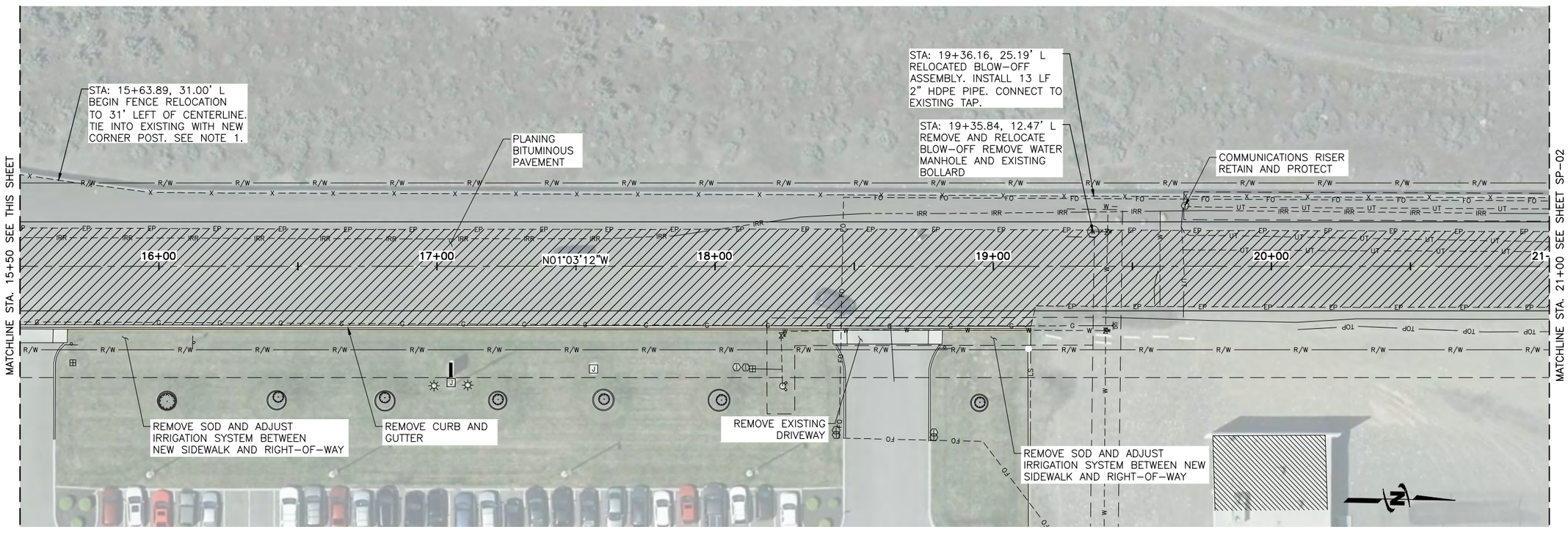
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

TYPICAL ROADWAY SECTIONS

FILE : 30-20-079_G-004
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/14/2021
SHEET: 04
DRAWING: G-004

Plot Date=4/15/2021 8:47 AM Plotted By: Mary M. Wilkinson
Date Created=2/2/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_G-004.DWG





NOTES:
1. THIS SITE IS A SECURE AREA. ALL FENCE RELOCATION MUST BE COMPLETE IN WITHIN 12 HOURS.

0 20 40
SCALE IN FEET

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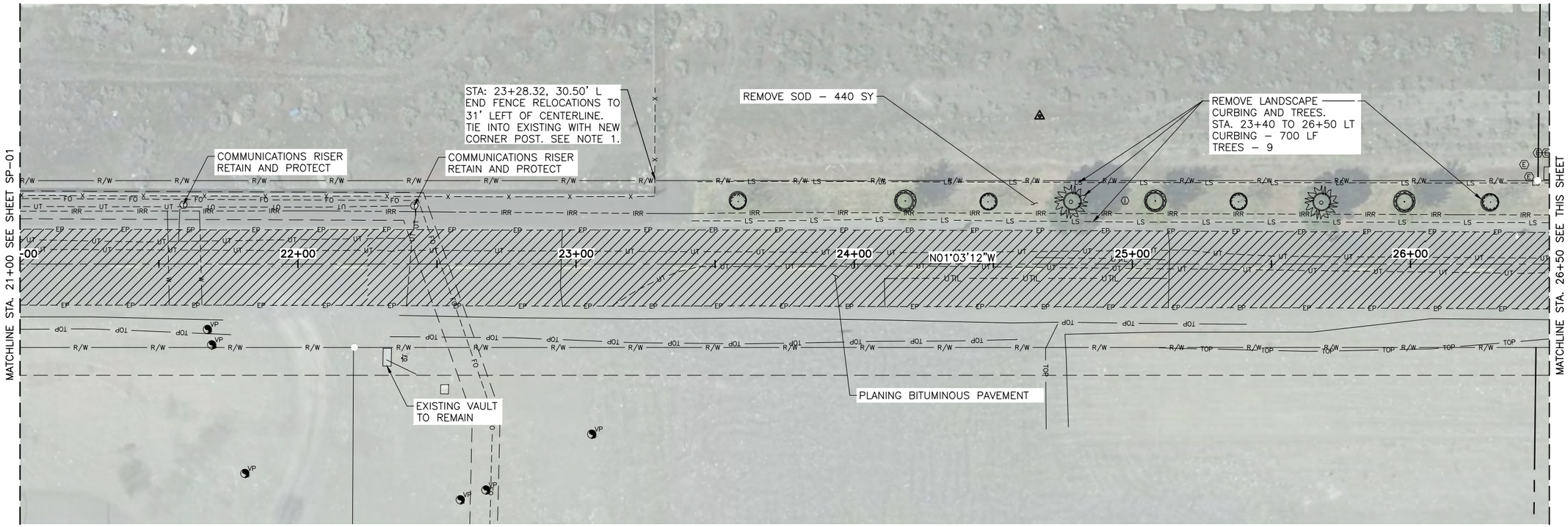
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

SITE PREPARATION PLAN

FILE : 30-20-079_SP1
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/15/2021
SHEET: 05
DRAWING: SP-01

Plot Date:4/15/2021 8:47 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_SP1.DWG



NOTES:
1. THIS SITE IS A SECURE AREA. ALL FENCE RELOCATION MUST BE COMPLETE IN WITHIN 12 HOURS.

0 20 40
SCALE IN FEET

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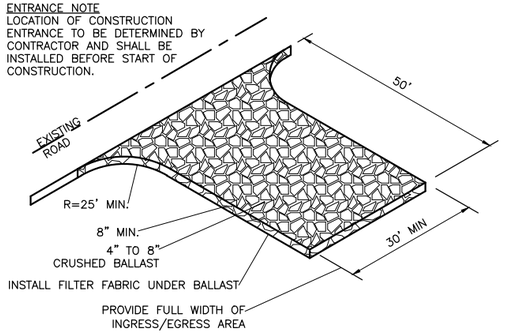
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

SITE PREPARATION PLAN

FILE : 30-20-079_SP1
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/15/2021
SHEET: 06
DRAWING: SP-02

Plot Date:4/15/2021 8:47 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_SP1.DWG

ENTRANCE NOTE
LOCATION OF CONSTRUCTION ENTRANCE TO BE DETERMINED BY CONTRACTOR AND SHALL BE INSTALLED BEFORE START OF CONSTRUCTION.



1. THE TEMPORARY CONSTRUCTION ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO NOTE #4 IN THIS PLAN. IF WASH RACKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
2. GRAVEL SHALL BE CRUSHED BALLAST ROCK, 8" TO 12" IN DEPTH AND INSTALLED TO THE SPECIFIED DIMENSIONS AT THE ENTRANCE.
3. THE GRAVEL BALLAST ROCK SHALL BE 4" TO 8" IN DIAMETER AND PLACED ACROSS THE FULL WIDTH OF VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50 FEET.
4. IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICLE TIRES BY CONTACT WITH GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER ONTO A PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
5. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2" STONE, AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

1 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.

0 110 220
SCALE IN FEET

TESC NOTES

1. THE TEMPORARY EROSION CONTROL SYSTEM SHALL BE INSTALLED PRIOR TO ALL OTHER CONSTRUCTION.
2. ALL CLEARING LIMITS AND/OR EASEMENTS SETBACKS, SENSITIVE/CRITICAL AREAS AND THEIR BUFFERS, SIGNIFICANT TREES AND DRAINAGE COURSES SHALL BE CLEARLY STAKED AND MARKED AS SHOWN ON PLANS.
3. PROPERTIES ADJACENT TO THE PROJECT SITE THAT ARE SUBJECT TO POTENTIAL EROSION CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION THROUGH THE USE OF SILT FENCE, WATTLES, OR OTHER BMP SELECTED BY THE CONTRACTOR.
4. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED WITH TEMPORARY INLET SEDIMENT CONTROL TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM. THE INSERT SHALL BE INSPECTED REGULARLY, CLEANED WHEN NECESSARY, AND REMOVED AT COMPLETION OF CONSTRUCTION.
5. WHEREVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED (SEE DETAIL) TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. A MINIMUM OF ONE (1) ON-SITE STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
7. ALL POLLUTANTS OTHER THAN SEDIMENT THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORM WATER OR THE SITE.
8. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSPECTED, MAINTAINED, AND REPAIRED BY THE CONTRACTOR AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED USE.
9. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO SILT FENCING, SEDIMENT PONDS/TRAPS, DIVERSIONS SWALES, CHECK DAMS, SEDIMENT BARRIERS, FILTER FABRIC, MULCH, AND SEEDING, AS CONDITIONS REQUIRE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PREVENTING SILT-LADEN RUNOFF FROM DISCHARGING FROM THE PROJECT SITE. FAILURE BY THE CONTRACTOR AND/OR OWNER CAN RESULT IN A FINE.
11. AT NO TIME SHALL CONCRETE, CONCRETE BY-PRODUCTS, VEHICLE FLUIDS, PAINT, CHEMICALS, OR OTHER POLLUTING MATTER BE PERMITTED TO DISCHARGE TO THE TEMPORARY OR PERMANENT DRAINAGE SYSTEM, OR TO DISCHARGE FROM THE PROJECT SITE.
12. AT ALL TIMES OF THE YEAR, THE CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS, EQUIPMENT AND LABOR ON-SITE TO STABILIZE AND PREVENT EROSION FROM ALL DENUDED AREAS WITHIN 12-HOURS AS SITE AND WEATHER CONDITIONS DICTATE. CONTRACTOR SHALL PROVIDE DUST CONTROL, AS NECESSARY, TO BE COMPLIANT WITH ALL LOCAL AND STATE CLEAN AIR/DUST CONTROL POLICIES. THE SPRAYING OF WATER ON DRY AREAS SHALL BE USED TO CONTROL DUST. CONTRACTOR SHALL SUPPLY ALL THE NECESSARY WATER FOR DUST CONTROL.
13. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL ADJACENT PROPERTIES TO THEIR ORIGINAL CONDITION DUE TO ANY CONSTRUCTION RELATED ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
14. NONCOMPLIANCE WITH EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND CLEARING LIMITS VIOLATIONS MAY RESULT IN REVOCATION OF PROJECT PERMITS AND PLAN APPROVAL AND BOND FORECLOSURES.
15. PRIOR TO ANY SITE CONSTRUCTION, INCLUDING CLEARING, LOGGING OR GRADING, THE SITE CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR (OR PROJECT ENGINEER) AS REQUIRED BY THESE PLANS.
16. ALL SITE WORK MUST BE PERFORMED IN ACCORDANCE WITH CURRENT CITY ADOPTED INTERNATIONAL BUILDING CODE.
17. STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND ADEQUATELY PROTECTED BY TEMPORARY SEEDING AND MULCHING. HYDROSEEDING IS PREFERRED.
18. THE CONTRACTOR SHALL OBTAIN AN ENVIRONMENTAL PROTECTION AGENCY'S NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (OTHERWISE KNOWN AS THE CONSTRUCTION GENERAL PERMIT OR CGP). THE PERMIT IS ADMINISTERED THROUGH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY. A NOTICE OF INTENT (NOI) IS REQUIRED TO BE SUBMITTED AND PAID FOR BY THE CONTRACTOR.
19. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT THE NOI.
20. THE SELECTED GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE CGP TO THE END OF CONSTRUCTION.
21. THE CGP DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH OTHER REGULATIONS OR CONTRACT REQUIREMENTS REGARDING STORM WATER POLLUTION PREVENTION INCLUDING BUT NOT LIMITED TO: PROTECTION OF SURFACE WATERS, PREVENTION OF SOIL RUNOFF INTO DRAINS, DUST CONTROL, PREVENTION OF TRACKING SOILS TO ADJACENT STREETS, FUEL CONTAINMENT, SPILL CONTROL, ETC.
22. THE GENERAL CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT IN ACCORDANCE WITH THE CGP REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE A COPY OF THE SWPPP TO THE OWNER AND/OR OWNER'S REPRESENTATIVE A MINIMUM OF 5 WORKING DAYS PRIOR TO SITE DISTURBANCE.
23. THE GENERAL CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) AFTER PROJECT COMPLETION AND FINAL STABILIZATION HAS BEEN ESTABLISHED.

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NO.	DESCRIPTION	DATE	BY APP.
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FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

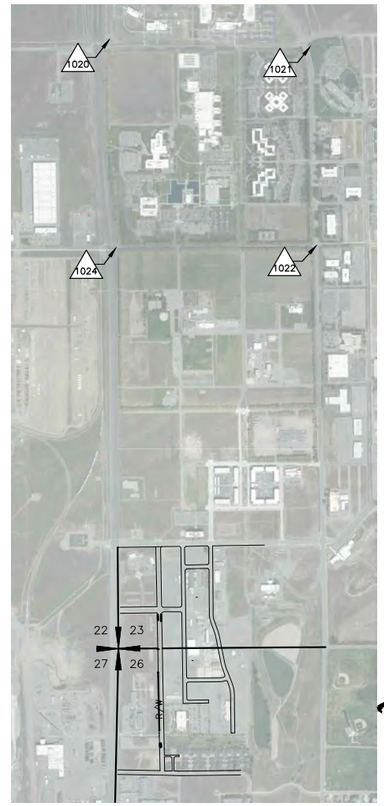
EROSION SEDIMENT CONTROL

FILE : 30-20-079_ESC1
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/6/2021
SHEET: 07
DRAWING: ESC-1

Plot Date:4/15/2021 8:47 AM Plotted By: Mary M.Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_ESC1.DWG

J-U-B PROJECT CONTROL POINTS

NUMBER	DESCRIPTION	NORTHING	EASTING	ELEVATION
14	5/8 REBAR WITH RED JUB CONTROL CAP	365538.08	1947801.696	408.477
15	SECOR–CENTER/14	365373.583	1948274.349	407.965



CITY OF RICHLAND CONTROL POINTS

NUMBER	DESCRIPTION	NORTHING	EASTING	ELEVATION
1020	TRAVPT–B324	373597.010	1947662.020	407.231
1021	SECOR–CENTER/14	373487.538	1950299.761	408.995
1022	MON–GWW/BATTELLE	370863.579	1950382.929	409.175
1024	SECOR–14–15–22–23	370831.838	1947737.068	401.704

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS PROJECT IS A LOCAL SITE PROJECTION ORIGINATING FROM THE 1991 ADJUSTMENT OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83/91), WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (4602) BASED UPON GPS OBSERVATIONS TO CITY OF RICHLAND PROVIDED GPS CONTROL, POINT NUMBERS 1024, 1022, 1021, AND 1020. ALL BEARINGS SHOWN ARE GRID; DISTANCES ARE GROUND EXPRESSED IN US SURVEY FEET.

VERTICAL DATUM

VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) BASED UPON GPS OBSERVATIONS TO CITY OF RICHLAND PROVIDED GPS CONTROL POINT NO. 1020 (A NATIONAL GEODETIC SURVEY BRASS CAP STAMPED B324) THIS MONUMENT IS THE PROJECT BENCHMARK, THE PUBLISHED ELEVATION BEING 407.23 FEET.

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Kennewick, WA 99336
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Fax: 509.736.0790
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TRAVIS A. MARDEN
STATE OF WASHINGTON
39882
REGISTERED
PROFESSIONAL ENGINEER
4/14/2021

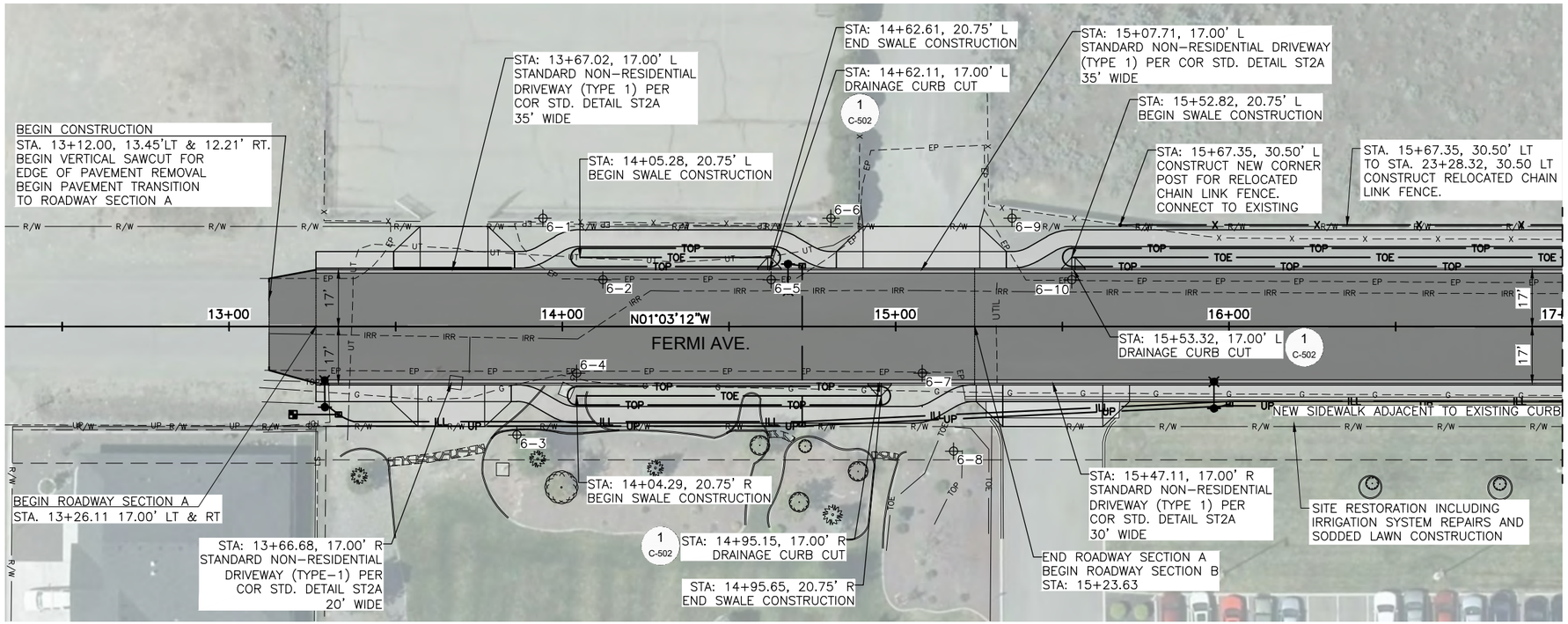
NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

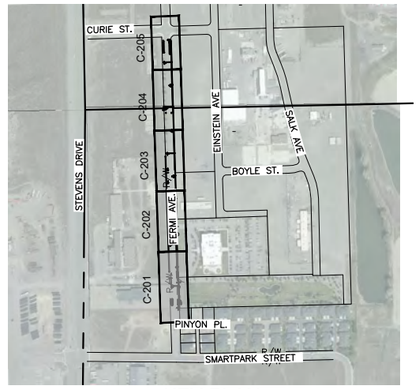
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

OVERALL SITE MAP AND SURVEY CONTROL

FILE : 30-20-079_V-101
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/6/2021
SHEET: 08
DRAWING: V-101

Plot Date:4/15/2021 8:48 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 I:\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_V-101.DWG

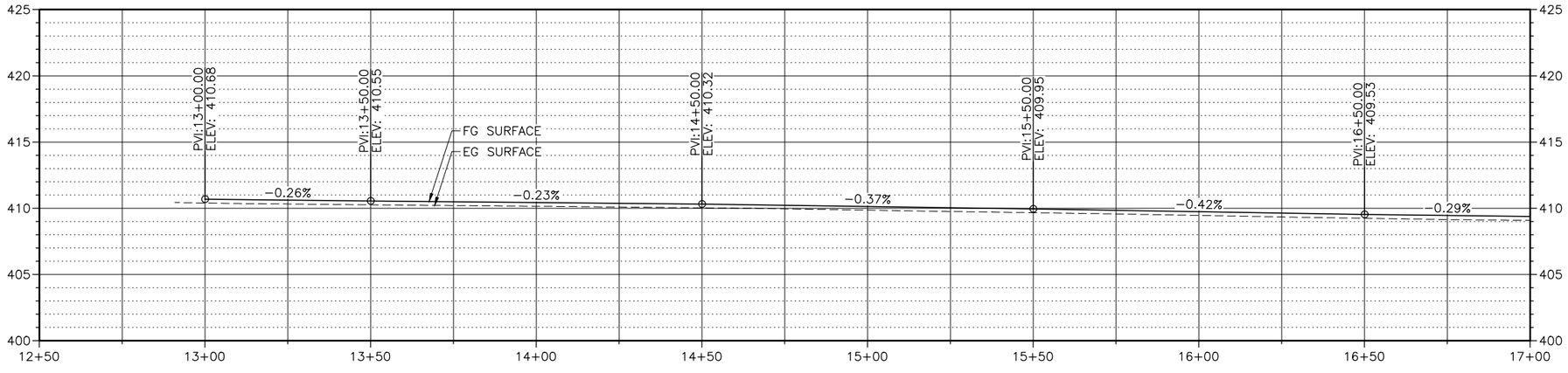




KEY PLAN

SIDEWALK TRANSITION CONTROL POINTS

NUMBERS	STATION/OFFSET	NORTHING	EASTING
6 – 1	13+94.17, 32.50' LT	N:364301.65	E:1948314.74
6 – 2	14+12.13, 14.00 LT	N:364319.94	E:1948332.91
6 – 3	13+86.34, 32.50' RT	N:364295.01	E:1948379.87
6 – 4	14+04.29, 14.00' RT	N:364312.62	E:1948361.04
6 – 5	14+62.61, 14.00' LT	N:364370.41	E:1948331.98
6 – 6	14+80.56, 32.50' LT	N:364388.02	E:1948313.15
6 – 7	15+07.92, 14.00' RT	N:364416.23	E:1948359.14
6 – 8	15+17.34, 37.36' RT	N:364426.08	E:1948382.32
6 – 9	15+34.86, 32.50' LT	N:364442.32	E:1948312.15
6 – 10	15+52.82, 14.00' LT	N:364460.61	E:1948330.32



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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4/14/2021

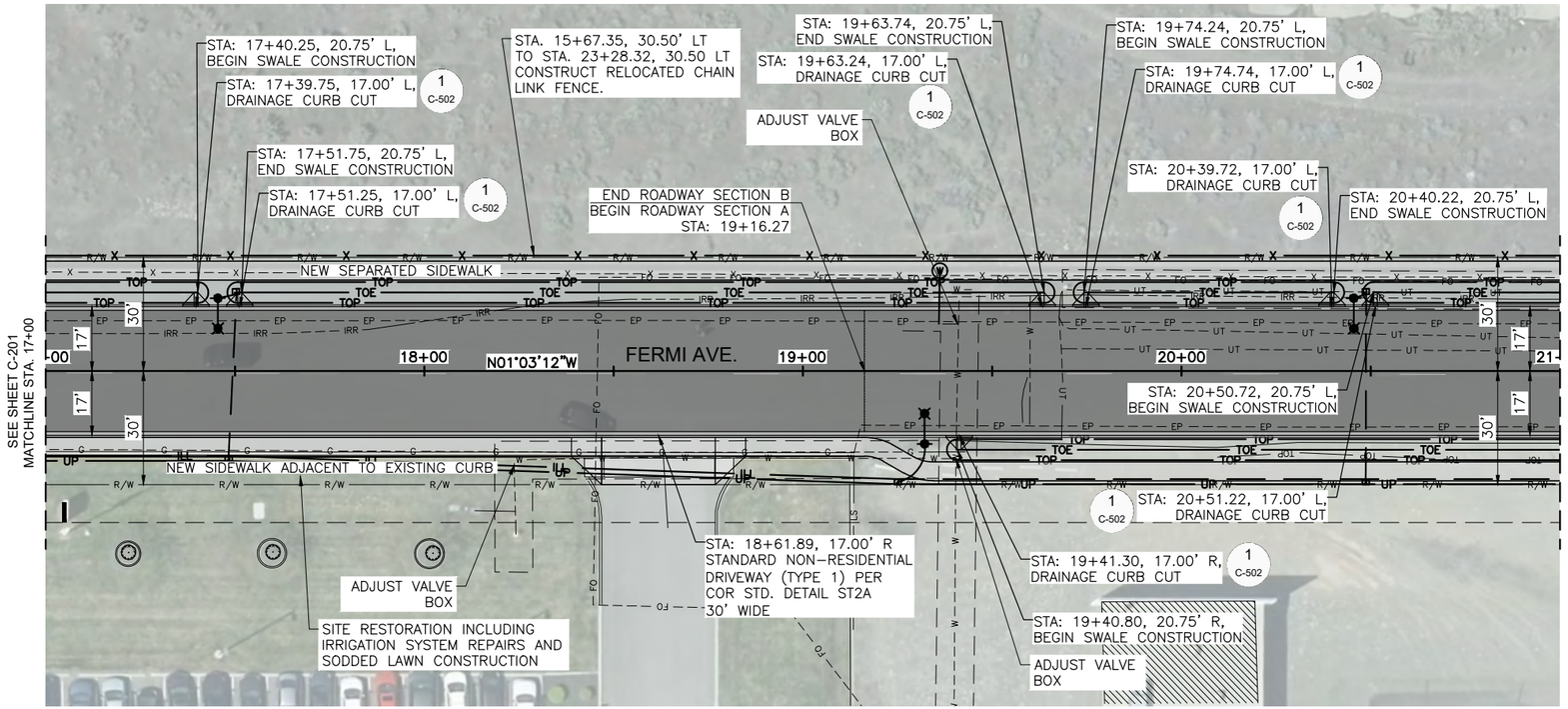
NO.	DESCRIPTION	BY	APP'D	DATE
	REVISION			

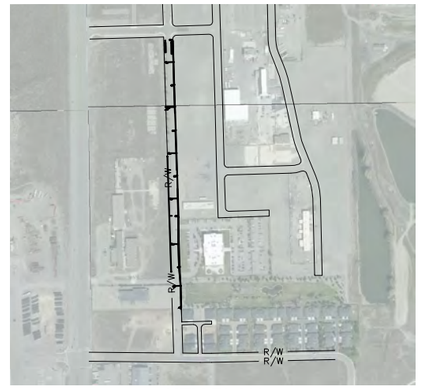
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

PLAN AND PROFILE STA.12+00 TO STA. 17+00

FILE : 30-20-079_C-201
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/8/2021
SHEET: 09
DRAWING: C-201

Plot Date:4/15/2021 6:48 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-201.DWG





KEY PLAN

HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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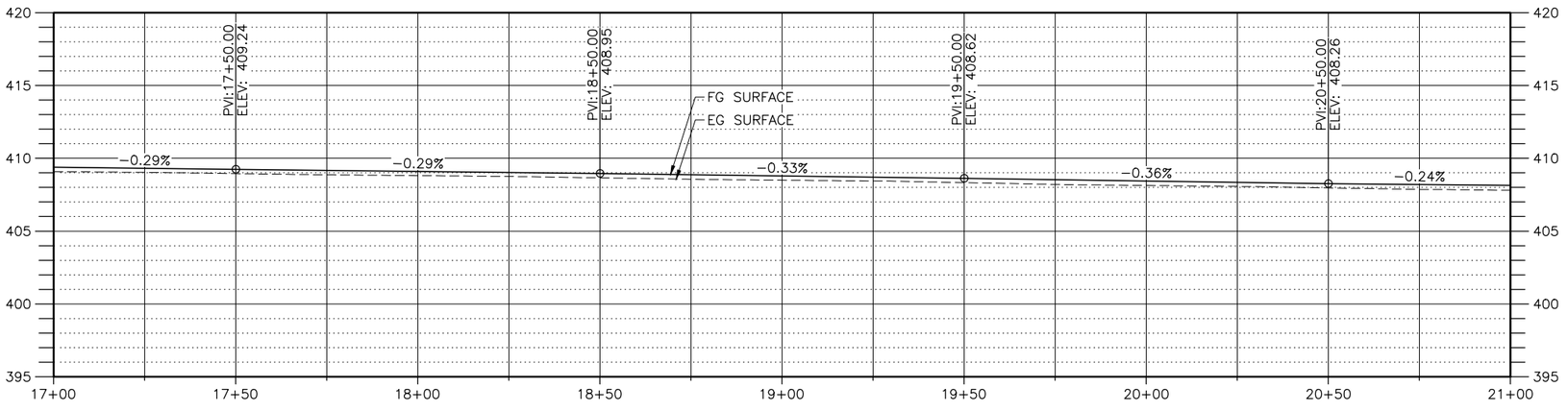

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4/14/2021

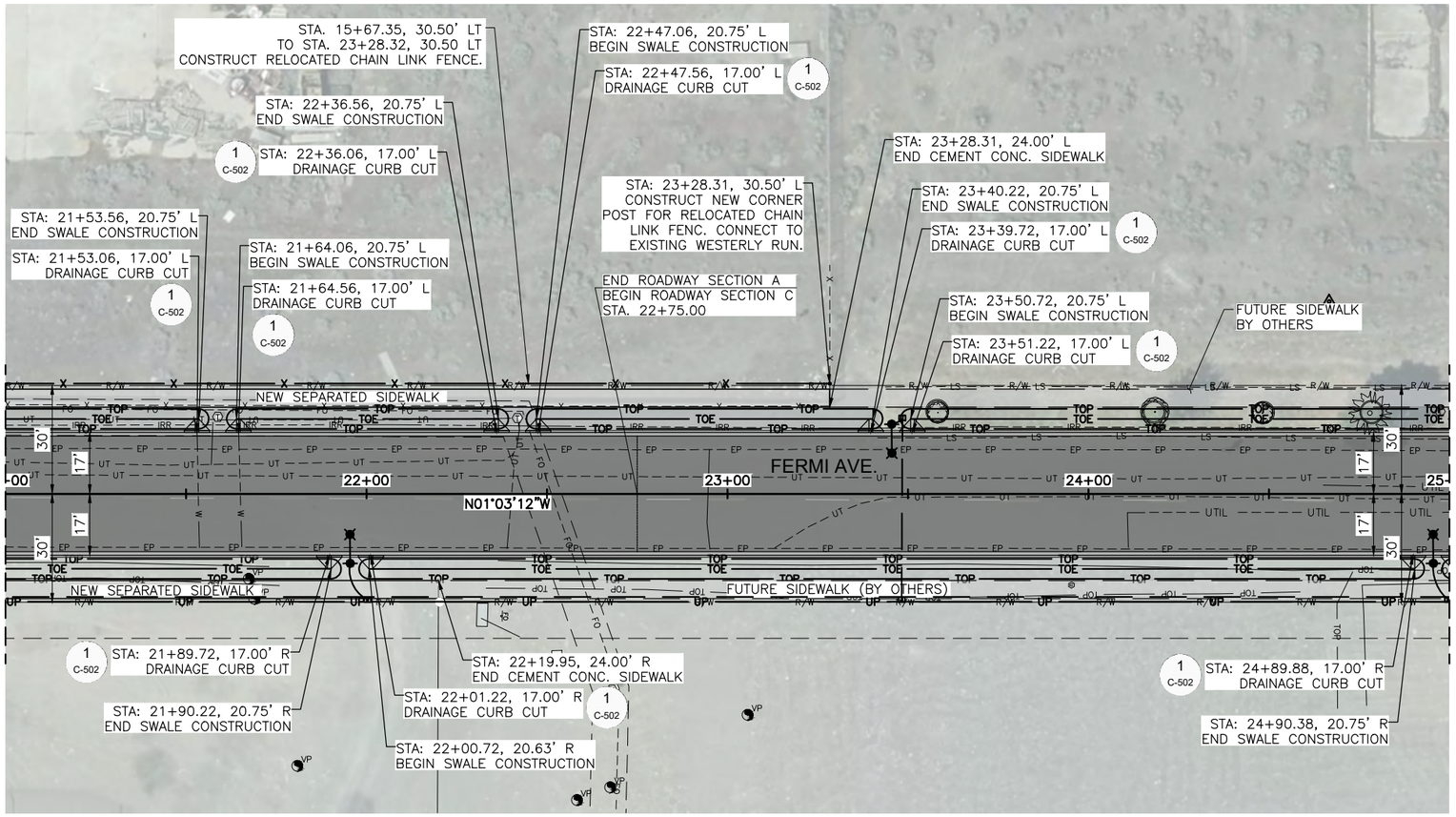
NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

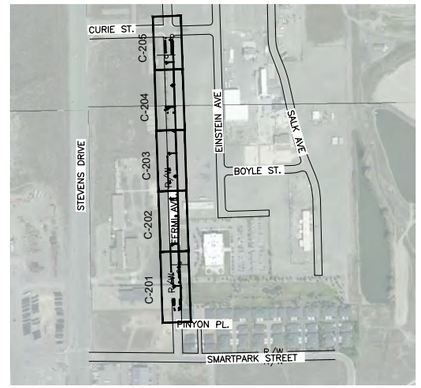
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

PLAN AND PROFILE STA. 17+00 TO STA 21+00

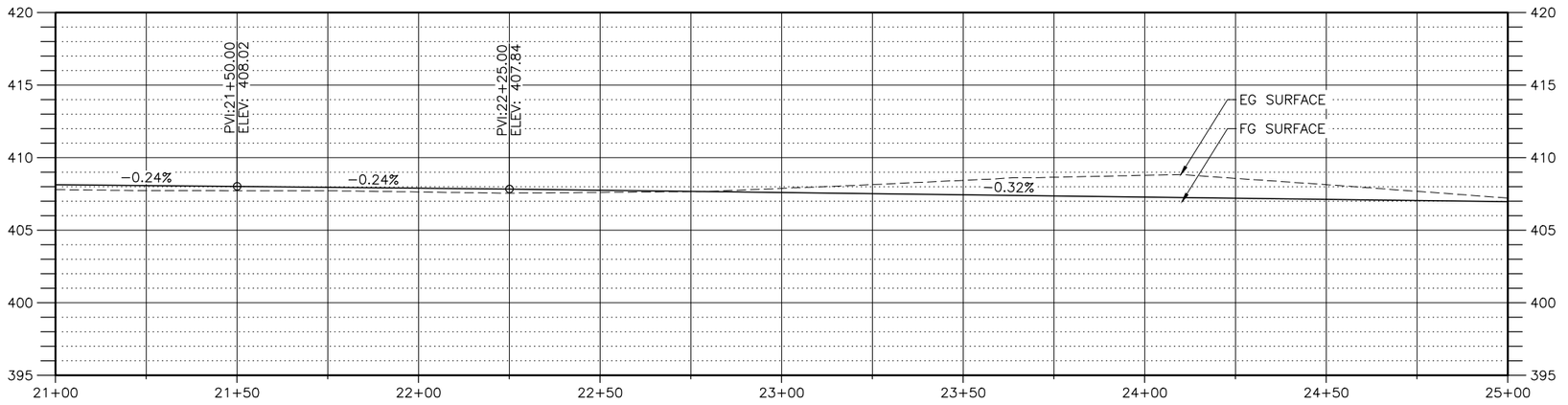
FILE : 30-20-079_C-202
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/8/2021
SHEET: 10
DRAWING: C-202

Plot Date:4/15/2021 8:49 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEETS\30-20-079_C-202.DWG





KEY PLAN



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VERT 0 5 10
SCALE IN FEET

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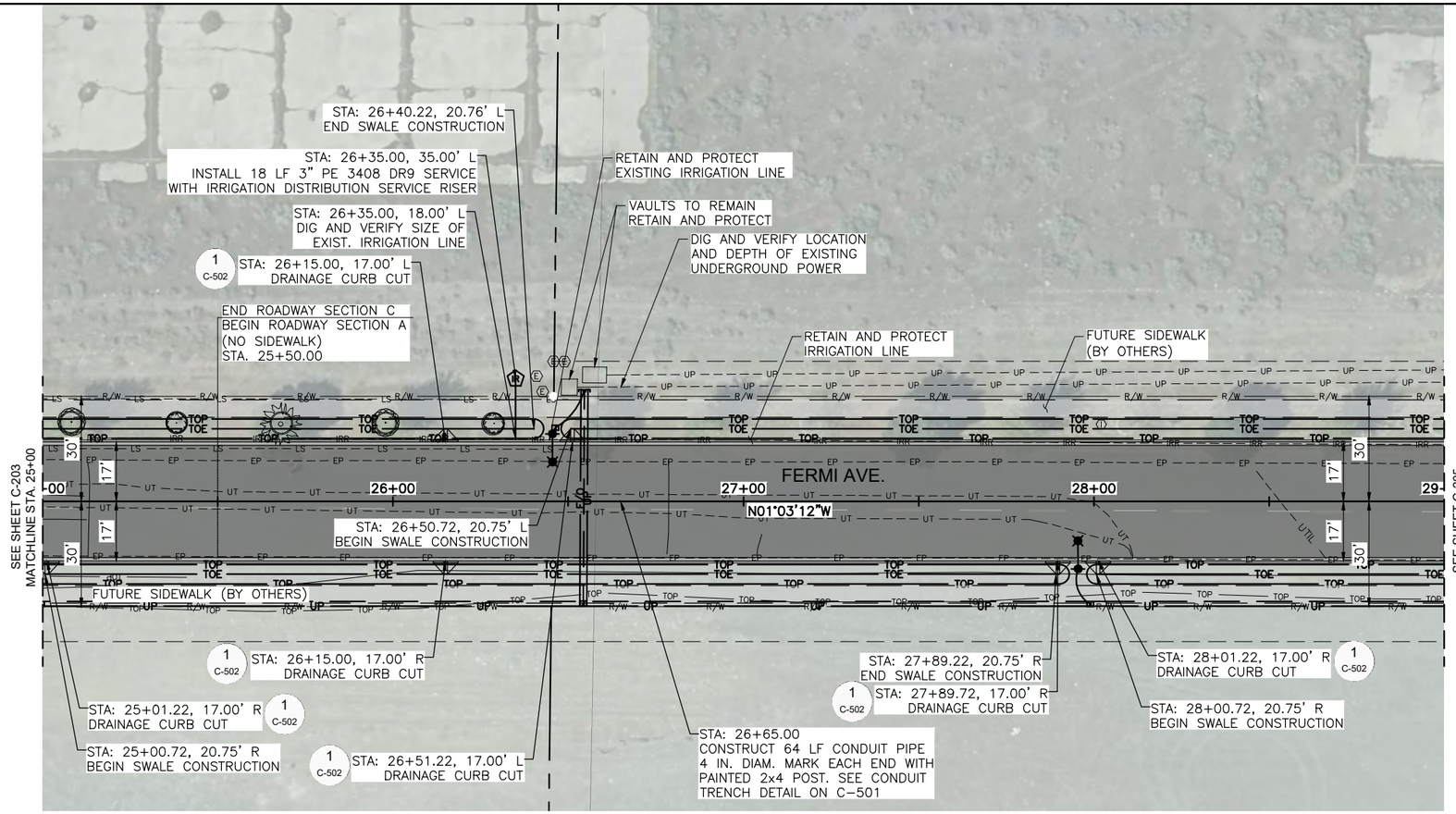
	REVISION			

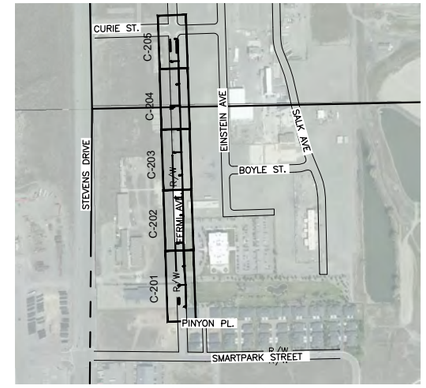
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

PLAN AND PROFILE STA. 21+00 TO STA. 25+00

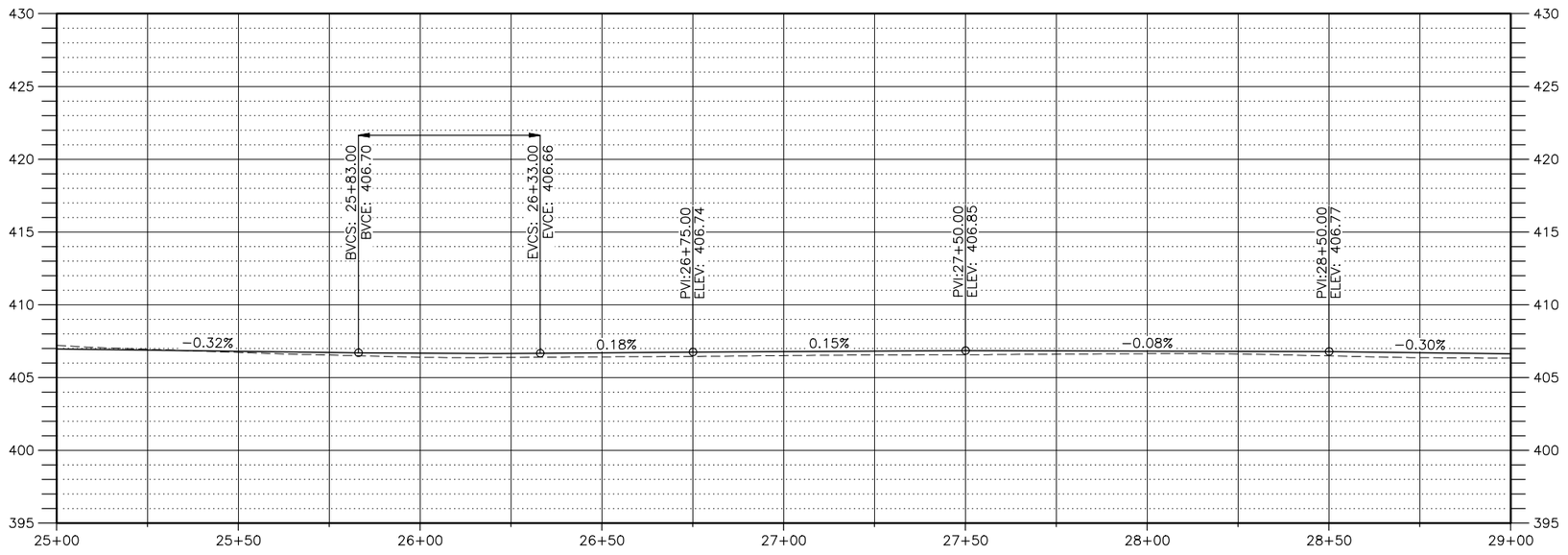
FILE : 30-20-079_C-203
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/8/2021
SHEET: 11
DRAWING: C-203

Plot Date:4/15/2021 8:49 AM Plotted By: Mary M.Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEETS\30-20-079_C-203.DWG





KEY PLAN



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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4/14/2021

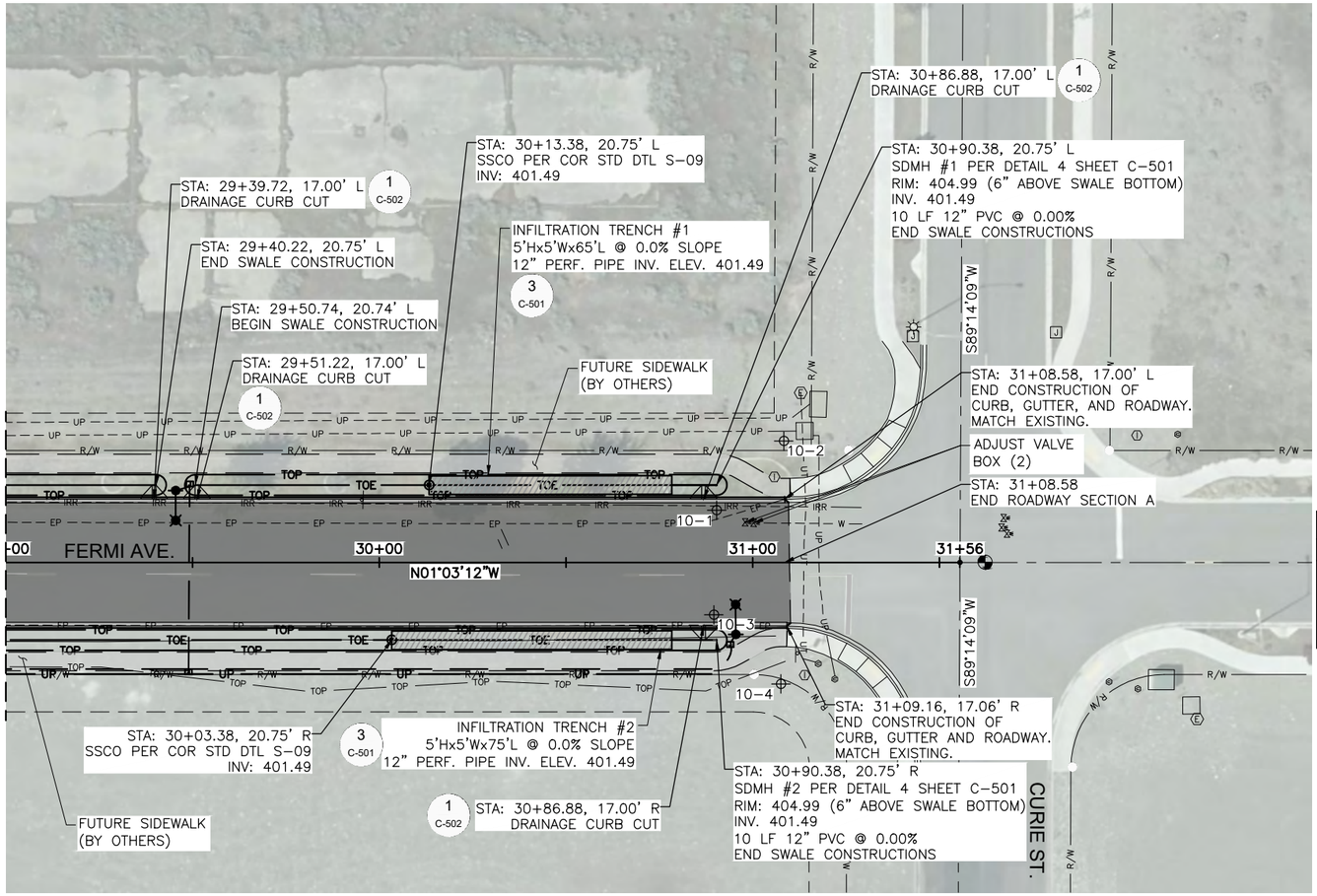
NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

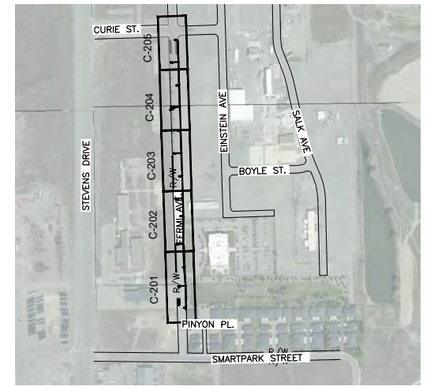
FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

PLAN AND PROFILE STA. 25+00 TO STA. 29+00

FILE : 30-20-079_C-204
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/14/2021
SHEET: 12
DRAWING: C-204

Plot Date:4/15/2021 8:50 AM Plotted By: Mary M.Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-204.DWG

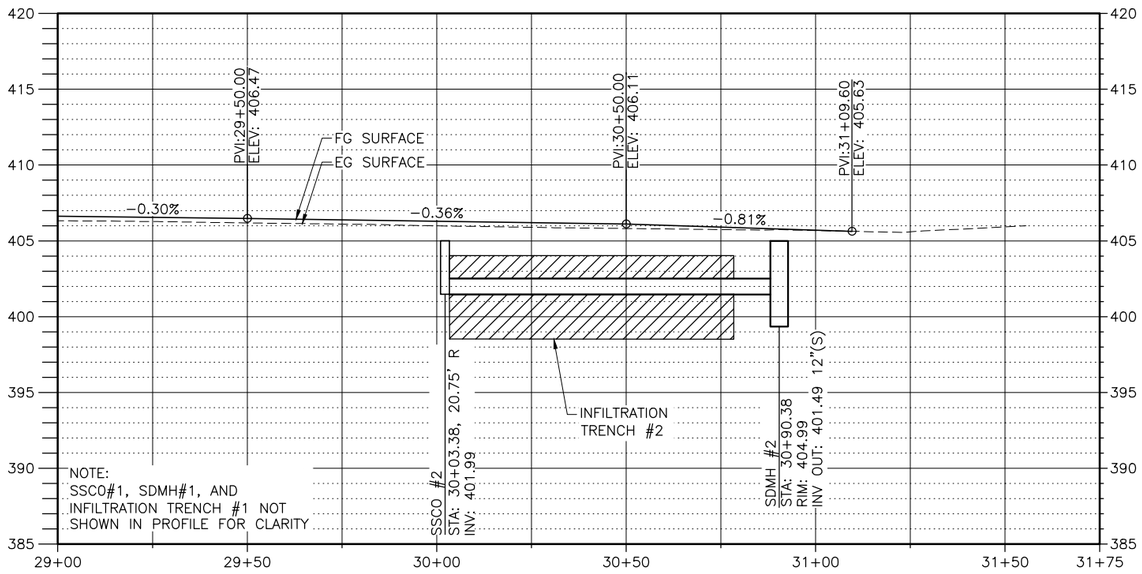


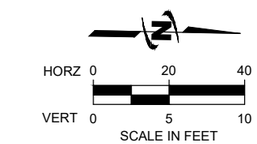


KEY PLAN

FUTURE ℄ SIDEWALK TRANSITION CONTROL POINTS ⌖

NUMBER	STATION-OFFSET	NORTHING	EASTING
10-1	STA: 30+90.38, 14.00' LT	N:365997.91	E:1948302.06
10-2	STA: 31+08.33, 32.50' LT	N:366015.52	E:1948283.23
10-3	STA: 30+89.60, 14.00' RT	N:365997.65	E:1948330.07
10-4	STA: 31+07.56, 32.50' RT	N:366015.94	E:1948348.23





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4/14/2021

NO.	DESCRIPTION	DATE	BY
	REVISION	APR.	

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

PLAN AND PROFILE STA. 29+00 TO STA. 31+50

FILE : 30-20-079_C-205
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE. IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/8/2021

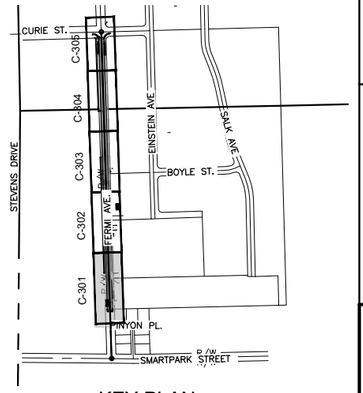
SHEET: 13
DRAWING: C-205

Plot Date:4/15/2021 8:50 AM Plotted By: Mary M Wilkinson
Date Created:4/6/2021 I:\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEETS\30-20-079_C-205.DWG

LUMINAIRE SCHEDULE					
NO.	STATION	OFFSET	MAST ARM LENGTH	MOUNT HEIGHT	LUMINAIRE CLASSIFICATION
1	13+28.76	24.16' RT	8'	30'	COLLECTOR
2	14+67.67	18.75' LT	8'	30'	COLLECTOR
3	15+95.47	24.55' RT	8'	30'	COLLECTOR

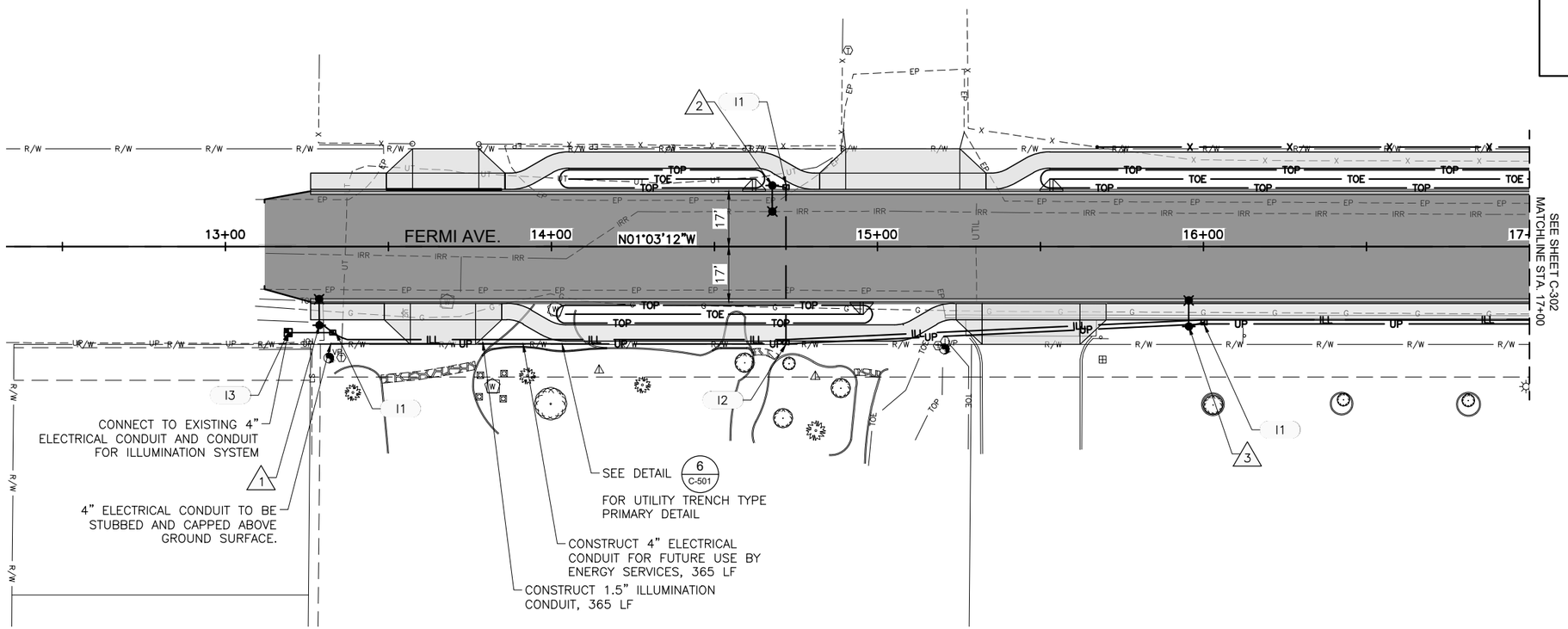
GENERAL NOTES:

1. USE WIDE SWEEPS FOR ALL CONDUIT CORNERS/CURVES.



KEY PLAN

KEYED NOTES	
KEY	NOTE
I1	JUNCTION BOX & MOUNTING BASE PER CITY OF RICHLAND STANDARD DRAWING SL-02.
I2	JUNCTION BOX PER CITY OF RICHLAND STANDARD DRAWING SL-02
I3	ELECTRICAL SERVICE PEDESTAL AND PHOTOELECTRIC CONTROL PER CITY OF RICHLAND STANDARD DRAWINGS SL-02. COORDINATE WITH RICHLAND ENERGY SERVICES FOR POWER DROP FROM PADMOUNT TRANSFORMER LOCATED ON PINYON PLACE. UTILIZE EXISTING CONDUIT.



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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SHANNON L. KRAMER — STATE OF WASHINGTON — 20105516 — REGISTERED PROFESSIONAL ENGINEER
4.14.21

NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

ILLUMINATION AND ELECTRICAL STA. 12+50 TO STA. 17+00

FILE :	30-20-079_C-301
JUB PROJ. # :	30-20-079
DRAWN BY:	BRK
DESIGN BY:	TAM
CHECKED BY:	TAM
ONE INCH	AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED:	4/14/2021
SHEET:	14
DRAWING:	C-301

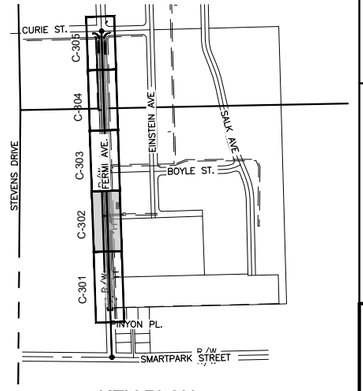
Plot Date:4/14/2021 2:06 PM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-301.DWG

LUMINAIRE SCHEDULE

NO.	STATION	OFFSET	MAST ARM LENGTH	MOUNT HEIGHT	LUMINAIRE CLASSIFICATION
4	17+45.47	19.25' LT	8'	30'	COLLECTOR
5	19+38.55	19.25' RT	8'	30'	COLLECTOR
6	20+45.47	19.25 LT	8'	30'	COLLECTOR

GENERAL NOTES:

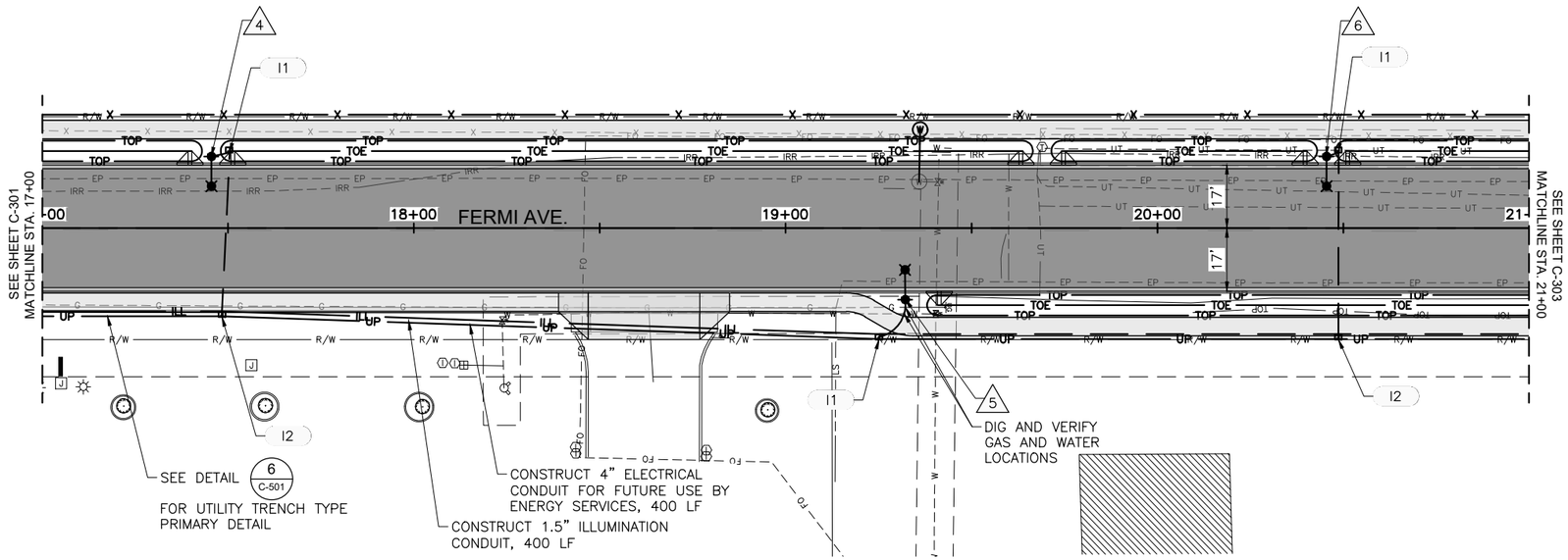
1. USE WIDE SWEEPS FOR ALL CONDUIT CORNERS/CURVES.



KEY PLAN

KEYED NOTES

KEY	NOTE
I1	JUNCTION BOX & MOUNTING BASE PER CITY OF RICHLAND STANDARD DRAWING SL-02.
I2	JUNCTION BOX PER CITY OF RICHLAND STANDARD DRAWING SL-02



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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SHANNON L. TAM 20105516 REGISTERED PROFESSIONAL ENGINEER STATE OF WASHINGTON
4.14.21

NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

ILLUMINATION AND ELECTRICAL STA. 17+00 TO STA. 21+00

FILE : 30-20-079_C-302
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/14/2021

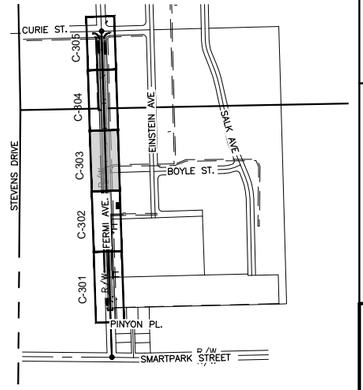
SHEET: 15
DRAWING: C-302

Plot Date:4/15/2021 9:23 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WAPORT\ORBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-302.DWG

LUMINAIRE SCHEDULE					
NO.	STATION	OFFSET	MAST ARM LENGTH	MOUNT HEIGHT	LUMINAIRE CLASSIFICATION
7	21+95.47	19.25' RT	8'	30'	COLLECTOR
8	23+45.47	19.25' LT	8'	30'	COLLECTOR
9	24.95.47	19.25' RT	8'	30'	COLLECTOR

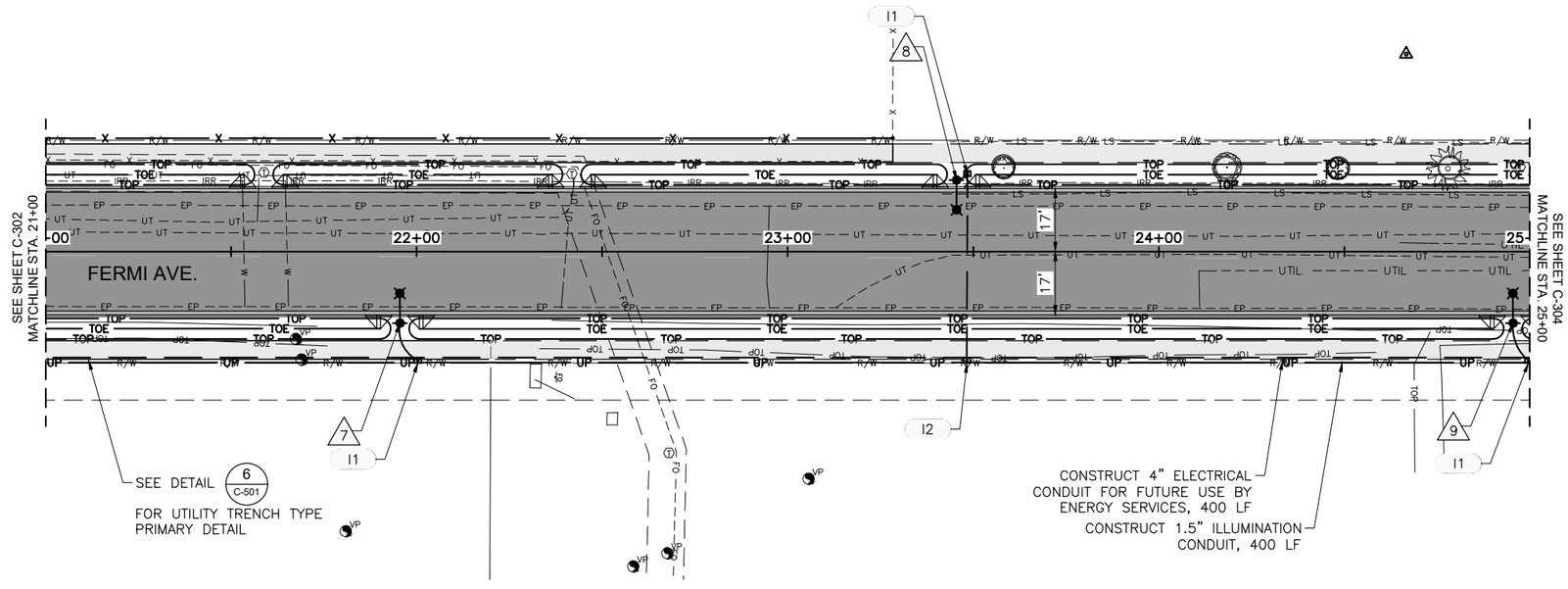
GENERAL NOTES:

1. USE WIDE SWEEPS FOR ALL CONDUIT CORNERS/CURVES.



KEY PLAN

KEYED NOTES	
KEY	NOTE
I1	JUNCTION BOX & MOUNTING BASE PER CITY OF RICHLAND STANDARD DRAWING SL-02.
I2	JUNCTION BOX PER CITY OF RICHLAND STANDARD DRAWING SL-02



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
2810 W. Clearwater Ave.
Suite 201
Kennewick, WA 99336
Phone: 509.783.2144
Fax: 509.736.0790
www.jub.com

SHANNON L. [illegible] STATE OF WASHINGTON 20105516 REGISTERED PROFESSIONAL ENGINEER
4.14.21

NO.	DESCRIPTION	DATE	BY APPR.
	REVISION		

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

ILLUMINATION AND ELECTRICAL STA. 21+00 TO STA. 25+00

FILE : 30-20-079_C-303
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/14/2021
SHEET: 16
DRAWING: C-303

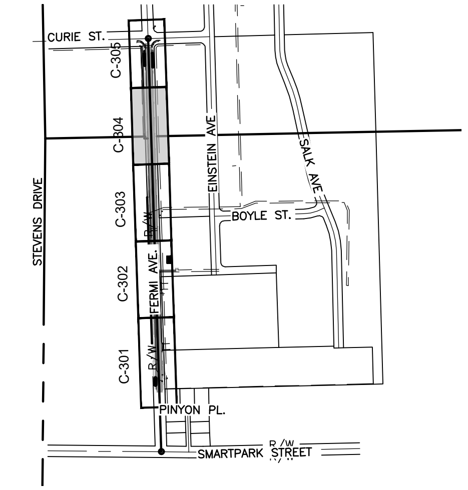
Plot Date:4/15/2021 9:23 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFRBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-303.DWG

LUMINAIRE SCHEDULE

NO.	STATION	OFFSET	MAST ARM LENGTH	MOUNT HEIGHT	LUMINAIRE CLASSIFICATION
10	26+45.47	19.25' LT	8'	30'	COLLECTOR
11	27+95.47	19.25' RT	8'	30'	COLLECTOR

GENERAL NOTES:

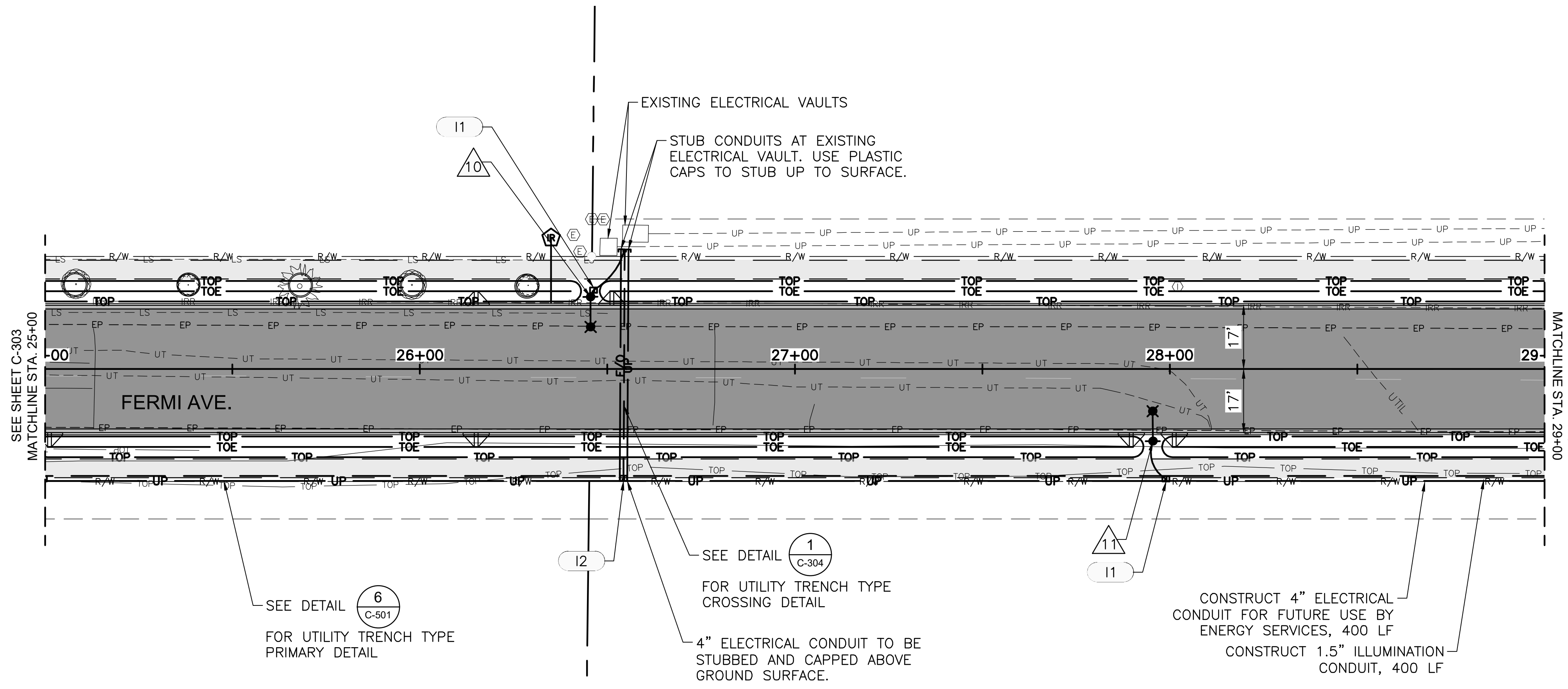
1. USE WIDE SWEEPS FOR ALL CONDUIT CORNERS/CURVES.



KEY PLAN

KEYED NOTES

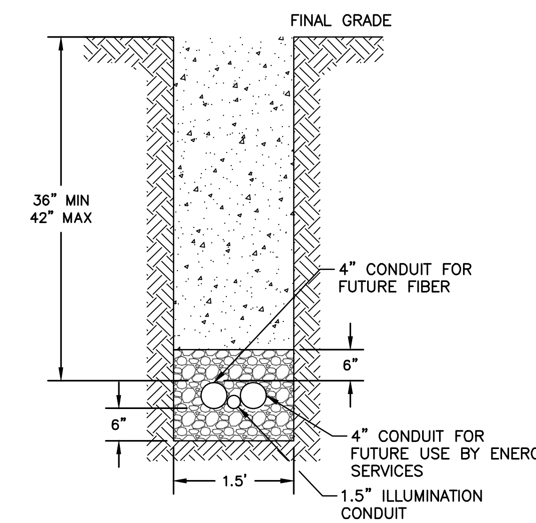
KEY	NOTE
I1	JUNCTION BOX & MOUNTING BASE PER CITY OF RICHLAND STANDARD DRAWING SL-02.
I2	JUNCTION BOX PER CITY OF RICHLAND STANDARD DRAWING SL-02



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES



NOTES:

1. TRENCH DEPTH SPECIFIED FROM FINAL GRADE.
2. TO THE EXTENT POSSIBLE, TRENCH BOTTOMS SHALL BE LEVEL AND MADE OF WELL-TAMPED EARTH WITHOUT SHARP RISES AND DROPS IN ELEVATION. ROCK SPURS OR RIDGES SHALL NOT PROJECT INTO THE TRENCH.
3. BEDDING MATERIAL SHALL PASS THROUGH A 3/4" SIEVE FRAME AND BE PLACED ABOVE AND BELOW THE CONDUIT IN TWO BACKFILL OPERATIONS OF 6" LIFTS.
4. BACKFILL SHALL BE FREE FROM STONES OR LUMPS EXCEEDING 3" AND FREE FORM SOD, FROZEN EARTH, ORGANIC MATERIALS AND CONSTRUCTION DEBRIS.
5. TRENCHES THAT EXCEED 48 INCHES IN DEPTH MUST COMPLY TO OSHA SHORING REQUIREMENTS.

1 UTILITY TRENCH TYPE CROSSING
SCALE:N.T.S.

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
2810 W. Clearwater Ave.
Suite 201
Kennewick, WA 99336
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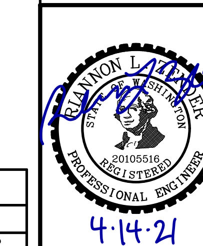


NO.	DESCRIPTION	BY	APR.	DATE

REVISION

FERMI AVENUE ROAD WIDENING
PORT OF BENTON

ILLUMINATION AND ELECTRICAL STA. 25+00 TO STA. 29+00

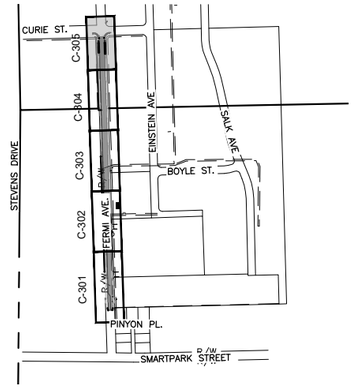
FILE : 30-20-079_C-304
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/14/2021
SHEET: 17
DRAWING: C-304

Plot Date:4/15/2021 9:24 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEETS\30-20-079_C-304.DWG

LUMINAIRE SCHEDULE					
NO.	STATION	OFFSET	MAST ARM LENGTH	MOUNT HEIGHT	LUMINAIRE CLASSIFICATION
12	29+45.47	19.25' LT	8'	30'	COLLECTOR
13	30+95.47	19.25' RT	8'	30'	COLLECTOR

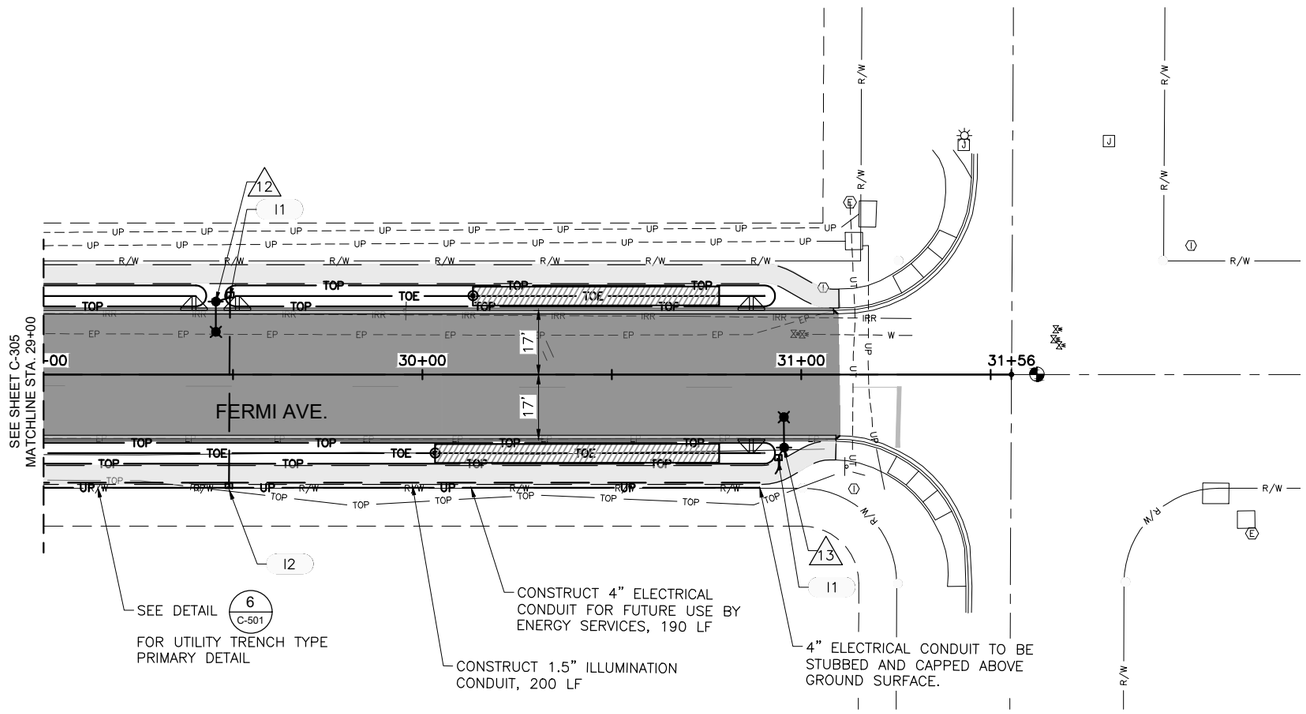
GENERAL NOTES:

1. USE WIDE SWEEPS FOR ALL CONDUIT CORNERS/CURVES.



KEY PLAN

KEYED NOTES	
KEY	NOTE
I1	JUNCTION BOX & MOUNTING BASE PER CITY OF RICHLAND STANDARD DRAWING SL-02.
I2	JUNCTION BOX PER CITY OF RICHLAND STANDARD DRAWING SL-02



HORZ 0 20 40
VERT 0 5 10
SCALE IN FEET

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

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J-U-B ENGINEERS, INC.

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Fax: 509.736.0790
www.jub.com

SHANNON L. KUNKLE — STATE OF WASHINGTON — 20105516 — REGISTERED PROFESSIONAL ENGINEER
4.14.21

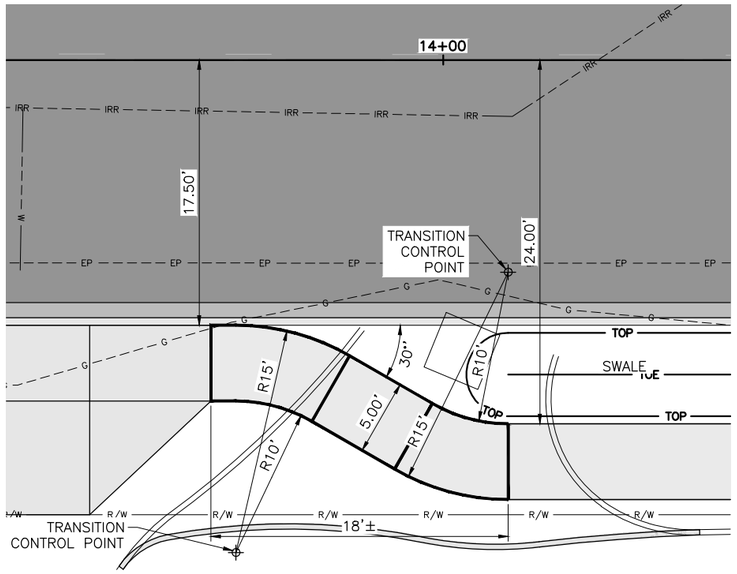
NO.	REVISION	BY	APP.	DATE
	DESCRIPTION			

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

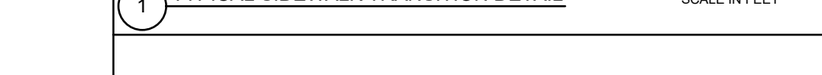
ILLUMINATION AND ELECTRICAL STA. 29+00 TO STA. 31+50

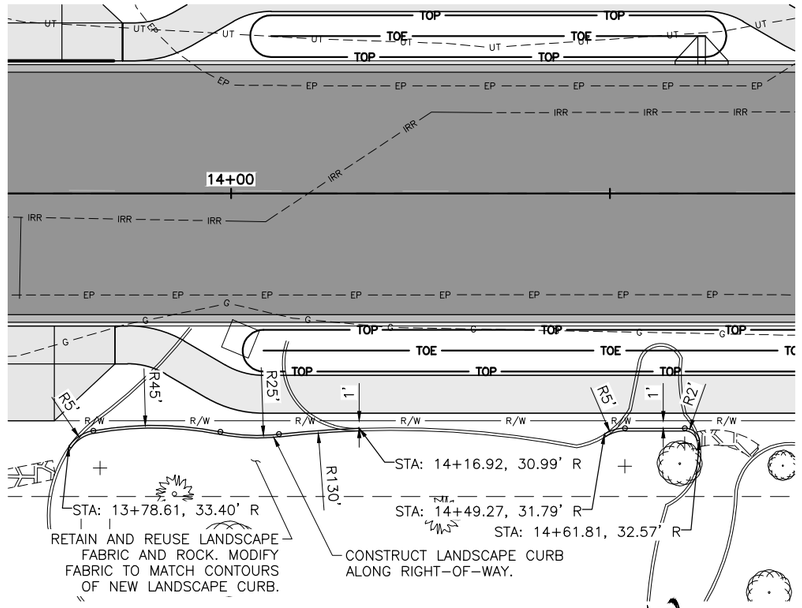
FILE : 30-20-079_C-305
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/14/2021
SHEET: 18
DRAWING: C-305

Plot Date:4/15/2021 9:24 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WAPORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-305.DWG

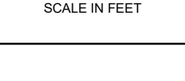


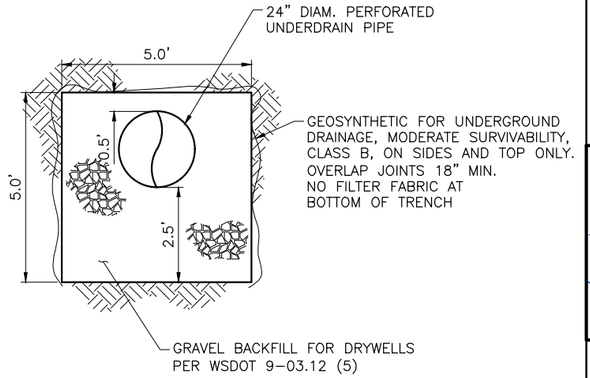
1 TYPICAL SIDEWALK TRANSITION DETAIL





2 LANDSCAPE RESTORATION DETAIL - PARK AREA

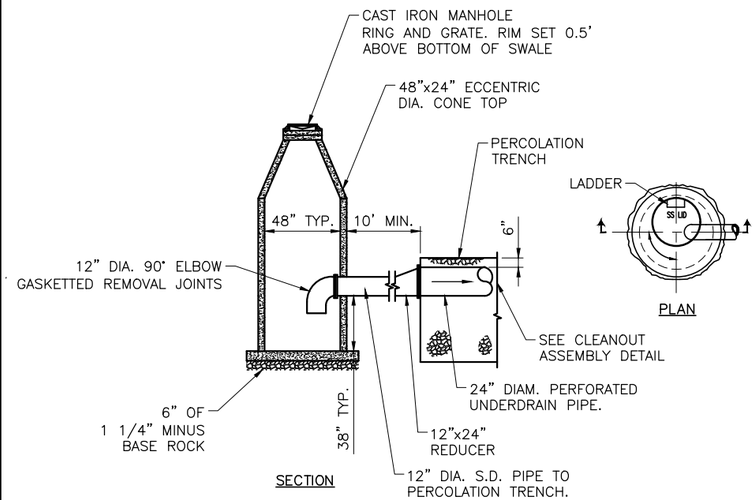




3 INFILTRATION TRENCH
SCALE:N.T.S.

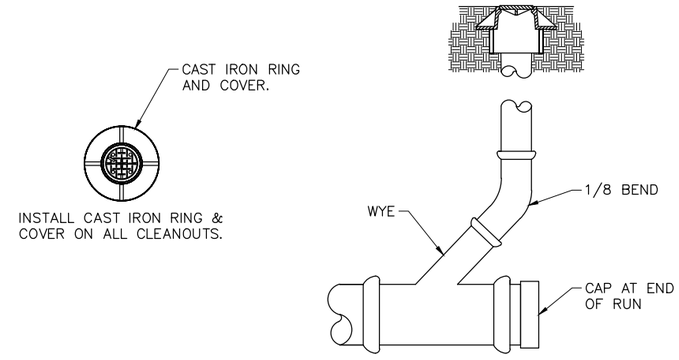
811 Know what's below. Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

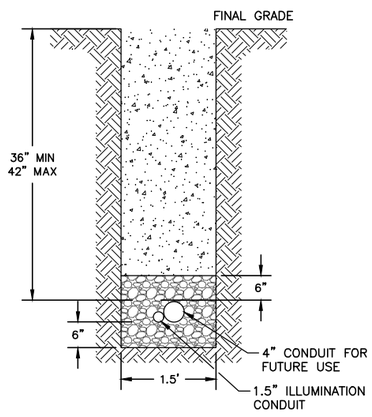


4 SDMH W/ INFILTRATION TRENCH CONNECTION
SCALE:N.T.S.

NOTE:
INSTALL RING AND COVER
FLUSH WITH BOTTOM OF DITCH.



5 CLEANOUT ASSEMBLY
SCALE:N.T.S.



NOTES:
1. TRENCH DEPTH SPECIFIED FROM FINAL GRADE.
2. TO THE EXTENT POSSIBLE, TRENCH BOTTOMS SHALL BE LEVEL AND MADE OF WELL-TAMPED EARTH WITHOUT SHARP RISES AND DROPS IN ELEVATION. ROCK SPURS OR RIDGES SHALL NOT PROJECT INTO THE TRENCH.
3. BEDDING MATERIAL SHALL PASS THROUGH A 3/4" SIEVE FRAME AND BE PLACED ABOVE AND BELOW THE CONDUIT IN TWO BACKFILL OPERATIONS OF 6" LIFTS.
4. BACKFILL SHALL BE FREE FROM STONES OR LUMPS EXCEEDING 3" AND FREE FORM SOD, FROZEN EARTH, ORGANIC MATERIALS AND CONSTRUCTION DEBRIS.
5. TRENCHES THAT EXCEED 48 INCHES IN DEPTH MUST COMPLY TO OSHA SHORING REQUIREMENTS.

6 UTILITY TRENCH TYPE PRIMARY
SCALE:N.T.S.

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Suite 201
Kennewick, WA 99336
Phone: 509.783.2144
Fax: 509.736.0790
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TRAVIS A. MARDEN
STATE OF WASHINGTON
23882
REGISTERED
PROFESSIONAL ENGINEER
4/14/2021

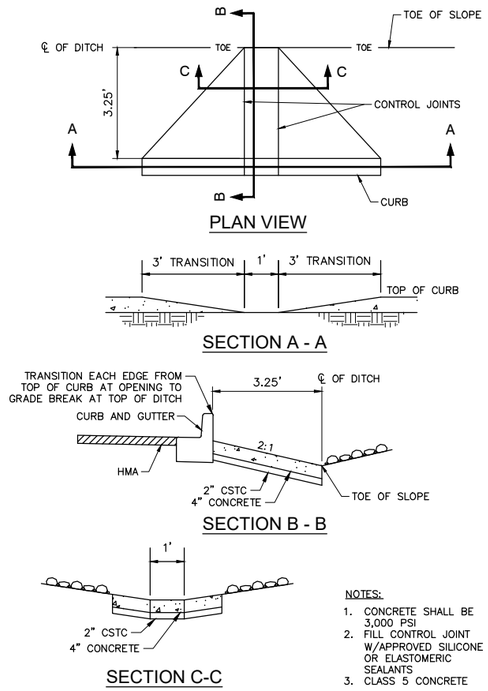
NO.	DESCRIPTION	BY	APP.	DATE
	REVISION			

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

DETAILS

FILE : 30-20-079_C-501
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/8/2021
SHEET: 19
DRAWING: C-501

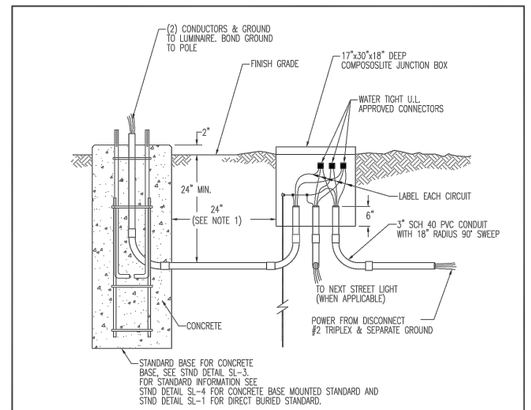
Plot Date:4/15/2021 8:51 AM Plotted By: Mary M. Wilkinson
Date Created:2/5/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-501.DWG



NOTES:

1. CONCRETE SHALL BE 3,000 PSI
2. FILL CONTROL JOINT W/APPROVED SILICONE OR ELASTOMERIC SEALANTS
3. CLASS 5 CONCRETE

1 CURB CUT
SCALE:N.T.S.

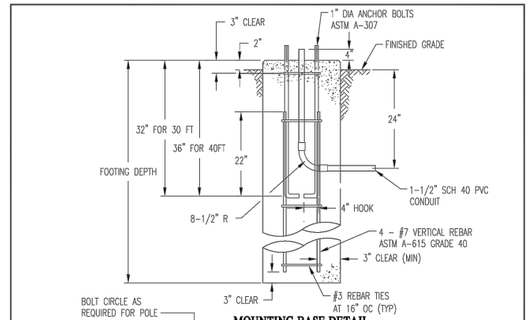


NOTES:

1. SET JUNCTION BOX IN THE PROPER LOCATION SUCH THAT IT IS AS LITTLE OVER 24" FROM STREET LIGHT FOUNDATION AS POSSIBLE. SOIL UNDER BOX SHALL BE RESTORED TO 95% COMPACTION. SET BOX AT AN ELEVATION SUCH THAT THE TOP OF THE BOX COVER IS APPROXIMATELY 2" ABOVE FINISHED GRADE UNLESS BOX IS TO BE SURROUNDED BY ASPHALT OR CONCRETE. SET BOX LEVEL WITH AND PARALLEL TO STREET.
2. SWEEP CONDUIT UP INTO JUNCTION BOX A MINIMUM OF 6". INSTALL BELL ENDS OR BUSHINGS ON ALL EXPOSED CONDUIT ENDS IN JUNCTION BOX.
3. ALLOW SUFFICIENT SLACK IN CONDUCTORS SUCH THAT SPLICES MAY BE REMOVED A MINIMUM OF 36" FROM SPLICE BOX.
4. JUNCTION BOXES SHALL BE COMPOSOLITE AS MANUFACTURED BY QUAZITE CORPORATION OR APPROVED EQUAL. BOXES SHALL BE CONCRETE GRAY COLOR IN APPEARANCE. COVER SHALL UTILIZE A PENTA-HEAD BOLD TO SECURE IT TO BOX. THE COVER SHALL HAVE THE LOGO "ELECTRICAL" PERMANENTLY MARKED ON IT.

STREET LIGHTING JUNCTION BOX & MOUNTING BASE	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 11.15
	DRAWN BY: LD	DWG: SL-2
	CAD FILE: 2015_SL2_11_2015	

2 STREET LIGHTING JUNCTION BOX & MOUNTING BASE
SCALE:NTS



MOUNTING BASE DETAIL

NOTE:
CONCRETE STRENGTH = 4000 PSI CONCRETE CLASS 4000P.
CONCRETE STRENGTH = 2400 PSI PRIOR TO SETTING POLE.

MOUNTING BASE TOP VIEW

POLE LENGTH (FEET)	MINIMUM FOOTING DEPTH IN FEET SEE SOIL TABLE		
	A	B	C
30	5'0"	6'6"	8'0"
40	5'6"	7'0"	8'6"

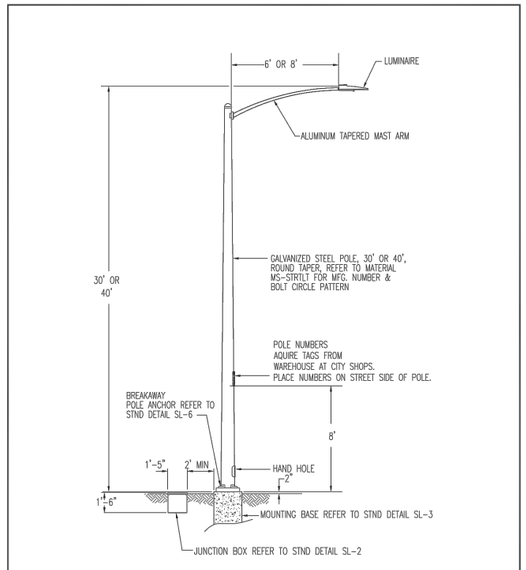
SOIL TYPE	CLASS OF MATERIAL (UNIFORM BUILDING CODE)
A	GOOD-COMPACT WELL-GRADED SAND AND GRAVEL. HARD CLAY WELL-GRADED FINE AND COARSE SAND (ALL DRAINED SO WATER WILL NOT STAND)
B	AVERAGE-COMPACT FINE SAND MEDIUM CLAY COMPACT SANDY LOAM LOOSE COARSE SAND AND GRAVEL (ALL DRAINED SO WATER WILL NOT STAND.)
C	POOR-SOFT CLAY CLAY LOAM POORLY COMPACTED SAND CLAYS CONTAINING LARGE AMOUNTS OF SILT (WATER STANDS DURING WET SEASON)

NOTE:
FORMING MATERIALS (SONOTUBE) SHALL BE REMOVED FROM THE TOP OF THE FOUNDATION TO SIX INCHES BELOW FINISHED GRADE AFTER CONCRETE HAS HAD A CHANCE TO SET UP.

SOIL BELOW MOUNTING BASE TO BE UNDISTURBED.

STREET LIGHTING MOUNTING BASE DETAILS CONCRETE SUPPORT	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 11.15
	DRAWN BY: LD	DWG: SL-3
	CAD FILE: 2015_SL3_11_2015	

3 STREET LIGHTING MOUNTING BASE DETAILS CONCRETE SUPPORT
SCALE:NTS



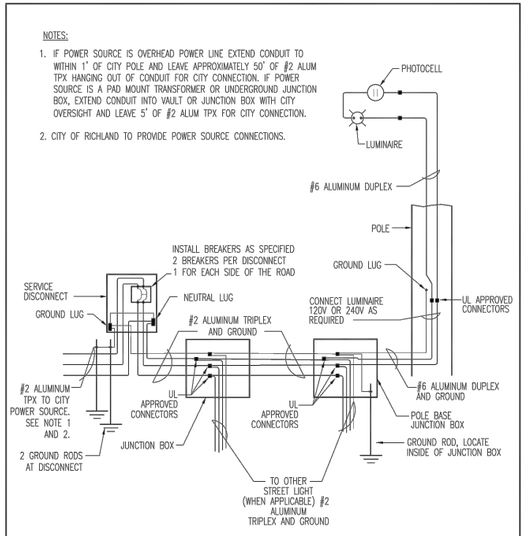
SEE TECHNICAL SPECIFICATION TS-STRTLT FOR DESIGN INFORMATION
SEE MATERIAL SPECIFICATION MS-STRTLT FOR MANUFACTURING AND MATERIALS INFORMATION

STREET LIGHTING STEEL POLE 30/40FT CONCRETE BASE	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 11.15
	DRAWN BY: LD	DWG: SL-4
	CAD FILE: 2015_SL4_11_2015	

4 STREET LIGHTING STEEL POLE 30/40 FT CONCRETE BASE
SCALE:NTS

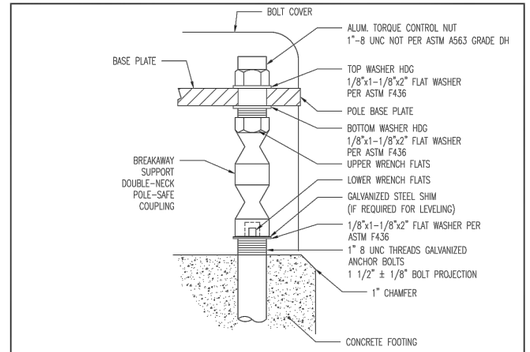
NOTES:

1. IF POWER SOURCE IS OVERHEAD POWER LINE EXTEND CONDUIT TO WITHIN 1' OF CITY POLE AND LEAVE APPROXIMATELY 50' OF #2 ALUM TPX HANGING OUT OF CONDUIT FOR CITY CONNECTION. IF POWER SOURCE IS A PAD MOUNT TRANSFORMER OR UNDERGROUND JUNCTION BOX, EXTEND CONDUIT INTO VAULT OR JUNCTION BOX WITH CITY OVERSIGHT AND LEAVE 5' OF #2 ALUM TPX FOR CITY CONNECTION.
2. CITY OF RICHLAND TO PROVIDE POWER SOURCE CONNECTIONS.

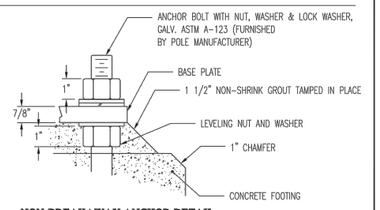


STREET LIGHTING WIRING DIAGRAM	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 07.17
	DRAWN BY: LD	DWG: SL-5
	CAD FILE: 2015_SL5_07_2017	

5 STREET LIGHTING WIRING DIAGRAM
SCALE:NTS



BREAKAWAY POLE ANCHOR DETAIL



NON-BREAKAWAY ANCHOR DETAIL

STREET LIGHTING POLE ANCHOR CONCRETE SUPPORT	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 07.17
	DRAWN BY: LD	DWG: SL-6
	CAD FILE: 2015_SL6_07_2017	

6 STREET LIGHTING POLE ANCHOR CONCRETE SUPPORT
SCALE:NTS

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
2810 W. Clearwater Ave.
Suite 201
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www.jub.com

TRAVIS A. MARDEN
STATE OF WASHINGTON
39882
REGISTERED
PROFESSIONAL ENGINEER
4/14/2021

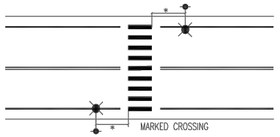
NO.	DESCRIPTION	BY	APP'L	DATE
	REVISION			

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

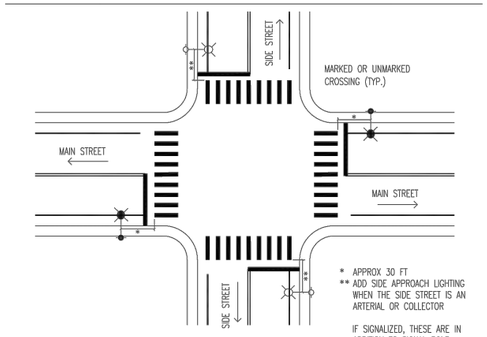
DETAILS

FILE : 30-20-079_C-502
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/8/2021
SHEET: 20
DRAWING: C-502

Plot Date:4/15/2021 8:51 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\J-U-B.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-502.DWG



MIDBLOCK CROSSWALK LIGHTING



INTERSECTION LIGHTING

MIDBLOCK LIGHTING INTERSECTION LIGHTING	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 05.20
	DRAWN BY: EY	DWG: SL-7
	CAD FILE: 2020_SL7_05_2020	

1 MIDBLOCK LIGHTING INTERSECTION LIGHTING
SCALE:

City of Richland Street Light Design Criteria		Roadway Classification											
		Principal Arterial Roadway			Minor Arterial Roadway			Collector Roadway			Local Street		
		High	Medium	Low	High	Medium	Low	High	Medium	Low	High	Medium	Low
Pedestrian Conflict Area		1.2	0.9	0.6	1.2	0.9	0.6	0.8	0.6	0.4	0.6	0.5	0.3
Average Maintained Luminance (cd/m²)		3.0	3.0	3.5	3.0	3.0	3.5	3.0	3.5	4.0	6.0	6.0	6.0
Luminance Uniformity	Ave/Min	5.0	5.0	6.0	5.0	5.0	6.0	5.0	6.0	8.0	10.0	10.0	10.0
	Max/Min	1.7	1.3	0.9	1.7	1.3	0.9	1.2	0.9	0.6	0.9	0.7	0.4
Average Maintained Illuminance for curved roadway sections (fc)†		3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	6.0	6.0	6.0
Illuminance Uniformity	Ave/Min	180	220	280	150	200	300	220	280	340	210	280	350
Site Characteristics	Minimum Pole spacing for LED Lighting (ft)‡		8			8			8 or 2.5			8 or 2.5	
	Setback (ft)	Staggered* or Opposite			Staggered* or Opposite			Staggered* or Opposite			Staggered*		
	Configuration												
LED Luminaire Characteristics	Luminaire Distribution	III			II			II			II		
	Max Fixture Wattage	270			170			110			70		
	Color Temperature	4100K (±200)			4100K (±200)			4100K (±200)			4100K (±200)		
	Minimum LLD (L00,000 hrs)	0.75			0.75			0.75			0.75		
	Max BUG Rating	B3 U0 G3			B2 U0 G3			B2 U0 G3			B1 U0 G2		
Pole Characteristics	Mounting Height (ft)	38			38			28			28		
	Arm Length (ft)	8 or 12			8 or 12			8			8		

* Staggered spacing measured between luminaires on the same side of the road.
† For R2 and R3 Pavement
‡ Maximum spacing requirement may be revised periodically to better reflect the capabilities of new LED lighting technology.

STREET LIGHT DESIGN CRITERIA	PUBLIC WORKS ENGINEERING	
	APPR. BY: PKR	DATE: 05.20
	DRAWN BY: EY	DWG: SL-8
	CAD FILE: 2020_SL8_05_2020	

2 STREET LIGHT DESIGN CRITERIA
SCALE:

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
2810 W. Clearwater Ave.
Suite 201
Kennewick, WA 99336
Phone: 509.783.2144
Fax: 509.736.0790
www.jub.com

TRAVIS A. MARDEN
STATE OF WASHINGTON
39882
REGISTERED
PROFESSIONAL ENGINEER
4/14/2021

NO.	DESCRIPTION	BY	APPR.	DATE
	REVISION			

FERMI AVENUE
ROAD WIDENING
PORT OF BENTON

DETAILS

FILE : 30-20-079_C-503
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/6/2021
SHEET: 21
DRAWING: C-503

Plot Date:4/15/2021 8:51 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEET\30-20-079_C-503.DWG

Application Id:	35546	**Certification Received:** *(Ecology use)*	
Facility/Site Name:	Fermi Avenue Widening	**Permit Number:** *(Ecology use)*	
Facility Address:	Fermi Avenue, between Curie Street and Smartpark Street	**Facility County:**	Benton
Permittee Name:	Port of Benton	**Permittee Title:**	
Permittee Email:	roger@rgwenterprises.com	**Permittee Phone:**	5093753565
Permittee Address:	3250 Port of Benton Blvd Richland, WA 99354-1670	**Company Name:**	Port of Benton
Disturbed Acreage:	1.3		

Certification of Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Roger Wright, P.E. / RGW Enterprises	Port of Benton Project Representative
Printed Name / Company	Title
	April 14, 2021
Signature of Permittee *	Date

* Federal regulations require this application is signed by one of the following:
A. For a corporation: By a responsible corporate officer, of at least the level of vice president.
B. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.
C. For a municipality, state, federal, or other public facility: By either a principal executive officer or ranking elected official.

Please print, sign and mail this form to the following address:

Department of Ecology
ATTN: Water Quality Program, Construction Stormwater P.O. Box 47696
Olympia, WA 98504-7696

DEPARTMENT OF ECOLOGY
State of Washington

Notice of Intent

Construction Stormwater General Permit

Application Type: [X] **New** [ ] **Renewal** **Permit Number:** **NOI :** 35546

I. Contact Information

Permittee

Honorific: **First Name:** Port of **Last Name:** Benton

Organization Name: Port of Benton **Title:**

Mailing Address: 3250 Port of Benton Blvd

City: Richland **State:** WA **Zip Code:** 99354-1670

Email: roger@rgwenterprises.com

Primary Phone: 509-375-3565 **Secondary Phone:** 509-366-7455

UBI Number:

Site Contact

Honorific: **First Name:** Roger **Last Name:** Wright

Organization Name: RGW Enterprises, PC **Title:** Project Representative

Mailing Address: 3250 Port of Benton Blvd

City: Richland **State:** WA **Zip Code:** 99354-1670

Email: roger@rgwenterprises.com

Primary Phone: 509-375-3565 **Secondary Phone:** 509-366-7455

UBI Number:

Site Owner

Honorific: **First Name:** Port of **Last Name:** Benton

Organization Name: Port of Benton **Title:**

Mailing Address: 3250 Port of Benton Blvd

City: Richland **State:** WA **Zip Code:** 99354-1670

Email: roger@rgwenterprises.com

Primary Phone: 509-375-3565 **Secondary Phone:** 509-366-7455

UBI Number:

II. Electronic Discharge Monitoring Reporting

You must submit monthly discharge monitoring reports using Ecology's Electronic Discharge Monitoring Reporting (WQWebDMR) system. To sign up for WQWebDMR, or to register a new site, go to ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits, and click on the "Construction Stormwater" link. You will find information on WQWebDMR under the "WQWebDMR and PARIS" link on the right-hand side. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, you must submit the Electronic Signature Agreement with your application. If you have questions on this process, contact Ecology's WQWebDMR staff at WQWebPortal@ecy.wa.gov or 360-407-7097.

III. Site Information

Site Project Name: Fermi Avenue Widening

Street Address or Location Description: Fermi Avenue, between Curie Street and Smartpark Street

City: **County:** Benton **Zip Code:**

Latitude: 46.32853 **Longitude:** -119.281072

Type of Construction Activity:

- [ ] Residential
- [ ] Commercial
- [ ] Industrial
- [X] Highway or Road (city, county, state)
- [ ] Utilities (specify):
- [X] Other (specify): Grading

Site Acreage

Total site/project size: 2.5 acres

Total disturbed area: 1.3 acres

Total area of soil disturbance for your site/project over the life of the project. Include grading, equipment staging, excavation, borrow pit, material storage areas, dump areas, haul roads, side-cast areas, off-site construction support areas, and all other soil disturbance acreage associated with the project.

Will 1,000 cubic yards or more of poured concrete or recycled concrete be used over the life of the project? [ ] Yes [X] No

Estimated project start date: 6/1/2021 **Estimated project completion date:** 10/15/2021

Other Permits

None

IV. Existing Site Conditions

1. Are you aware of contaminated soils on this site? [ ] Yes [X] No

2. Are you aware of groundwater contamination located within the site boundary? [ ] Yes [X] No

3. If you answered yes to question 1 or 2, will any contaminated soils be distrubed or will any contaminated groundwater be discharged due to the proposed construction activity? [ ] Yes [ ] No

If yes, please provide detailed information (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth) as well as pollution prevention and/or treatment Best Management Practices (BMPs) proposed to control the discharge of soil and/or groundwater contaminants in stormwater. This should include information that would be included in related portions of the Stormwater Pollution Prevention Plan (SWPPP) that describe how contaminated and potentially contaminated construction stormwater and dewatering water will be managed. You may attach this information separately, if needed

V. Stormwater Pollution Prevention Plan (SWPPP)

You must develop a SWPPP prior to starting construction. Do not submit your SWPPP with your application. If you answered yes to the questions in Part IV, please submit the information that would be included in related portions of the SWPPP that describe how contaminated and potentially contaminated construction stormwater and dewatering water will be managed.

VI. Best Management Practices (BMPs)

You must use the BMPs listed in the Stormwater Management Manual for Western Washington or the Stormwater Management Manual for Eastern Washington or other manuals approved by Ecology. Alternatively, you may use demonstrably equivalent BMPs on the basis of permit condition S9.C.4. If you intend to use a BMP at your site that is not included in these manuals, but that you believe meets the definition of a demonstrably equivalent BMP, you must notify the appropriate regional office. (See Definitions in the Construction Stormwater General Permit).*

http://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit#contacts

**Note that if you receive permit coverage without indicating the preference for a demonstrably equivalent BMP and later decide to use one, you must provide Ecology with notice of the selection of an equivalent BMP no less than 60 days before the intended use of the equivalent BMP.*

VII. Discharge/Receiving Water Information

Indicate whether your site's stormwater and/or dewatering water could enter surface waters, directly and/or indirectly:

[X] Water will discharge directly or indirectly (through a storm drain system or roadside ditch) into one or more surface waterbodies (wetlands, creeks, lakes, and all other surface waters and water courses).

If your discharge is to a storm sewer system, provide the name of the operator of the storm sewer system:

[ ] Water will discharge to ground with 100% infiltration, with no potential to reach surface waters under any conditions.

If your project includes dewatering, you must include dewatering plans and discharge locations in your site Stormwater Pollution Prevention Plan.

Location of Discharge into Surface Waterbody

Outfall Number	Outfall Description	Surface Waterbody Name	Outfall Type	Latitude	Longitude
1	On Site Infiltration		Ground	46.328530	-119.281072

VIII. State Environmental Policy Act (SEPA)

This Notice of Intent (NOI) is incomplete and cannot be approved until the applicable SEPA requirements under Chapter 197-11 WAC are met.

Who is the SEPA lead agency on your site? City of Richland

Has the SEPA lead agency issued a final decision on your checklist? [ ] Yes [X] No [ ] Exempt

If No: The NOI is incomplete. Ecology will hold the application until a final SEPA decision is made or the Construction Stormwater NOI public comment period ends, whichever is later. **You must notify Ecology once the lead agency has issued a determination.**

If Yes: Type of SEPA decision issued:

Date of final SEPA decision:

Date when all SEPA-related comment & appeal periods ended or will end:

If Exempt:

[ ] Watershed Restoration & Fish Habitat Enhancement Exemption (RCW 43.21C.0382).

[ ] Infill Development Exemption (RCW 43.21C.229).

[ ] Planned Action Exemption (RCW 43.21C.031).

[ ] Categorical Exemption. Under what section of the SEPA Rule (WAC 197-11-800) is it exempt?

Section:

IX. Public Notice

You must publish a public notice at least **once** a week for **two** consecutive weeks with **seven days** between publications, in at least a **single** newspaper of general circulation in the county in which the facility is located. Ecology cannot grant permit coverage sooner than the end of the 30-day public comment period, which begins on the date of the **second** public notice.

Newspaper Name	First Public Notice Date	Second Public Notice Date
Tri-City Herald	4/18/2021	4/25/2021

X. Certification of Permittees

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

	April 14, 2021
Permittee Signature	Date

Public Notice

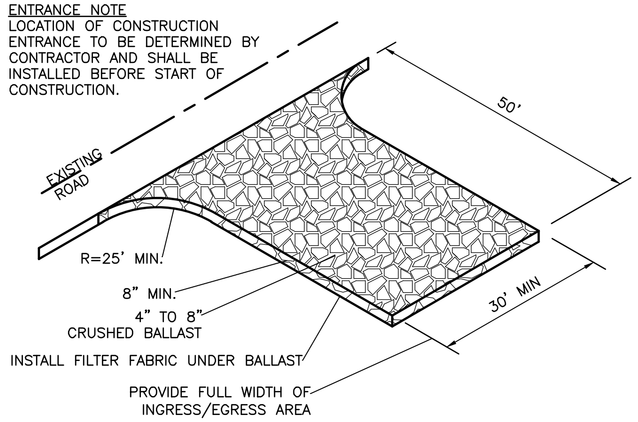
The Port of Benton, Attn: Roger Wright, P.E., 3250 Port of Benton Blvd Richland, WA 99354-1670, is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit.

The proposed project, Fermi Avenue Widening, is located along Fermi Avenue, between Curie Street and Smartpark Street, in Richland in Benton County. This project involves 1.3 acres of soil disturbance for Highway or Road, Other (Grading) construction activities.

All discharges and runoff goes to ground water.

Any persons desiring to present their views to the Washington State Department of Ecology regarding this Application, or interested in Ecology's action on this Application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II anti-degradation requirements under WAC 173-201A-320.

Comments can be submitted to:
ecyrewqianoi@ecy.wa.gov, or
Department of Ecology
Attn: Water Quality Program, Construction Stormwater
P.O. Box 47696, Olympia, WA 98504-7696



1. THE TEMPORARY CONSTRUCTION ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHOULD BE CONSTRUCTED ACCORDING TO NOTE #4 IN THIS PLAN. IF WASH RACKS ARE USED, THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
2. GRAVEL SHALL BE CRUSHED BALLAST ROCK, 8" TO 12" IN DEPTH AND INSTALLED TO THE SPECIFIED DIMENSIONS AT THE ENTRANCE.
3. THE GRAVEL BALLAST ROCK SHALL BE 4" TO 8" IN DIAMETER AND PLACED ACROSS THE FULL WIDTH OF VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50 FEET.
4. IF CONDITIONS ON THE SITE ARE SUCH THAT MOST OF THE MUD IS NOT REMOVED FROM VEHICLE TIRES BY CONTACT WITH GRAVEL, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER ONTO A PUBLIC ROAD. WASH WATER MUST BE CARRIED AWAY FROM ENTRANCE TO A SETTLING AREA TO REMOVE SEDIMENT. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.
5. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2" STONE, AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

1 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.

0 110 220
SCALE IN FEET

TESC NOTES

1. THE TEMPORARY EROSION CONTROL SYSTEM SHALL BE INSTALLED PRIOR TO ALL OTHER CONSTRUCTION.
2. ALL CLEARING LIMITS AND/OR EASEMENTS SETBACKS, SENSITIVE/CRITICAL AREAS AND THEIR BUFFERS, SIGNIFICANT TREES AND DRAINAGE COURSES SHALL BE CLEARLY STAKED AND MARKED AS SHOWN ON PLANS.
3. PROPERTIES ADJACENT TO THE PROJECT SITE THAT ARE SUBJECT TO POTENTIAL EROSION CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION THROUGH THE USE OF SILT FENCE, WATTLES, OR OTHER BMP SELECTED BY THE CONTRACTOR.
4. ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED WITH TEMPORARY INLET SEDIMENT CONTROL TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM. THE INSERT SHALL BE INSPECTED REGULARLY, CLEANED WHEN NECESSARY, AND REMOVED AT COMPLETION OF CONSTRUCTION.
5. WHEREVER CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED (SEE DETAIL) TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) ONTO THE PAVED ROAD. IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. A MINIMUM OF ONE (1) ON-SITE STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.
7. ALL POLLUTANTS OTHER THAN SEDIMENT THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORM WATER OR THE SITE.
8. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE INSPECTED, MAINTAINED, AND REPAIRED BY THE CONTRACTOR AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED USE.
9. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO SILT FENCING, SEDIMENT PONDS/TRAPS, DIVERSIONS SWALES, CHECK DAMS, SEDIMENT BARRIERS, FILTER FABRIC, MULCH, AND SEEDING, AS CONDITIONS REQUIRE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PREVENTING SILT-LADEN RUNOFF FROM DISCHARGING FROM THE PROJECT SITE. FAILURE BY THE CONTRACTOR AND/OR OWNER CAN RESULT IN A FINE.
11. AT NO TIME SHALL CONCRETE, CONCRETE BY-PRODUCTS, VEHICLE FLUIDS, PAINT, CHEMICALS, OR OTHER POLLUTING MATTER BE PERMITTED TO DISCHARGE TO THE TEMPORARY OR PERMANENT DRAINAGE SYSTEM, OR TO DISCHARGE FROM THE PROJECT SITE.
12. AT ALL TIMES OF THE YEAR, THE CONTRACTOR SHALL HAVE SUFFICIENT MATERIALS, EQUIPMENT AND LABOR ON-SITE TO STABILIZE AND PREVENT EROSION FROM ALL DENUDED AREAS WITHIN 12-HOURS AS SITE AND WEATHER CONDITIONS DICTATE. CONTRACTOR SHALL PROVIDE DUST CONTROL, AS NECESSARY, TO BE COMPLIANT WITH ALL LOCAL AND STATE CLEAN AIR/DUST CONTROL POLICIES. THE SPRAYING OF WATER ON DRY AREAS SHALL BE USED TO CONTROL DUST. CONTRACTOR SHALL SUPPLY ALL THE NECESSARY WATER FOR DUST CONTROL.
13. CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL ADJACENT PROPERTIES TO THEIR ORIGINAL CONDITION DUE TO ANY CONSTRUCTION RELATED ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
14. NONCOMPLIANCE WITH EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND CLEARING LIMITS VIOLATIONS MAY RESULT IN REVOCATION OF PROJECT PERMITS AND PLAN APPROVAL AND BOND FORECLOSURES.
15. PRIOR TO ANY SITE CONSTRUCTION, INCLUDING CLEARING, LOGGING OR GRADING, THE SITE CLEARING LIMITS SHALL BE LOCATED AND FIELD IDENTIFIED BY THE PROJECT SURVEYOR (OR PROJECT ENGINEER) AS REQUIRED BY THESE PLANS.
16. ALL SITE WORK MUST BE PERFORMED IN ACCORDANCE WITH CURRENT CITY ADOPTED INTERNATIONAL BUILDING CODE.
17. STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND ADEQUATELY PROTECTED BY TEMPORARY SEEDING AND MULCHING. HYDROSEEDING IS PREFERRED.
18. THE CONTRACTOR SHALL OBTAIN AN ENVIRONMENTAL PROTECTION AGENCY'S NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (OTHERWISE KNOWN AS THE CONSTRUCTION GENERAL PERMIT OR CGP). THE PERMIT IS ADMINISTERED THROUGH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY. A NOTICE OF INTENT (NOI) IS REQUIRED TO BE SUBMITTED AND PAID FOR BY THE CONTRACTOR.
19. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT THE NOI.
20. THE SELECTED GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE CGP TO THE END OF CONSTRUCTION.
21. THE CGP DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH OTHER REGULATIONS OR CONTRACT REQUIREMENTS REGARDING STORM WATER POLLUTION PREVENTION INCLUDING BUT NOT LIMITED TO: PROTECTION OF SURFACE WATERS, PREVENTION OF SOIL RUNOFF INTO DRAINS, DUST CONTROL, PREVENTION OF TRACKING SOILS TO ADJACENT STREETS, FUEL CONTAINMENT, SPILL CONTROL, ETC.
22. THE GENERAL CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT IN ACCORDANCE WITH THE CGP REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE A COPY OF THE SWPPP TO THE OWNER AND/OR OWNER'S REPRESENTATIVE A MINIMUM OF 5 WORKING DAYS PRIOR TO SITE DISTURBANCE.
23. THE GENERAL CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) AFTER PROJECT COMPLETION AND FINAL STABILIZATION HAS BEEN ESTABLISHED.

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

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
2810 W. Clearwater Ave.
Suite 201
Kennewick, WA 99336
Phone: 509.783.2144
Fax: 509.736.0790
www.jub.com

PRELIMINARY PLANS NOT FOR CONSTRUCTION

REVISION

NO.	DESCRIPTION	BY	APR.	DATE

FERMI AVENUE ROAD WIDENING PORT OF BENTON

EROSION SEDIMENT CONTROL

FILE : 30-20-079_ESC1
JUB PROJ. # : 30-20-079
DRAWN BY: BRK
DESIGN BY: TAM
CHECKED BY: TAM
ONE INCH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 4/6/2021
SHEET: 07
DRAWING: ESC-1

Plot Date:4/7/2021 9:06 AM Plotted By: Mary M. Wilkinson
Date Created:4/6/2021 \\JUB.COM\CENTRAL\CLIENTS\WA\PORTOFBENTON\PROJECTS\30-20-079_FERMIWIDENING\DESIGN\CAD\SHEETS\30-20-079_ESC1.DWG