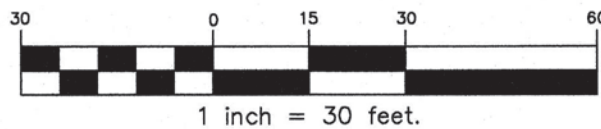


OLSON BROTHERS STORAGE

A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON



APPROVED

BY
CITY OF PUYALLUP
DEVELOPMENT ENGINEERING

DATE

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

PROPERTY DEVELOPMENT STANDARDS

MIN. LOT AREA PER BUILDING SITE: 10,000 SF
MIN. LOT WIDTH: 75'
MIN. LOT DEPTH: 100'
MIN. FRONT YARD SETBACK: 20'
MIN. REAR YARD SETBACK: 0'
MIN. INTERIOR SIDE YARD SETBACK: 0'
MIN. STREET SIDE YARD SETBACK: 10'
MIN. STREET FRONTAGE: 25'
MAX. LOT COVERAGE: 65%
MAX. BUILDING HEIGHT: 50'
MIN. LANDSCAPED AREA: 10%

PARCEL A PARKING REQUIREMENTS:

EX HOUSE - 1 SPACE PER 300 SF OF GROSS FLOOR AREA
1,680/300 = 6 SPACES

PARCEL B & C PARKING REQUIREMENTS:

WAREHOUSE - 1 SPACE PER 2,000 SF OF GROSS FLOOR AREA
8,860/2000 = 5 SPACES

OFFICE - 1 SPACE PER 300 SF OF GROSS FLOOR AREA
3,867/300 = 13 SPACES

TOTAL PARKING SPACES REQUIRED = 24
TOTAL PARKING SPACES PROVIDED = 32

PARKING BREAKDOWN:

ADA STALL = 1
STANDARD STALLS = 36
TRUCK STALLS = 17

ASPHALT/CONCRETE AREA:

NEW CONCRETE SIDEWALK = 2,193 SF
NEW ASPHALT PAVEMENT = 4,662 SF
NEW PERMEABLE PAVEMENT = 28,625 SF
TOTAL ASPHALT/CONCRETE = 35,480 SF

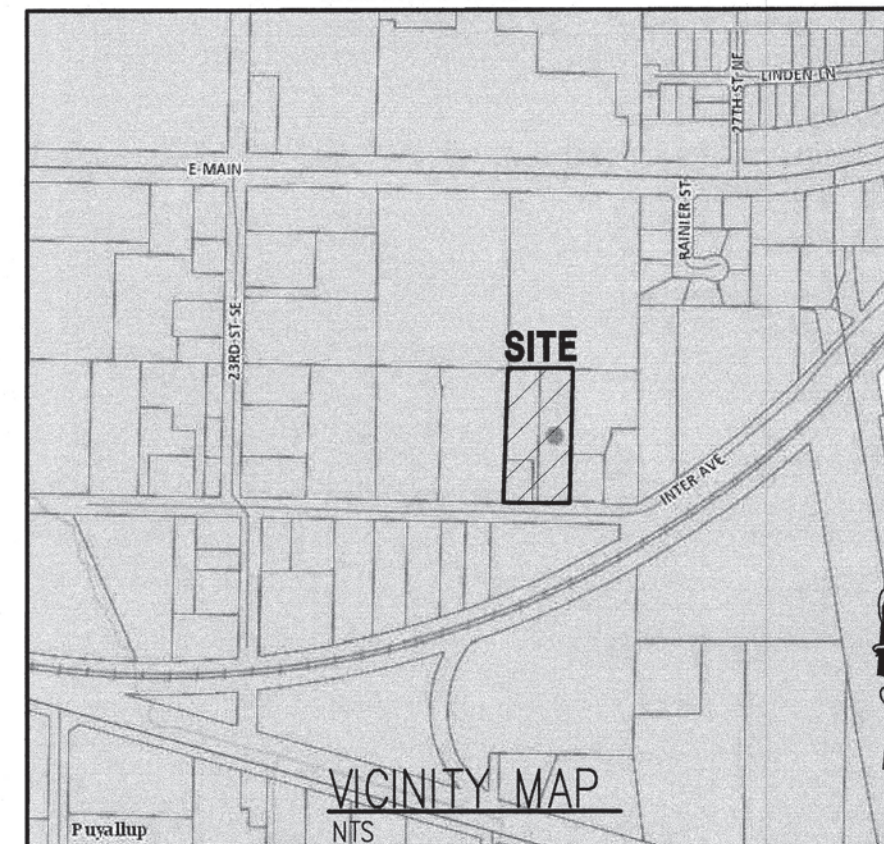
LANDSCAPE AREA:

LANDSCAPE AREA INTERIOR = 6,750 SF
LANDSCAPE AREA PERIMETER = 4,722 SF
LANDSCAPE AREA PROVIDED = 11,472 SF

CLEARED AREA = 48,615 SF

LEGEND

EXISTING	DESCRIPTION	PROPOSED
⊕	MONUMENT	⊕
—	MONUMENT LINE	—
---	PROPERTY LINE	---
---	RIGHT OF WAY LINE	---
---	EASEMENT LINE	---
—○—	CHAIN LINK FENCE	—○—
---	CURB & GUTTER	---
---	EDGE OF PAVEMENT	---
---	CONTOURS	---
---	STREET SIGN	---
□	STORM DRAIN CATCH BASIN	□
○	STORM DRAIN MANHOLE	○
○	STORM DRAIN CLEANOUT	○
---	STORM DRAIN LINE	---
---	WALL DRAIN LINE	---
○	SANITARY SEWER MANHOLE	○
○	SANITARY SEWER CLEANOUT	○
---	SANITARY SEWER LINE	---
---	SANITARY SEWER STUB	---
⊕	FIRE HYDRANT	⊕
⊕	WATER VALVE	⊕
⊕	WATER METER	⊕
⊕	THRUST BLOCKING	⊕
---	WATER MAIN	---
---	LUMINAIRE	---
---	POWER/UTILITY POLE	---
---	SAWCUT LINE	---
---	ASPHALT CONCRETE	---
---	CEMENT CONCRETE	---
---	PERMEABLE ASPHALT	---
---	GRIND/OVERLAY	---
---	LANDSCAPE AREAS	---
---	LANDSCAPE WALL	---



SHEET INDEX

C1 COVER SHEET
C2 TESC PLAN & NOTES & DETAILS
C3 PAVING & UTILITY PLAN
C4 INTER AVE SE PLAN & PROFILE
C5 DIMENSIONING PLAN
C6 NOTES AND DETAILS
C7 WATER NOTES AND DETAILS
C8 WATER NOTES AND DETAILS
L1-L2 LANDSCAPE PLANS
SV SURVEY TOPO MAP
E-001-703 ELECTRICAL PLANS

ADDRESS

2511 INTER AVE.
PUYALLUP, WA 98372

PARCEL NUMBERS

2105200180, 2105200191, 2105200192

OWNER/DEVELOPER

BPLC PROPERTIES LLC
2412 INTER AVE.
PUYALLUP, WA 98372

ENGINEER

C.E.S. NW INC.
429 29TH ST NE SUITE D
PUYALLUP, WA 98372

SITE DATA

PARCEL 2105200180:
AREA: 40,569 SF (0.93 AC)

PARCEL 2105200191:
AREA: 10,200 SF (0.23 AC)

PARCEL 2105200192:
AREA: 30,366 SF (0.70 AC)

TOTAL SITE AREA: 81,135 SF (1.86 AC)
ZONING: ML (LIMITED MANUFACTURING)
SOIL TYPE: PUYALLUP SANDY LOAM

UTILITIES

WATER: CITY OF PUYALLUP
SEWER: CITY OF PUYALLUP
POWER: PUGET SOUND ENERGY
GAS: PUGET SOUND ENERGY
TELEPHONE: COMCAST/CENTURY LINK

SURVEY BY

CES NW, INC.
429 - 29TH STREET NE, SUITE D
PUYALLUP, WA 98372
PHONE: 253-848-4282

BASIS OF BEARING

NAD 83-2011 (EPOCH 2010.00), WASHINGTON STATE PLANE, SOUTH ZONE, (PER THE WASHINGTON STATE REFERENCE NETWORK). THE MONUMENTED CENTERLINE OF INTER AVENUE SOUTHEAST, BEARS N88°49'56"W.

LEGAL DESCRIPTION

PARCEL A, TPN. 2105200191

THE WEST 85 FEET OF THE SOUTH 120 FEET OF THE WEST HALF OF TRACT 10 OF ACKERSON'S SECOND ADDITION TO PUYALLUP, ACCORDING TO THE MAP THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 25, RECORDS OF PIERCE COUNTY, WASHINGTON.

PARCEL B, TPN. 2105200192

THE WEST HALF OF BLOCK 10 OF ACKERSON'S SECOND ADDITION TO PUYALLUP, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 25, RECORDS OF PIERCE COUNTY, WASHINGTON.

EXCEPT THE SOUTH 120 FEET OF THE WEST 85 FEET THEREOF.

PARCEL C, TPN. 2105200180

THE EAST ONE-HALF OF BLOCK 10 OF ACKERSON'S SECOND ADDITION TO PUYALLUP, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 25, RECORDS OF PIERCE COUNTY, WASHINGTON.

ALL SITUATE IN THE COUNTY OF PIERCE, STATE OF WASHINGTON.

FILL SPECIFICATION

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD. ONLY EARTH MATERIAL SHALL BE PLACED IN FILLS.

TRENCH NOTE

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)B, IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR WORKER SAFETY AND CES NW INC. ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW.

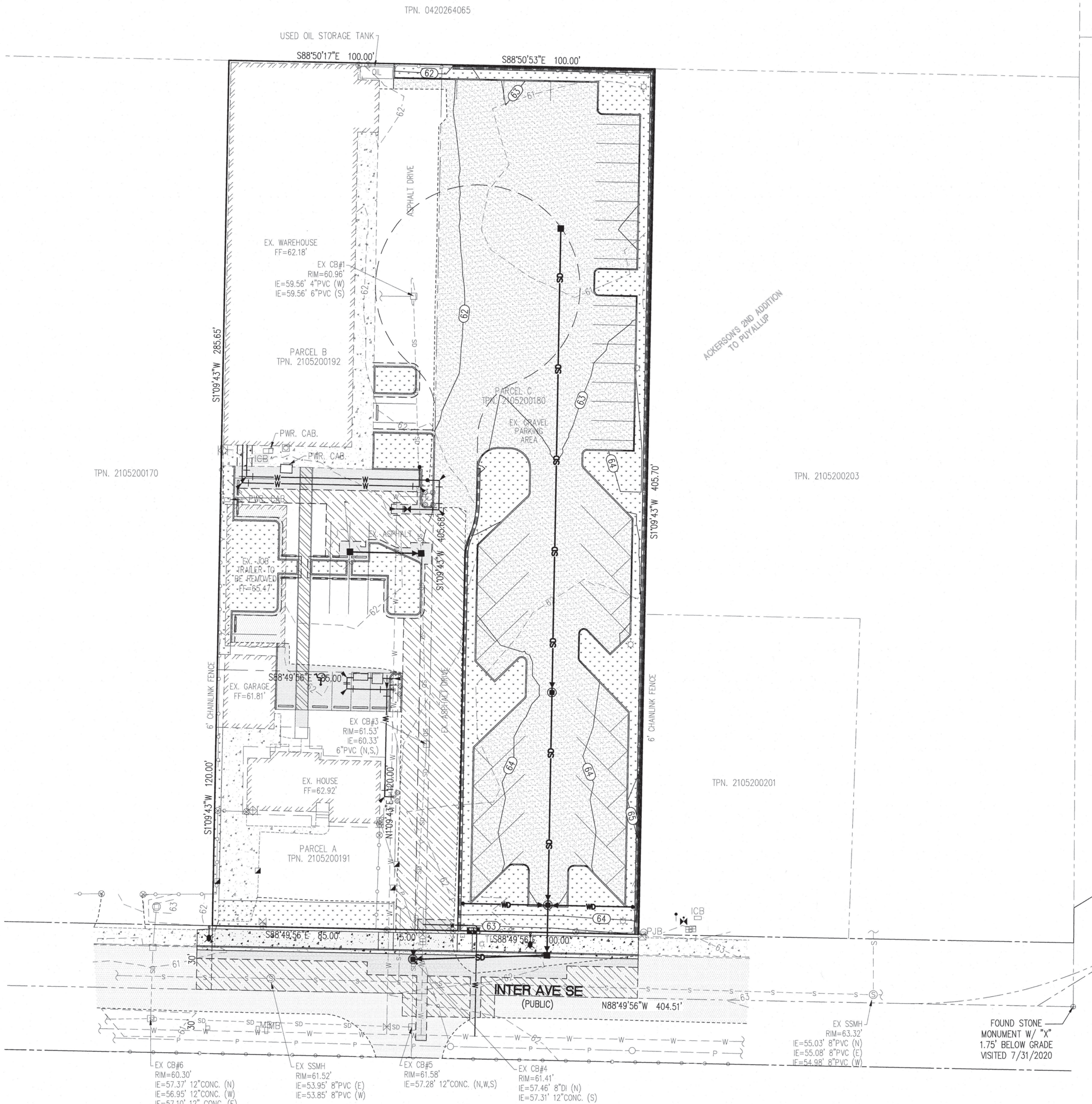
EARTHWORK QUANTITIES

1,015 CY CUT
3,418 CY FILL
2,403 CY NET
QUANTITIES ARE FOR PERMIT PURPOSES ONLY.
CONTRACTOR SHALL VERIFY EARTHWORK QUANTITIES FOR BID PURPOSES.

NOTES:

- THESE PLANS ARE PRELIMINARY UNLESS THE JURISDICTIONAL APPROVAL BOX HAS BEEN SIGNED.
- CAD FILE WILL BE PROVIDED BY ENGINEER TO AID IN ESTABLISHING HORIZONTAL CONTROL.
- SEE SEPARATE LANDSCAPE PLANS FOR LANDSCAPING REQUIREMENTS.

CALL 48 HOURS
BEFORE YOU DIG
DIAL 811



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING

OLSON BROTHERS STORAGE
COVER SHEET

Project:

Designed: DPS
Drawn: JEH
Checked: CAD

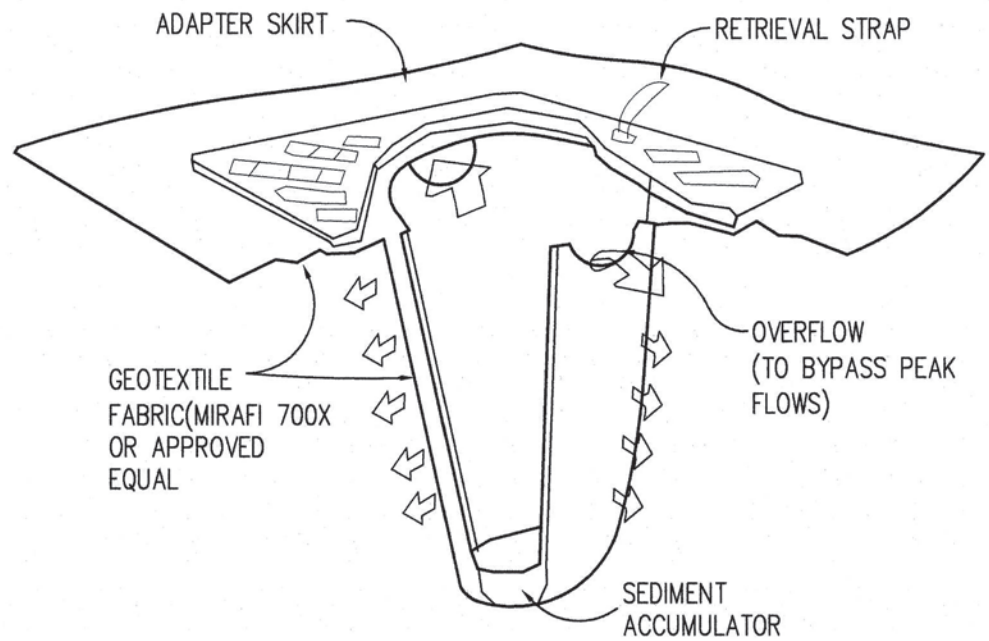
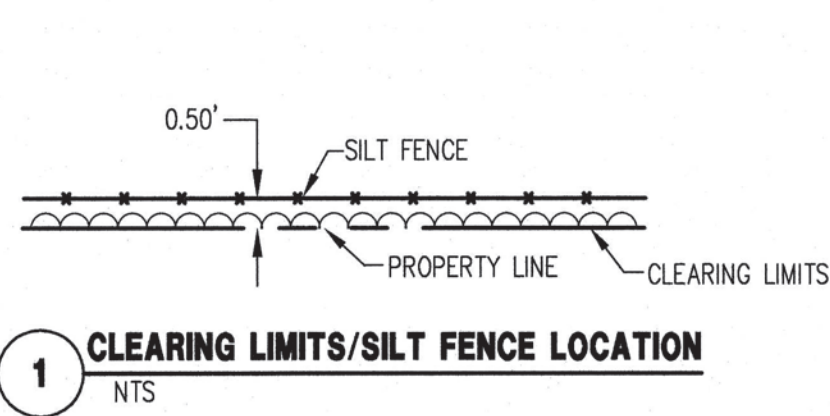
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Job No.: 20083

Sheet No.:

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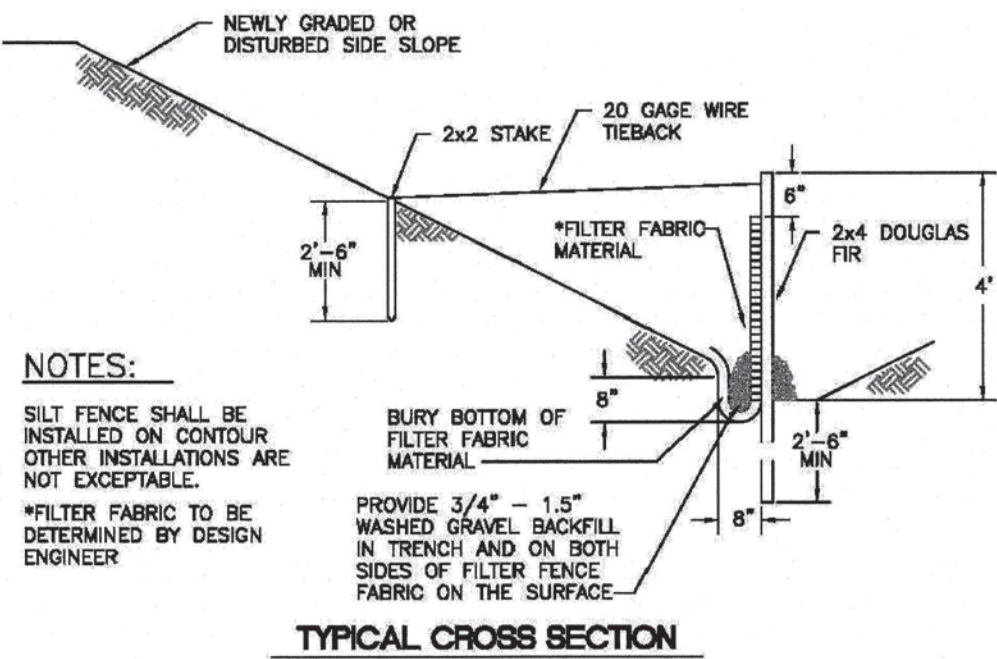
1 of 20 Sheets

OLSON BROTHERS STORAGE
A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON



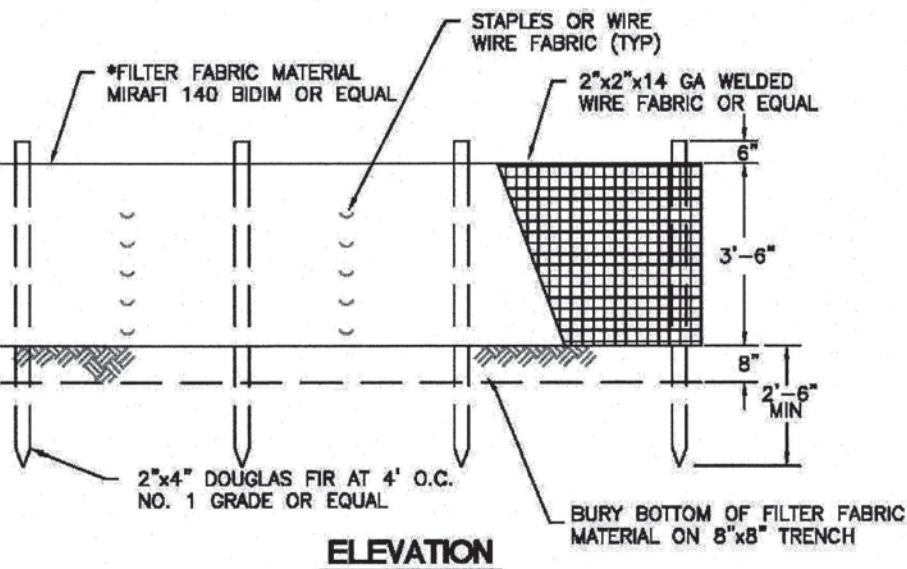
PROVIDE CB INSERT "STREAMGUARD FOR SEDIMENT" OR APPROVED EQUAL.
MANUFACTURER'S NAME: FOSS ENVIRONMENTAL
ADDRESS: 200 SW MICHIGAN STREET SEATTLE, WA 98106
TELEPHONE: FOR INFORMATION: (800) 909-3677

2 CB SEDIMENT PROTECTION
NTS



NOTES:
SILT FENCE SHALL BE INSTALLED ON CONTOUR. OTHER INSTALLATIONS ARE NOT EXCEPTABLE.
*FILTER FABRIC TO BE DETERMINED BY DESIGN ENGINEER
PROVIDE 3/4" - 1.5" WASHED GRAVEL BACKFILL IN TRENCH AND ON BOTH SIDES OF FILTER FABRIC ON THE SURFACE

TYPICAL CROSS SECTION



ELEVATION



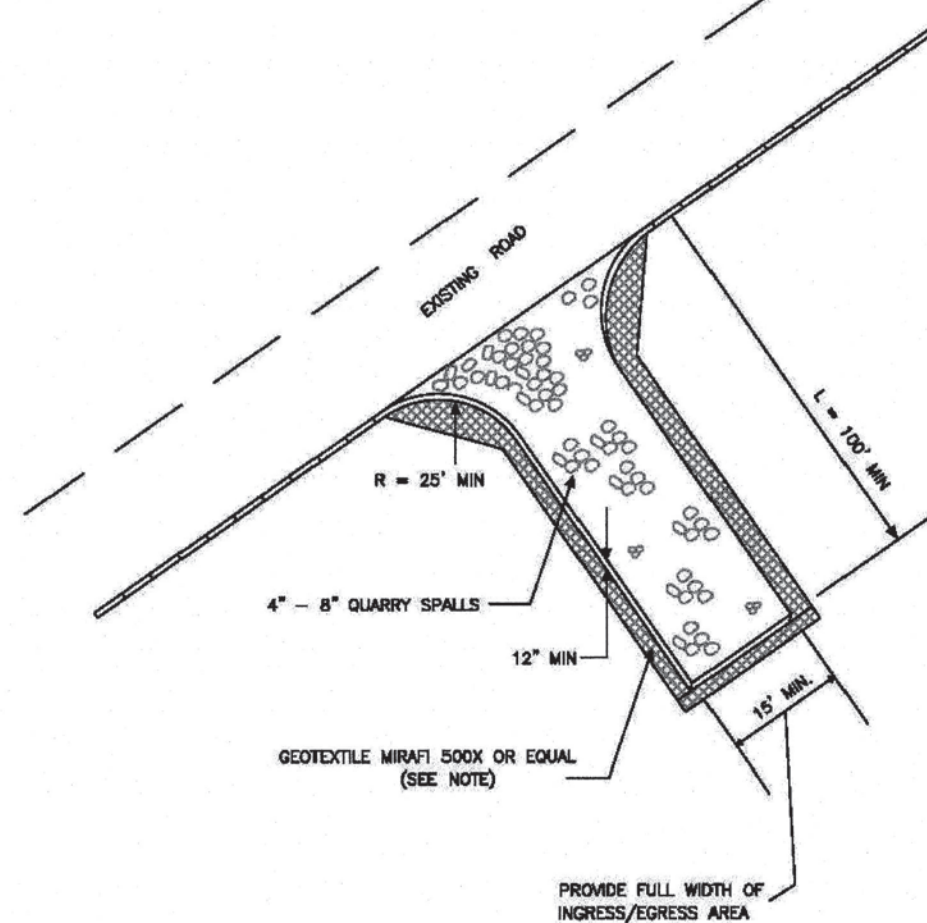
CITY OF
PUYALLUP

SILTATION FENCE

DESIGNED BY CITY ENGINEER	CHECKED BY CITY ENGINEER	APPROVED BY CITY ENGINEER	DESIGNED BY CITY ENGINEER	CITY APPROVAL DATE
02.03.02				

NOTE:

- GEOTEXTILE MIRAFI 500 X OR APPROVED EQUAL SHALL BE PLACED UNDER THE ENTIRETY OF THE TEMPORARY ENTRANCE.
- ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
- IF THE PAD DOES NOT ADEQUATELY REMOVE THE MUD FROM THE VEHICLE'S WHEELS, THE WHEELS SHALL BE HOSED OFF BEFORE THE VEHICLE ENTERS A PAVED STREET. THE WASHING SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK AND WASH WATER SHALL DRAIN TO A SEDIMENT RETENTION FACILITY OR THROUGH A SILT FENCE.



TEMPORARY CONSTRUCTION
ENTRANCE



CITY OF
PUYALLUP

DESIGNED BY CITY ENGINEER	CHECKED BY CITY ENGINEER	APPROVED BY CITY ENGINEER	DESIGNED BY CITY ENGINEER	CITY APPROVAL DATE
05.01.01				

- ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

- ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY. UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED, THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.

- THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.

- APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTORS, CHANNELS, OR RETENTION FACILITIES.

- ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITTEE BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.

- IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.

- NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.



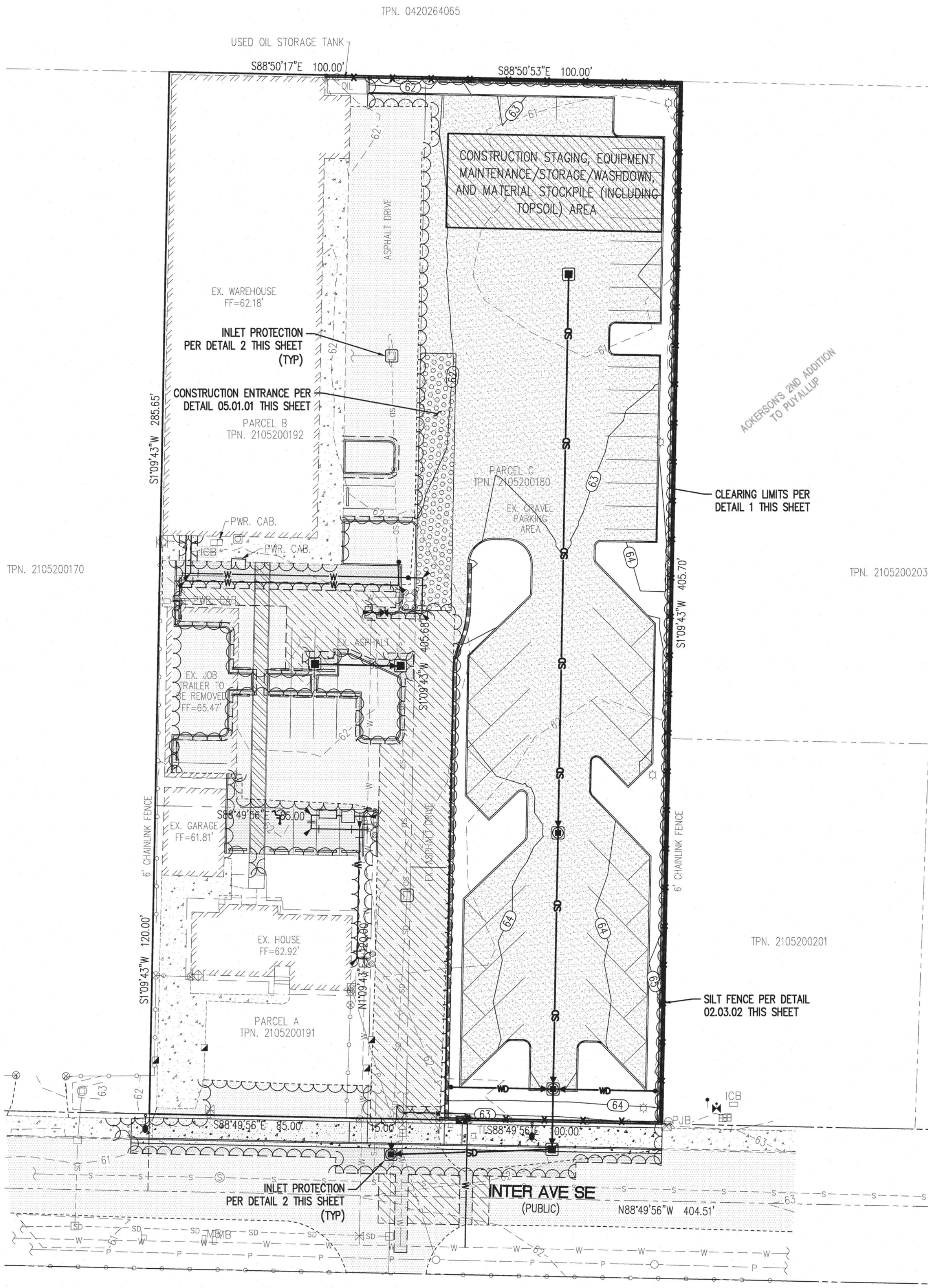
CITY OF
PUYALLUP

GRADING, EROSION, AND
SEDIMENTATION CONTROL NOTES

DESIGNED BY CITY ENGINEER	CHECKED BY CITY ENGINEER	APPROVED BY CITY ENGINEER	DESIGNED BY CITY ENGINEER	CITY APPROVAL DATE
05.02.01				

CONSTRUCTION SEQUENCE

- THE CONTRACTOR IS TO REQUEST A PRE-CONSTRUCTION MEETING WITH THE CITY'S INSPECTOR.
- CLEARLY STAKE, FLAG OR FENCE CLEARING LIMITS/WORK AREA. NO WORK SHALL BE PERFORMED OUTSIDE THESE LIMITS WITHOUT PRIOR APPROVAL FROM THE CITY OF PUYALLUP.
- PRIOR TO STARTING SITE WORK, REQUEST AN INSPECTION FOR EROSION AND SEDIMENT, INSPECTION CODE #010, BY CALLING THE INSPECTION REQUEST LINE AT 1-877-232-6456.
- PROVIDE SILT FENCING AS SHOWN ON THE APPROVED PLANS.
- GRADE SITE AS SHOWN ON THE APPROVED PLANS.
- CONSTRUCT THE CONVEYANCE SYSTEM AND INSTALL INLET PROTECT ON THE NEW CATCH BASINS.
- INSTALL FILTER FABRIC AND PERMEABLE BALLAST.
- CONSTRUCT ONSITE PLANTERS AND PAVE THE STORAGE AREA.
- CONSTRUCT FRONTAGE IMPROVEMENTS AND AMEND THE LANDSCAPE AND LAWN AREAS WITH SOIL AMENDMENTS.
- AMEND SOILS PER CS 01.02.08A ON SHEET C2.
- RELOCATE EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH CITY OF PUYALLUP AND DEPARTMENT OF ECOLOGY EROSION AND SEDIMENT CONTROL STANDARDS.
- COVER ALL AREAS, INCLUDING STOCKPILES, THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, PLASTIC SHEETING OR EQUIVALENT.
- STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
- SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- CALL FOR FINAL INSPECTIONS. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPs IF APPROPRIATE.



NOTES

- EROSION/SEDIMENTATION CONTROL MEASURES MUST BE FUNCTIONAL AND MAINTAINED DURING CONSTRUCTION.
- SOIL STOCK PILES TO BE COVERED WITHIN 24 HOURS.
- MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURE.
- AREAS TO BE DISTURBED ARE THE FOOTPRINT, PATIO, DRIVEWAY, & WALKWAY AREA W/ THE BALANCE OF THE LOT UNDISTURBED.
- DRIVEWAY PAVING MATERIAL TO BE CONCRETE.

MULCHING NOTES

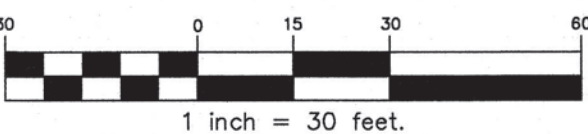
- MULCH MATERIALS USED SHALL BE HAY OR STRAW AND SHALL BE APPLIED AT A RATE OF 75-100 POUNDS PER 1,000 SQUARE FEET, OR 90-120 BALES PER ACRE TO A MIN. DEPTH OF 2 INCHES.
- MULCHES SHALL BE APPLIED IN ALL AREAS WITH EXPOSED SLOPES GREATER THAN 2:1.
- MULCHING SHALL BE USED IMMEDIATELY AFTER SEEDING OR IN AREAS WHICH CANNOT BE SEED BECAUSE OF THE SEASON.
- ALL AREAS NEEDED MULCH SHALL BE COVERED BY NOVEMBER 1.

TEMPORARY ESC MEASURES REQUIRED

- SILT FENCING.
- VEGETATION AND STABILIZATION OF EXPOSED SURFACES
- STOCKPILE PROTECTION.
- ADDITIONAL MEASURES MAY BE REQUIRED.

SEED MIXTURE FOR EROSION CONTROL

NAME:	% BY WEIGHT:	% PURITY:	% GERMINATION:
RED TOP	10 PERCENT	92 PERCENT	90 PERCENT
(AGROSTIS ALBA)			
ANNUAL RYE	40 PERCENT	98 PERCENT	90 PERCENT
(LOLIUM MULTIFLORUM)			
CHEWING FESCUE	40 PERCENT	97 PERCENT	80 PERCENT
(FESTUCA RUBRA CONNUTATA - JAMESTOWN, BANNER, SHADOW, OR KORBET)			
WHITE DUTCH CLOVER	10 PERCENT	96 PERCENT	90 PERCENT
(TRIFOLIUM REPENS)			



APPROVED

BY
CITY OF PUYALLUP
DEVELOPMENT ENGINEERING

DATE

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GRADING, EROSION AND SEDIMENTATION CONTROL NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
- A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
- ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE CITY ENGINEER PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.
- ANY REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.
- THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
- APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTORS, CHANNELS, OR RETENTION FACILITIES.
- ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITTEE BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.
- IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.
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OLSON BROTHERS STORAGE

TESC PLAN
NOTES & DETAILS

MIKE GRIMIT

Project:

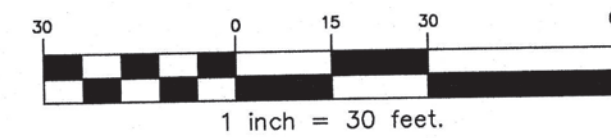
Designed: DPS
Drawn: JEH
Checked: CAD

Scale: 1"=30'
Date: 12/9/22
Job No.: 20083

Sheet No.:

C2

OLSON BROTHERS STORAGE
A PORTION OF NW 1/4 OF THE SE 1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON



FIRE HYDRANT/FDC LOCATION/ACCESS
APPROVED

BY: CITY OF PUYALLUP
FIRE CODE OFFICIAL

DATE:

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE FIRE CODE OFFICIAL.

APPROVED

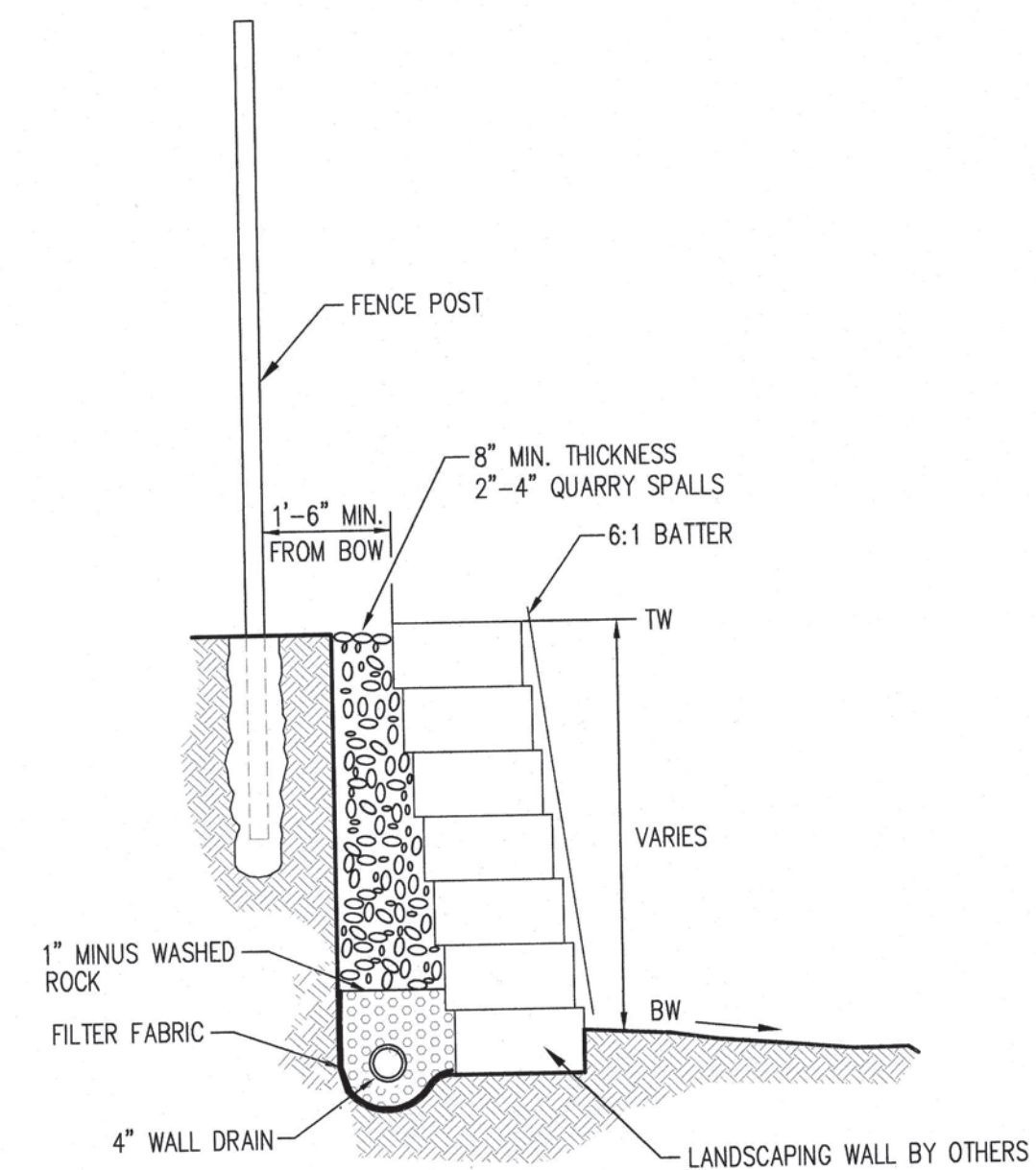
BY: CITY OF PUYALLUP
DEVELOPMENT ENGINEERING

DATE:

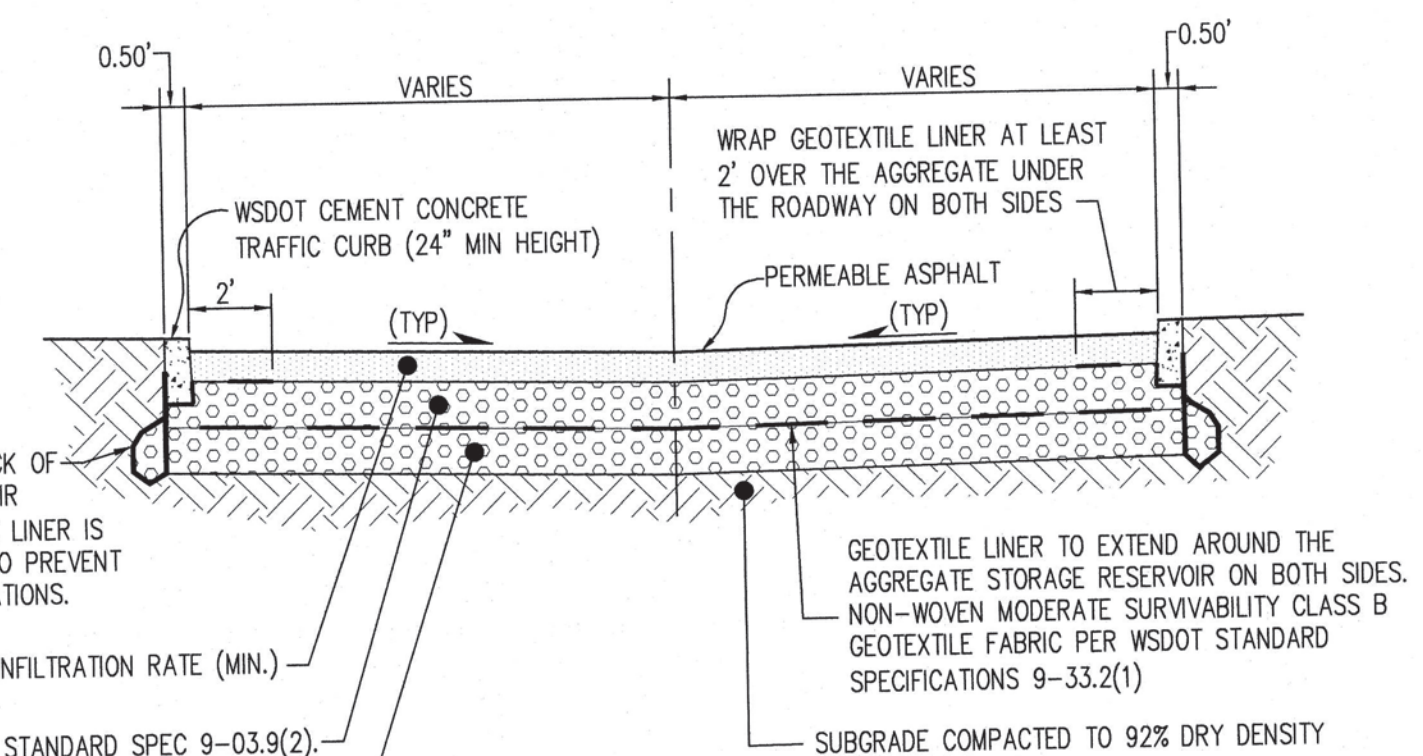
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

KEY NOTES

- INSTALL:
1-8"x6" WET TAP TEE
1-6" GATE VALVE (FLxMJ)
THRUST BLOCKING
- 20LF~6" DI CL52 FIRE SUPPLY LINE
- INSTALL:
1-6" 90° BEND (MJxMJ)
THRUST BLOCKING
- 14LF~6" DI CL52 FIRE SUPPLY LINE
- INSTALL:
1-6" 90° BEND (MJxMJ)
THRUST BLOCKING
- 6LF~6" DI CL52 FIRE SUPPLY LINE
- INSTALL:
1-PIV
- 85LF~6" DI CL52 FIRE SUPPLY LINE
- INSTALL:
1-6" 90° BEND (MJxMJ)
THRUST BLOCKING
- 15LF~6" DI CL52 FIRE SUPPLY LINE
- 18LF~6" DI CL52 FDC LINE
- INSTALL:
1-6" 90° BEND (MJxMJ)
THRUST BLOCKING
- 83LF~6" DI CL52 FDC LINE
- 11LF~6" DI CL52 FDC LINE
- INSTALL:
1-FDC RISER
- INSTALL:
1-8"x4" WET TAPPING TEE
1-4" GATE VALVE (FLxMJ)
1-4" WATER SERVICE METER PER CITY STANDARD PLAN 03.03.03
1-4" BACKFLOW ASSEMBLY PER CITY STANDARD PLAN 03.04.03
- 10LF~4" DI CL52 WATER LINE
- INSTALL:
1-4" 90° BEND (MJxMJ)
THRUST BLOCKING
- 5LF~4" DI CL52 WATER LINE
- INSTALL:
1-4" 90° BEND (MJxFL)
THRUST BLOCKING
- 5LF~4" DI CL52 WATER LINE
- INSTALL:
1-4"x4"x4" TEE (MJ)
- 6LF~4" DI CL52 WATER LINE
1-CONNECT TO EXISTING WATER FILL STATION (WHEEL GATE VALVE PREFERRED IN PLACE OF BALL VALVE)
- 50LF~4" DI CL52 WATER LINE
- INSTALL:
1-4" 90° BEND (MJxMJ)
THRUST BLOCKING
- INSTALL:
4LF~4" DI CL52 WATER LINE
1-CONNECT TO EXISTING WATER FILL STATION (WHEEL GATE VALVE PREFERRED IN PLACE OF BALL VALVE)

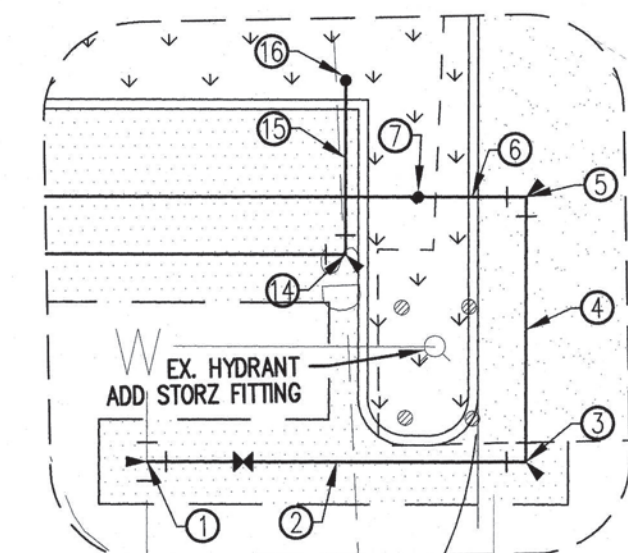


B BLOCK WALL
N.T.S.

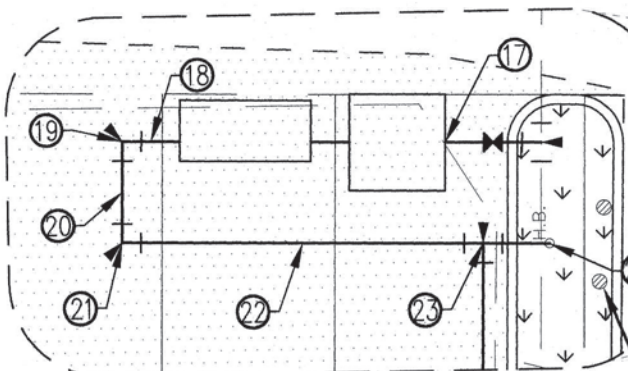


NOTE:
1. IMPERMEABLE GEOMEMBRANE LINER TO BE SOLMAX LDPE 30 MILS SMOOTH BLACK LINER OR APPROVED EQUIVALENT.

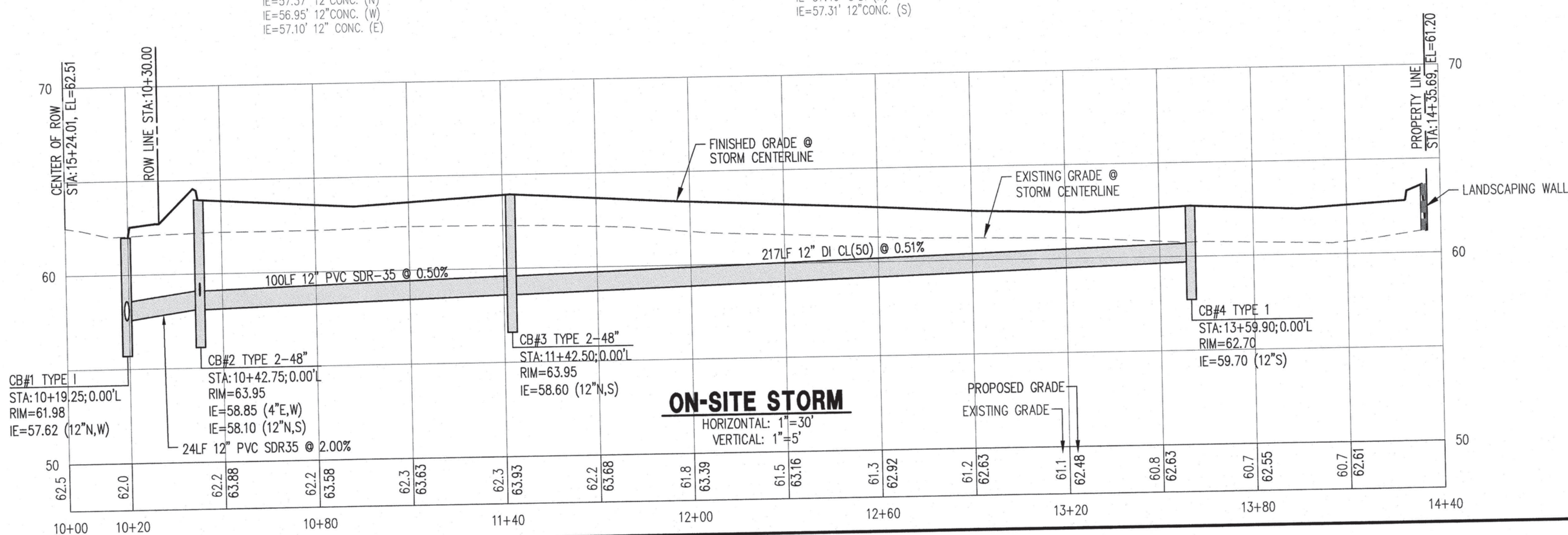
A PERMEABLE PAVEMENT SECTION
N.T.S.



PARCEL 'B' WATER
SCALE: 1"=10'



PARCEL 'A' WATER
SCALE: 1"=10'



ON-SITE STORM

HORIZONTAL: 1"=30'
VERTICAL: 1"=5'

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING

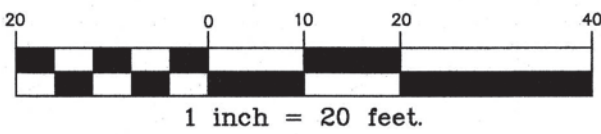
OLSON BROTHERS STORAGE
PAVING & UTILITY PLAN

Project: OLSON BROTHERS STORAGE
Client: GMIT ARCHITECTURE/CENTURYLINK.NET
Designed: DPS
Drawn: JEH
Checked: CAD
Scale: 1"=30'
Date: 12/9/22
Job No.: 20083

Sheet No.: C3

3 of 20 Sheets

OLSON BROTHERS STORAGE
A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON

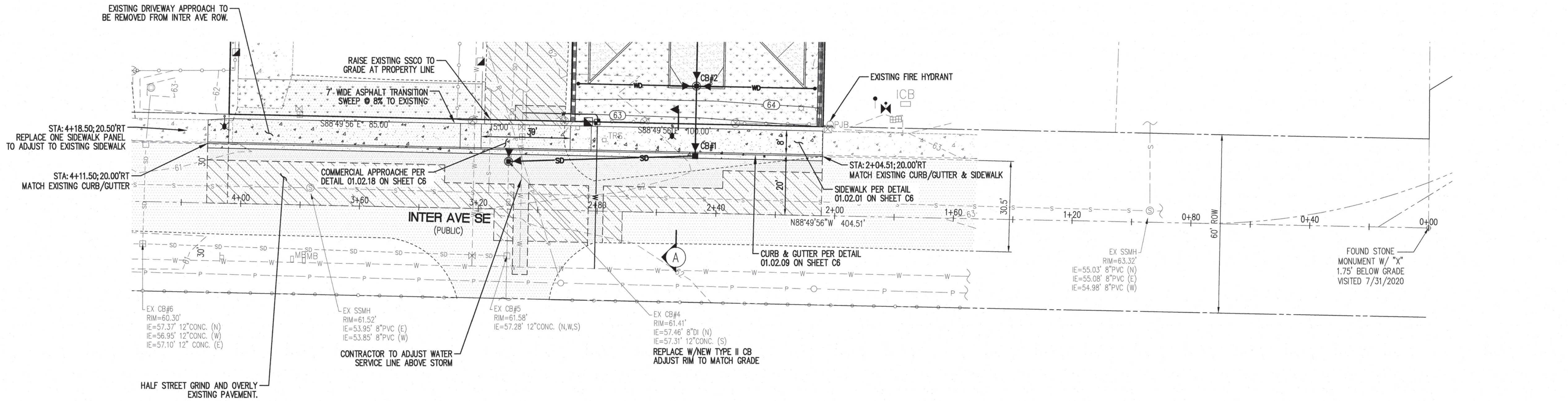


APPROVED

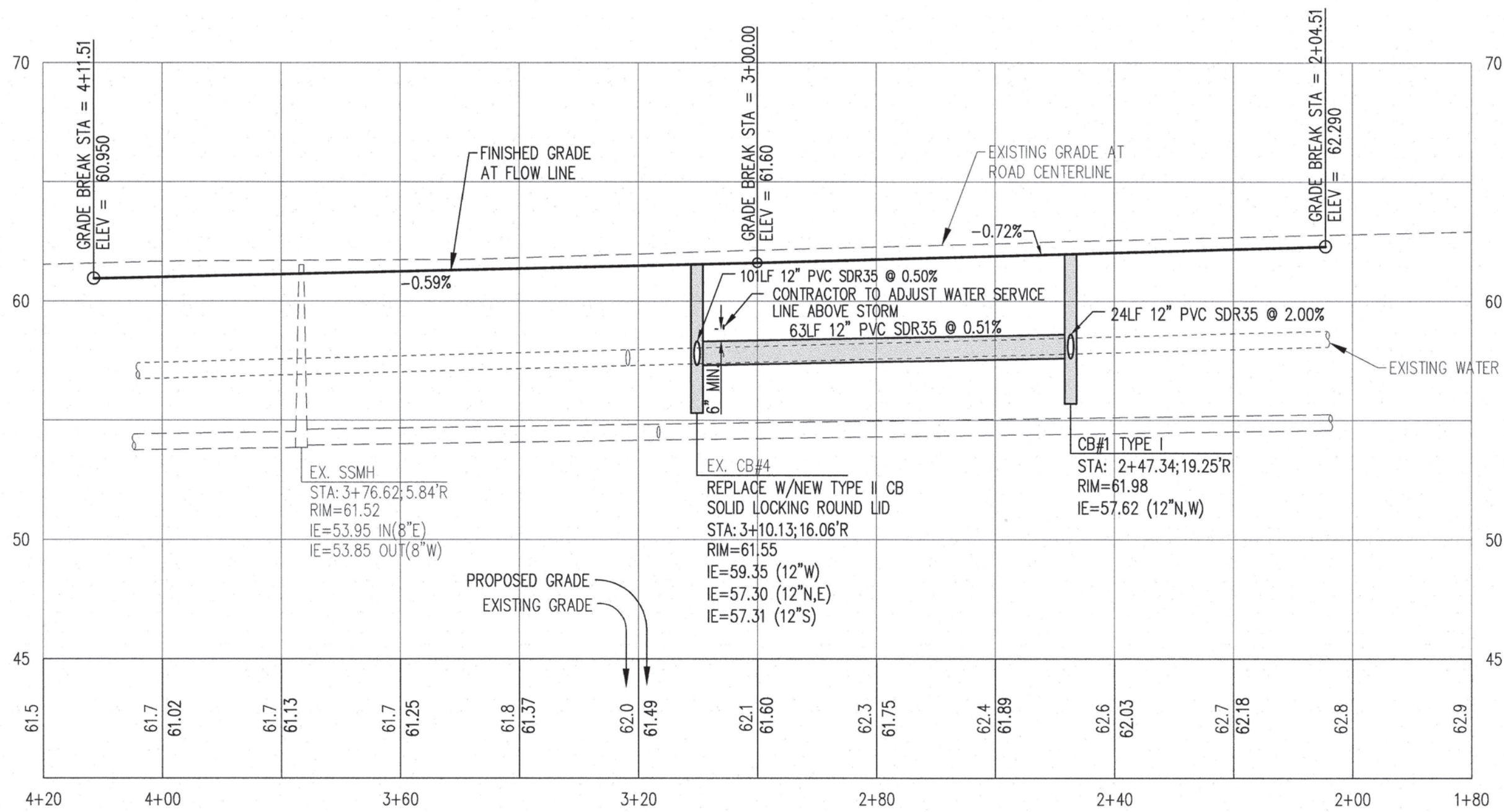
BY: CITY OF PUYALLUP
DEVELOPMENT ENGINEERING

DATE:

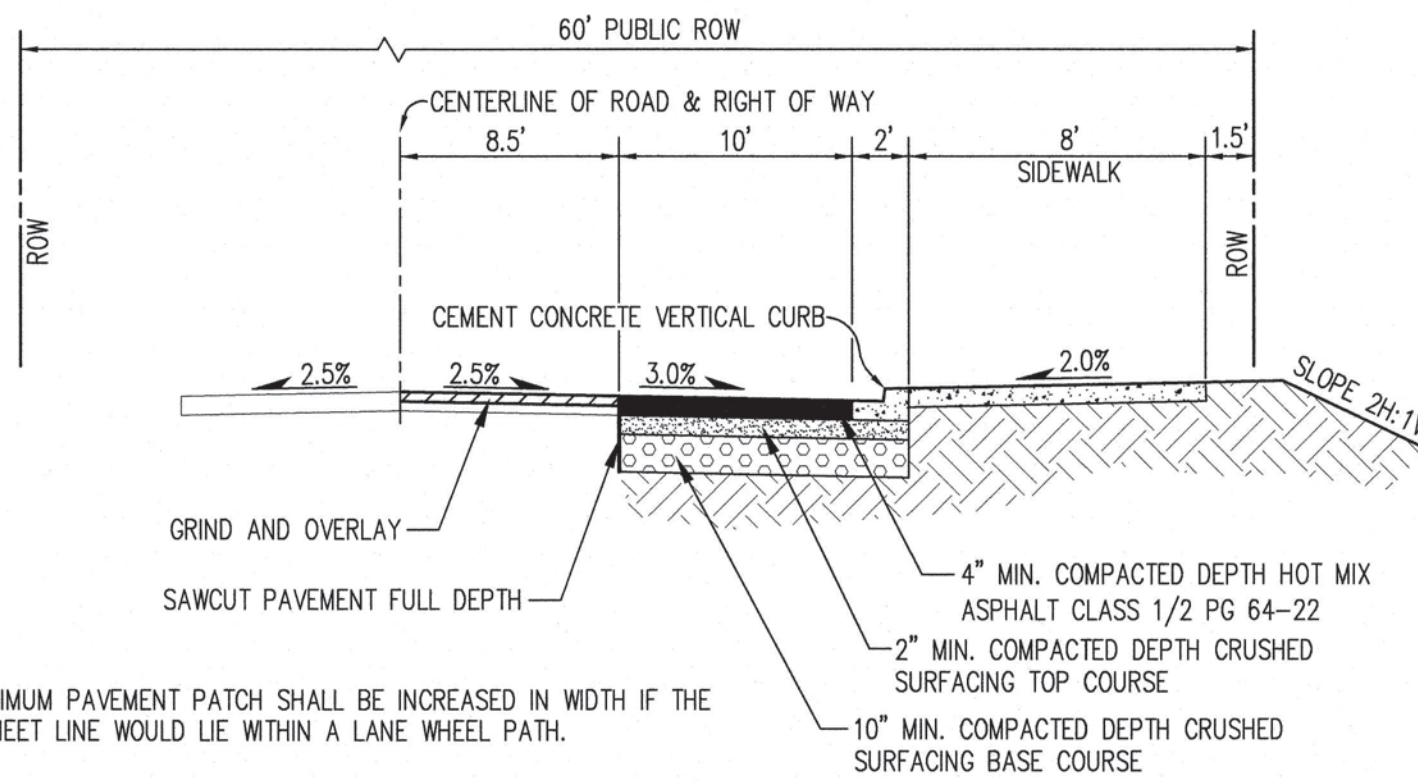
NOTE: THIS APPROVAL IS VOID AFTER
180 DAYS FROM APPROVAL DATE.
THE CITY WILL NOT BE RESPONSIBLE
FOR ERRORS AND/OR OMISSIONS ON
THESE PLANS.
FIELD CONDITIONS MAY DICTATE
CHANGES TO THESE PLANS AS
DETERMINED BY THE DEVELOPMENT
ENGINEERING MANAGER.



INTER AVE SE
HORIZONTAL: 1"=20'



INTER AVE SE
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'



NOTES:

1. THE 36" MINIMUM PAVEMENT PATCH SHALL BE INCREASED IN WIDTH IF THE RESULTING MEET LINE WOULD BE WITHIN A LANE WHEEL PATH.
2. THE ASPHALT SURFACE WITHIN THE NEW SECTION MUST HAVE A CONSTANT CROSS SLOPE FROM CURB TO CENTERLINE WITHIN THE RANGE OF 2.0 TO 5.0% IF CROSS SLOPE CANNOT BE ACHIEVED WITHIN THIS RANGE, CONTRACTOR SHALL OVERLAY OR REBUILD FROM CENTERLINE TO NEW GUTTER.
3. NEW ASPHALT DEPTH SHALL MATCH EXISTING CONDITION OR DEPTH SPECIFIED IN APPROPRIATE CITY CROSS SECTION DETAIL, WHICHEVER IS GREATEST.
4. IF THE BASE IS INADEQUATE OR THE PAVEMENT CONDITION IS SUBSTANDARD, THEN THE ROAD SECTION MUST BE REBUILT TO CENTERLINE.
5. ASPHALT SHALL BE HMA CL 1/2", PG64-22

INTER AVE SE
N.T.S.



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 - 20TH ST. NE, SUITE D
PUYALLUP, WA 98372
PH: (253) 848-4282
ceservices@cesnwinc.com

OLSON BROTHERS STORAGE
INTER AVE SE PLAN & PROFILE

Project:

Designed: DPS
Drawn: JEH/ND
Checked: CAD

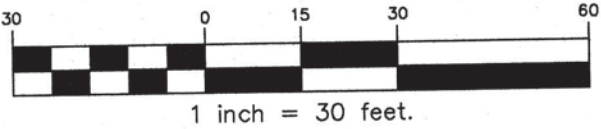
Scale: 1"=20'
Date: 12/9/22
Job No.: 20083

Sheet No.:

C4

4 of 20 Sheets

OLSON BROTHERS STORAGE
A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON



APPROVED

BY _____
CITY OF PUYALLUP
DEVELOPMENT ENGINEERING

DATE _____

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No.	Revision	Date



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING

PH: (253) 848-4282
ceesurvey@ceanwinc.com

429 - 29TH ST. NE, SUITE D
PUYALLUP, WA 98372

OLSON BROTHERS STORAGE
DIMENSIONING PLAN

Project: _____

Client: _____

Designed: _____
Drawn: _____
Checked: _____

Scale: 1"=30'
Date: 12/9/22
Job No.: 20083

Sheet No.: **C5**
5 of 20 Sheets

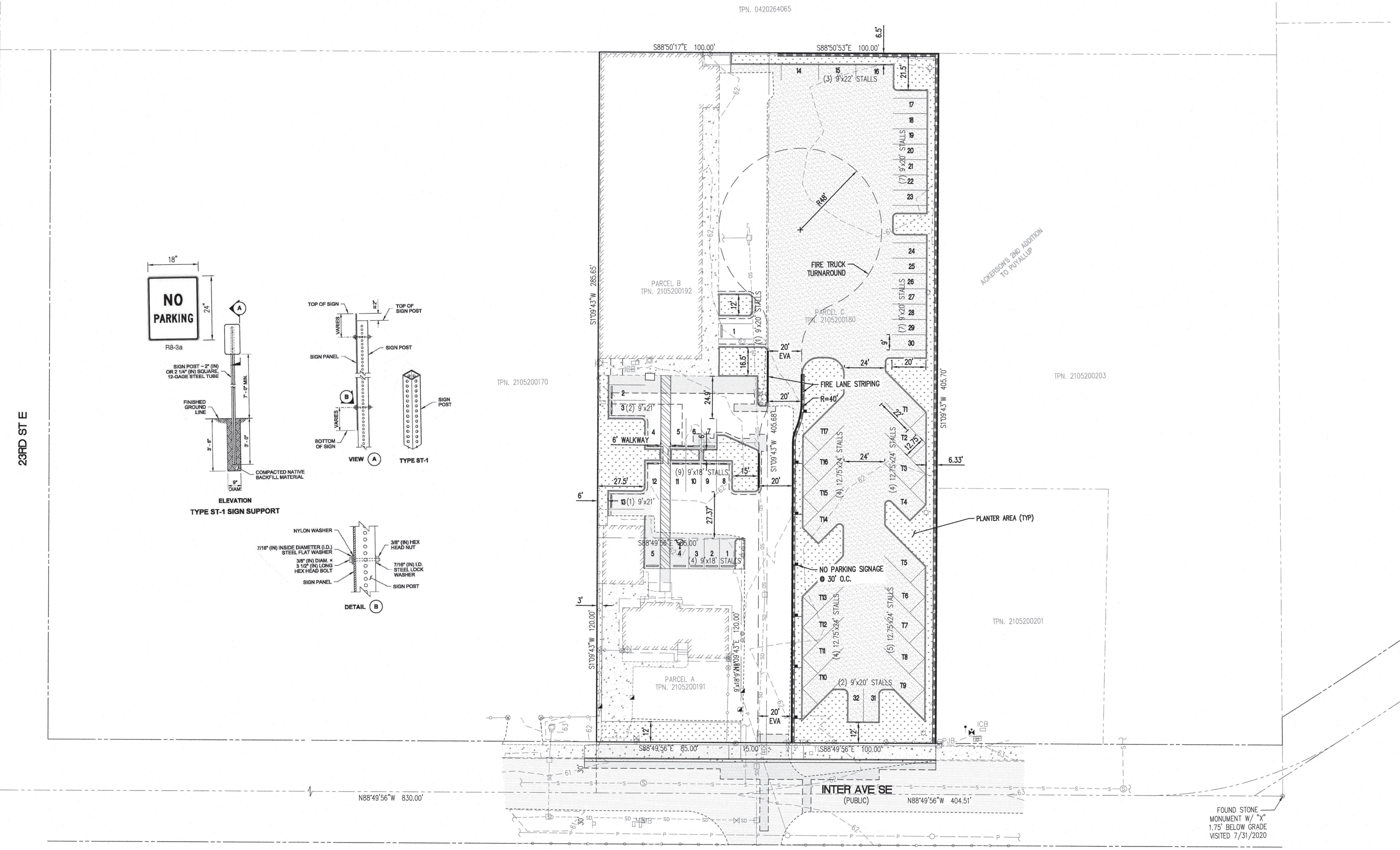
Mike Gritmit

Client: GMITARCHITECTURE@LINK.NET

Designed: _____
Drawn: _____
Checked: _____

Scale: 1"=30'
Date: 12/9/22
Job No.: 20083

Sheet No.: **C5**
5 of 20 Sheets



OLSON BROTHERS STORAGE

A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON

STORMWATER NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
- A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
- ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE ENGINEERING SERVICES STAFF PRIOR TO ANY IMPLEMENTATION IN THE FIELD.

THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.

- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
- DURING CONSTRUCTION, ALL EXISTING AND NEWLY INSTALLED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SEDIMENTS.
- ALL STORM MANHOLES SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.01. FLOW CONTROL MANHOLE/OIL WATER SEPARATOR SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.06 AND 02.01.07.
- MANHOLE RING AND COVER SHALL CONFORM TO CITY STANDARD DETAIL 06.01.02.
- CATCH BASINS TYPE I SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.02 AND 02.01.03 AND SHALL BE USED ONLY FOR DEPTHS LESS THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.
- CATCH BASINS TYPE II SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.04 AND SHALL BE USED FOR DEPTHS GREATER THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.

- CAST IRON OR DUCTILE IRON FRAME AND GRATE SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.05. GRATE SHALL BE MARKED WITH "DRAINS TO STREAM". SOLID CATCH BASIN LIDS (SQUARE UNLESS NOTED AS ROUND) SHALL CONFORM TO WSDOT STANDARD PLAN B-30.20-04 (OLYMPIC FOUNDRY NO. S560 OR EQUAL). VANED GRATES SHALL CONFORM TO WSDOT STANDARD PLAN B-30.30-03 (OLYMPIC FOUNDRY NO. S560 OR EQUAL).
- STORMWATER PIPE SHALL BE ONLY PVC, CONCRETE, DUCTILE IRON, OR DUAL WALLED POLYPROPYLENE PIPE.
- THE USE OF ANY OTHER TYPE SHALL BE REVIEWED AND APPROVED BY THE ENGINEERING SERVICES STAFF PRIOR TO INSTALLATION.
- PVC PIPE SHALL BE PER ASTM D3034, SDR 35 FOR PIPE SIZE 15-INCH AND SMALLER AND F679 FOR PIPE SIZES 18 TO 27 INCH. MINIMUM COVER ON PVC PIPE SHALL BE 3.0 FEET.
- CONCRETE PIPE SHALL CONFORM TO THE WSDOT STANDARD SPECIFICATIONS FOR CONCRETE UNDERDRAIN PIPE. MINIMUM COVER ON CONCRETE PIPE SHALL NOT BE LESS THAN 3.0 FEET.
- DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
- POLYPROPYLENE PIPE (PP) SHALL BE DUAL WALLED, HAVE A SMOOTH INTERIOR AND EXTERIOR CORRUGATIONS AND MEET WSDOT 9-05.24(1). 12-INCH THROUGH 30-INCH PIPE SHALL MEET OR EXCEED ASTM F2736 AND AASHTO M330, TYPE S, OR TYPE D. 36-INCH THROUGH 60-INCH PIPE SHALL MEET OR EXCEED ASTM F2881 AND AASHTO M330, TYPE S, OR TYPE D. TESTING SHALL BE PER ASTM F1417. MINIMUM COVER OVER POLYPROPYLENE PIPE SHALL BE 3- FEET.

- TRENCHING, BEDDING, AND BACKFILL FOR PIPE SHALL CONFORM TO CITY STANDARD DETAIL NO. 06.01.01.
- STORM PIPE SHALL BE A MINIMUM OF 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.
- ALL STORM DRAIN MAINS SHALL BE TESTED AND INSPECTED FOR ACCEPTANCE AS OUTLINED IN SECTION 406 OF THE CITY OF PUYALLUP SANITARY SEWER SYSTEM STANDARDS.
- ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

GENERAL NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
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- CATCH BASINS TYPE I SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.02 AND 02.01.03 AND SHALL BE USED ONLY FOR DEPTHS LESS THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.
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 - DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
 - POLYPROPYLENE PIPE (PP) SHALL BE DUAL WALLED, HAVE A SMOOTH INTERIOR AND EXTERIOR CORRUGATIONS AND MEET WSDOT 9-05.24(1). 12-INCH THROUGH 30-INCH PIPE SHALL MEET OR EXCEED ASTM F2736 AND AASHTO M330, TYPE S, OR TYPE D. 36-INCH THROUGH 60-INCH PIPE SHALL MEET OR EXCEED ASTM F2881 AND AASHTO M330, TYPE S, OR TYPE D. TESTING SHALL BE PER ASTM F1417. MINIMUM COVER OVER POLYPROPYLENE PIPE SHALL BE 3- FEET.
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- ALL STORM DRAIN MAINS SHALL BE TESTED AND INSPECTED FOR ACCEPTANCE AS OUTLINED IN SECTION 406 OF THE CITY OF PUYALLUP SANITARY SEWER SYSTEM STANDARDS.
- ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

ROADWAY NOTES:

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- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
- MONUMENTS SHALL BE INSTALLED AT ALL STREET INTERSECTIONS, AT ANGLE POINTS, AND POINTS OF CURVATURE IN EACH STREET. ALL BOUNDARY MONUMENTS MUST BE INSTALLED ACCORDING TO THE WASHINGTON STATE SUBDIVISION LAWS.
- CURB AND GUTTER INSTALLATION SHALL CONFORM TO CITY STANDARD DETAIL 01.02.09.
- SIDEWALKS AND DRIVEWAYS SHALL BE INSTALLED AS LOTS ARE BUILT ON. SIDEWALKS AND DRIVEWAYS SHALL CONFORM TO CITY STANDARD DETAIL 01.02.01, 01.02.02 AND 01.02.12. IF ASPHALT IS DAMAGED DURING REPLACEMENT OF CURB AND GUTTER, THE REPAIR SHALL CONFORM TO CITY STANDARD DETAIL 01.02.10.
- THE SURROUNDING GROUND (5 FEET BEYOND THE BASE) FOR ALL POWER TRANSFORMERS, TELEPHONE/TV PEDESTALS, AND STREET LIGHT MAIN DISCONNECTS SHALL BE GRADED TO A POSITIVE 2 PERCENT SLOPE FROM TOP OF CURB.
- SIGNAGE AND TRAFFIC CONTROL DEVICES ARE SAFETY ITEMS AND SHALL BE INSTALLED PRIOR TO ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY OR PLAT APPROVAL. HOWEVER, IN LARGER DEVELOPMENTS, EXACT LOCATIONS OF STOP AND YIELD SIGNS MAY NEED TO BE DETERMINED AFTER FULL BUILDOUT WHEN TRAFFIC PATTERNS HAVE BEEN ESTABLISHED. IN THIS CASE, CONTRACTOR SHALL PROVIDE INDICATED "CITY-PLACED" SIGNS, SIGNPOSTS, AND BRACKETS TO THE CITY SIGN SPECIALIST (253) 841-5471 FOR LATER INSTALLATION BY THE CITY. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- PRIOR TO ANY SIGN OR STRIPING INSTALLATION OR REMOVAL THE CONTRACTOR SHALL CONTACT THE CITY SIGN SPECIALIST (253) 841-5471 TO ARRANGE FOR AN ON-SITE MEETING TO DISCUSS PLACEMENT AND UNIFORMITY.
- NEW OR REVISED STOP SIGNS OR YIELD SIGNS SHALL BE ADVANCE WARNED USING THE PROCEDURE OUTLINED IN THE MUTCD. ADVANCE WARNING SIGNS AND FLAGS SHALL BE MAINTAINED BY INSTALLER FOR 30 DAYS AND THEN REMOVED.

APPROVED

BY
CITY OF PUYALLUP
DEVELOPMENT ENGINEERING

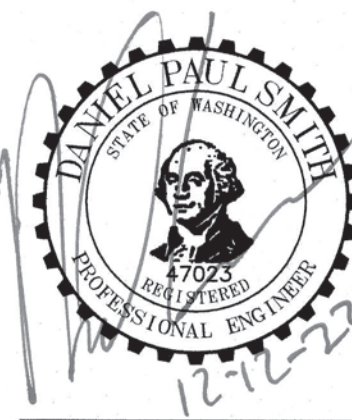
DATE

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

Date:

Revision:

No.

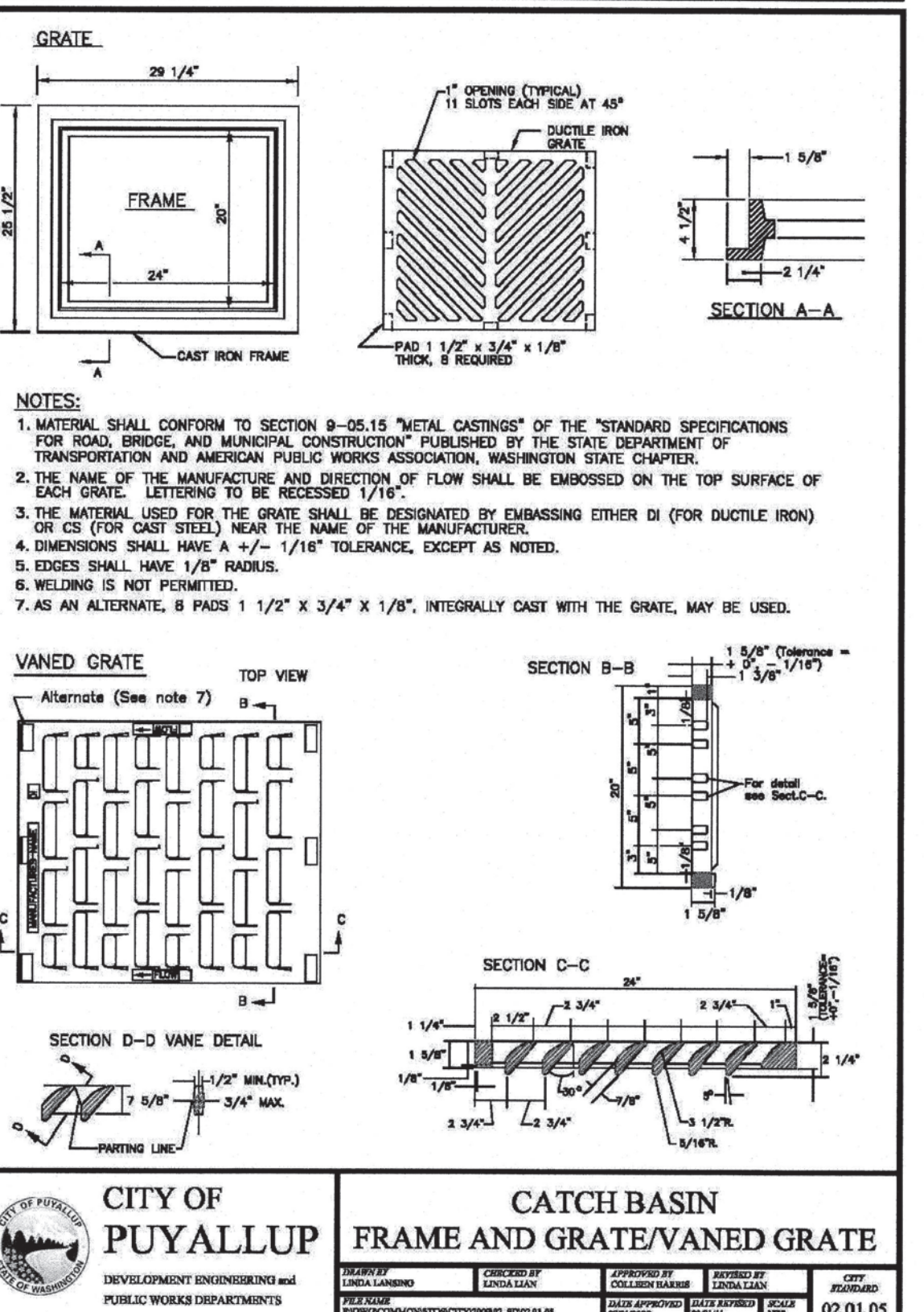
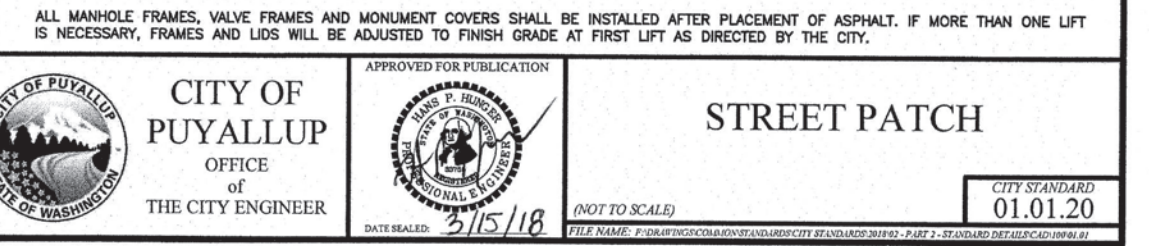
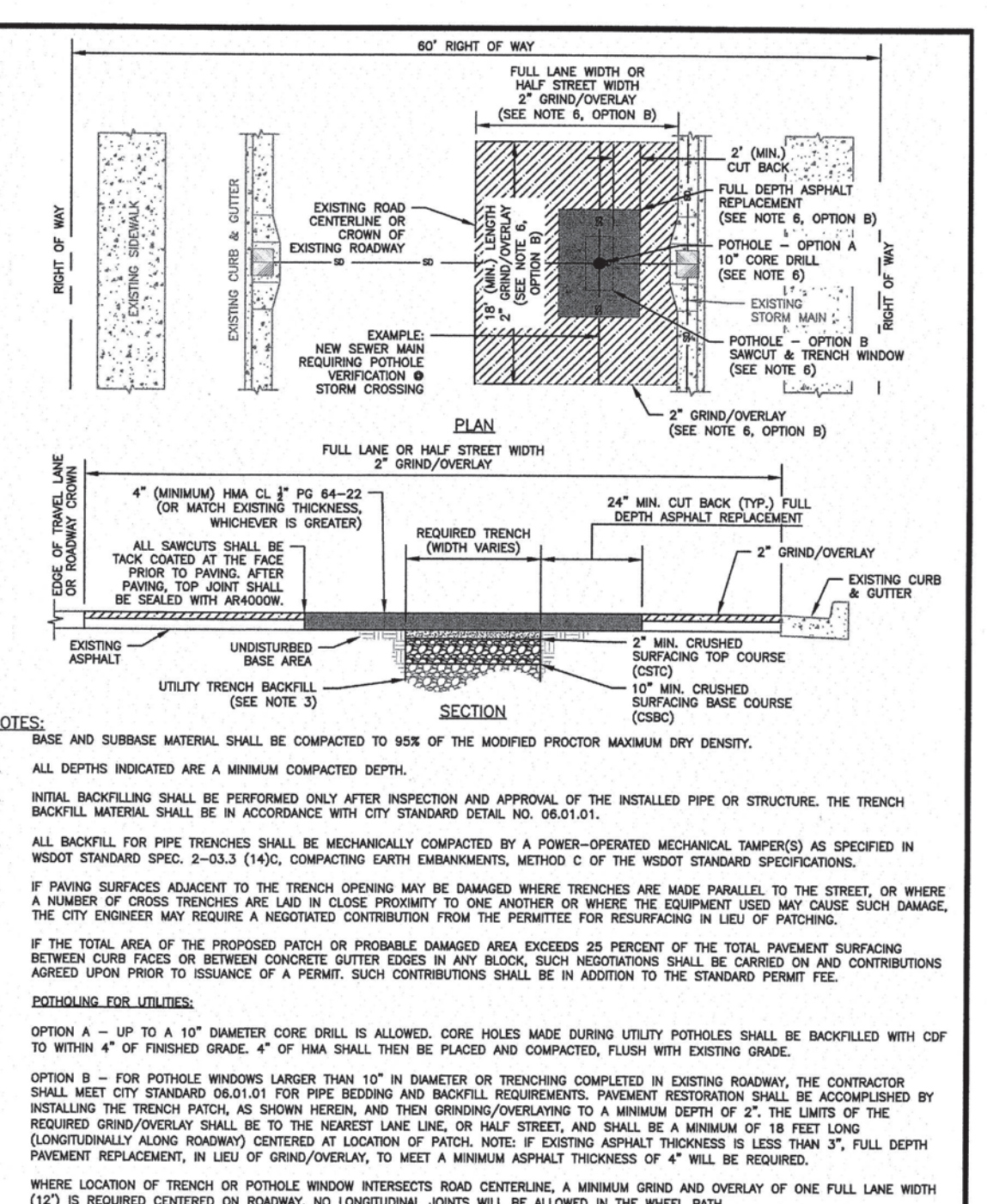
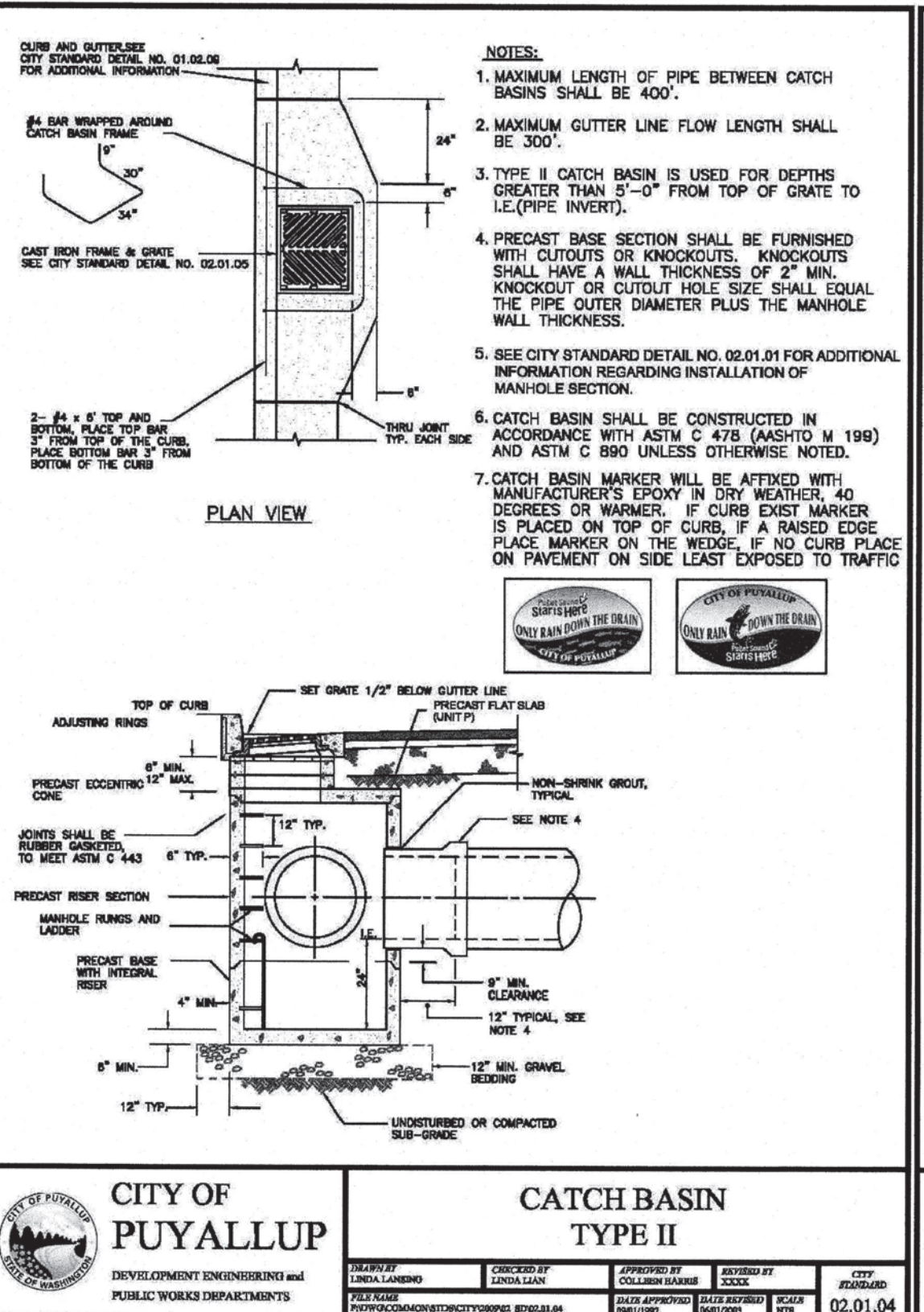
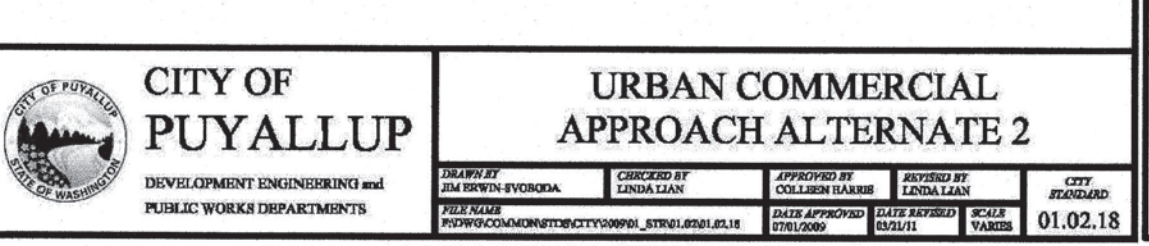
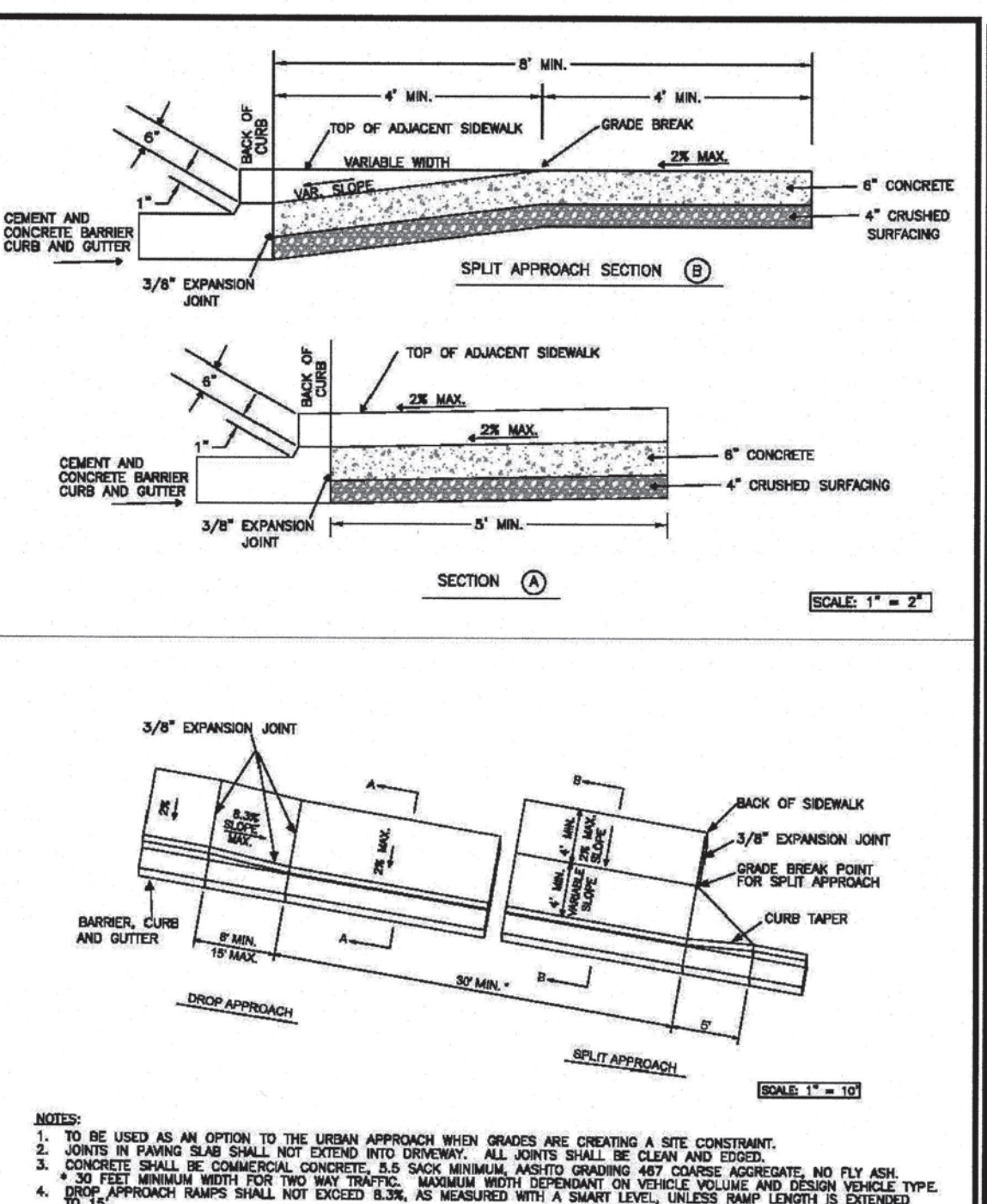
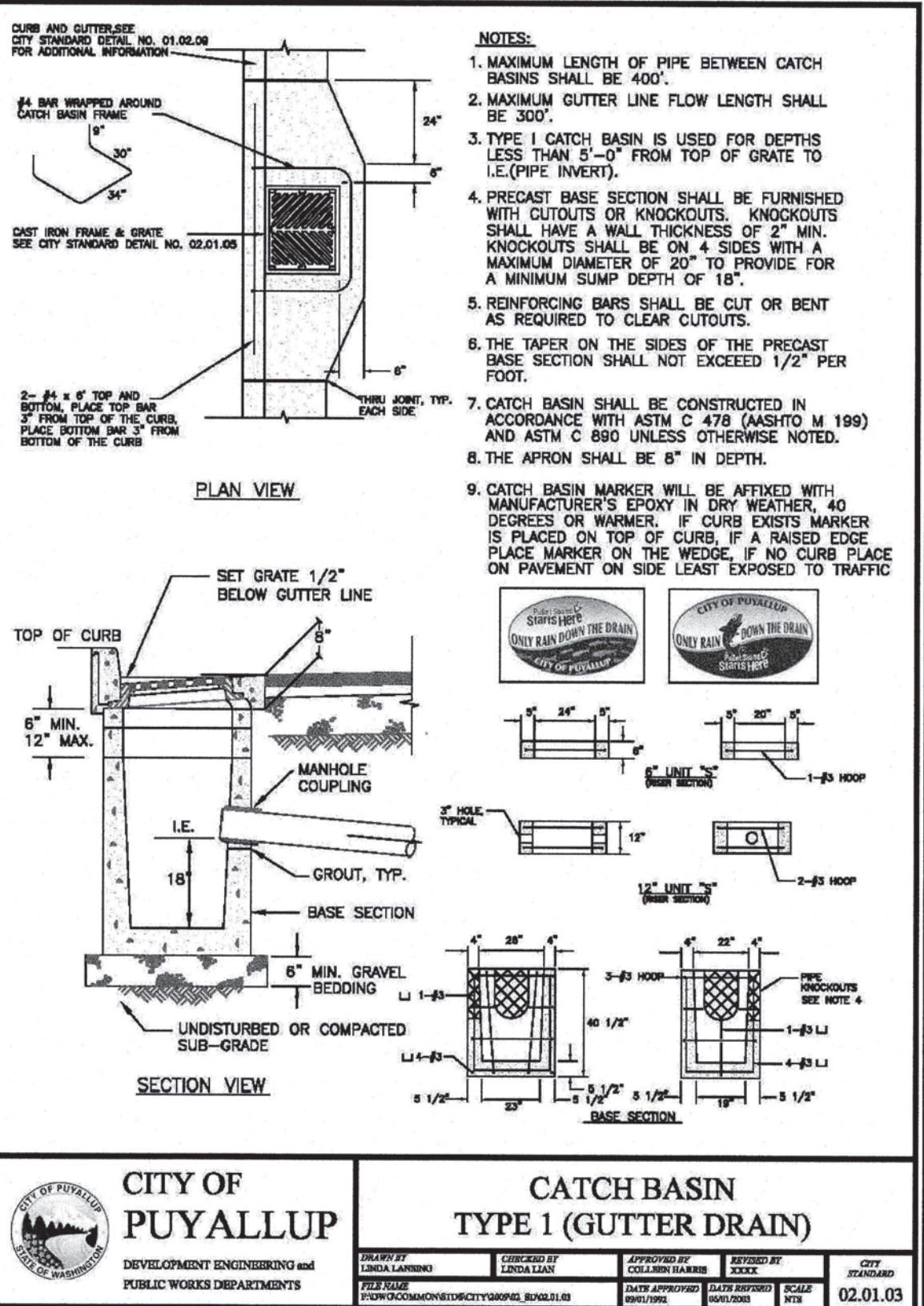
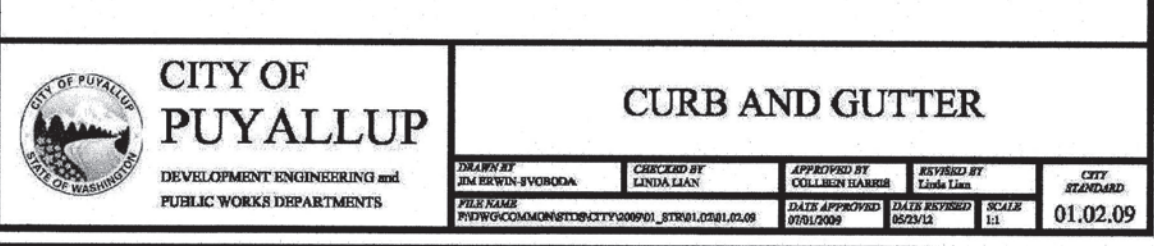
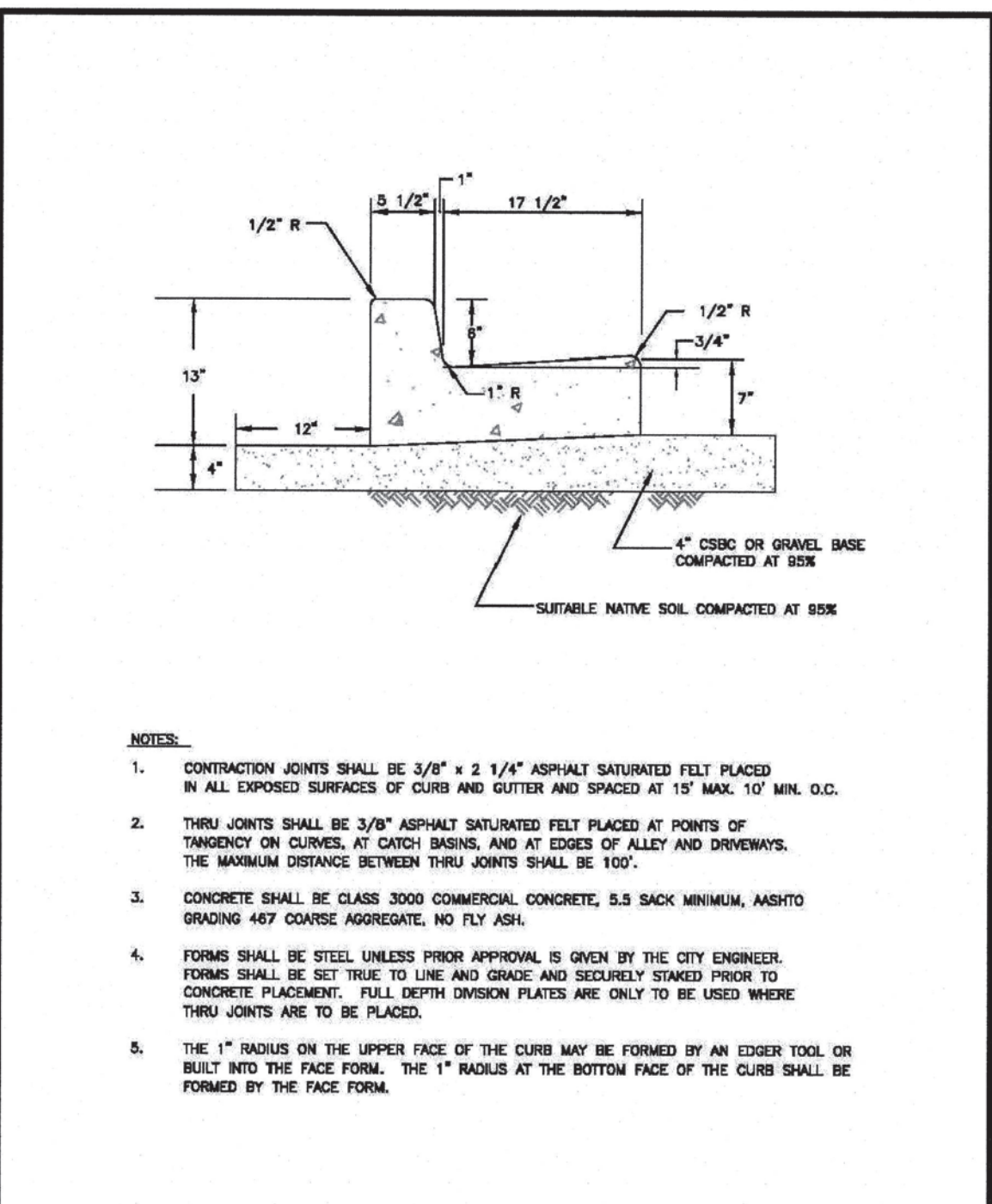
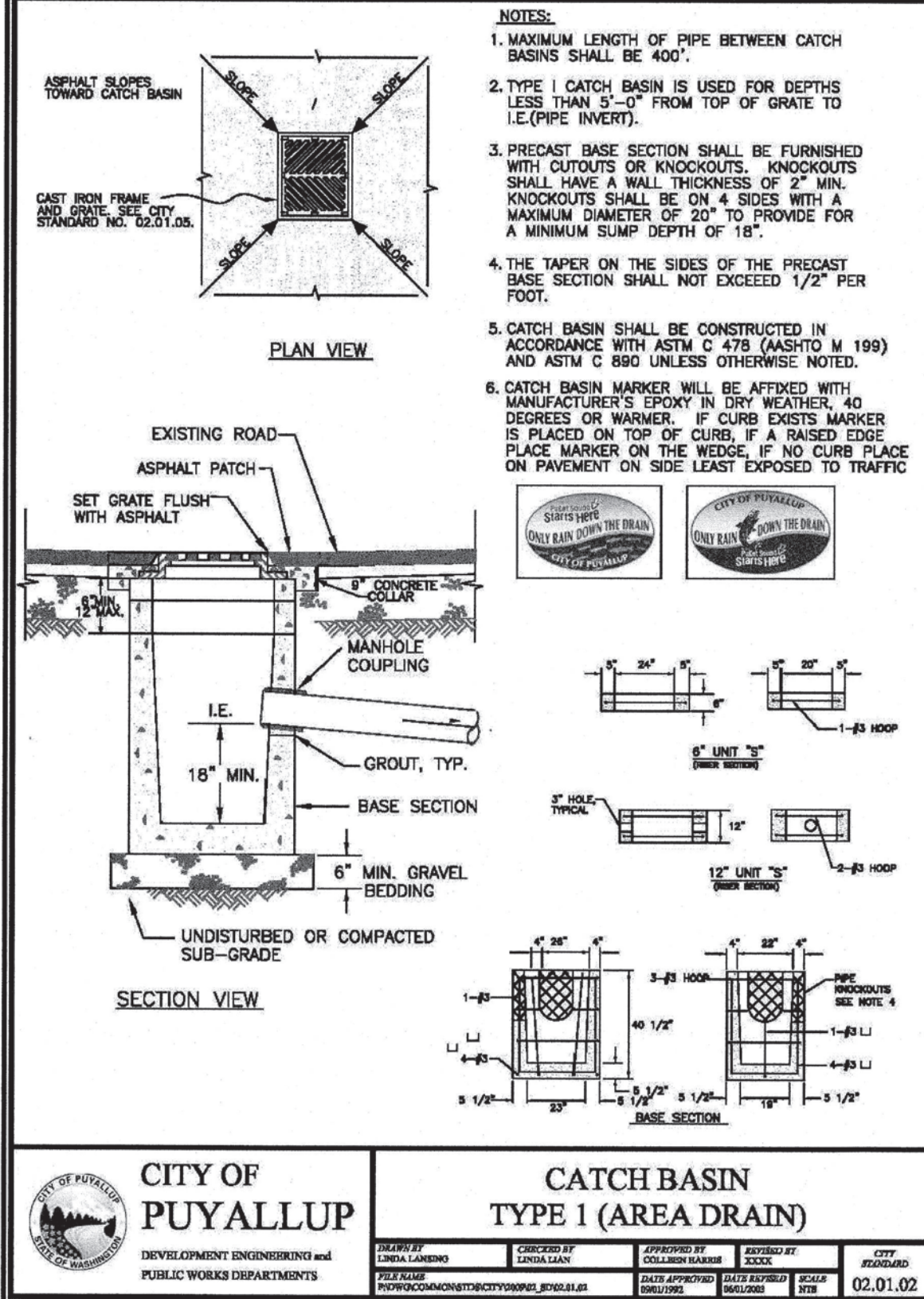
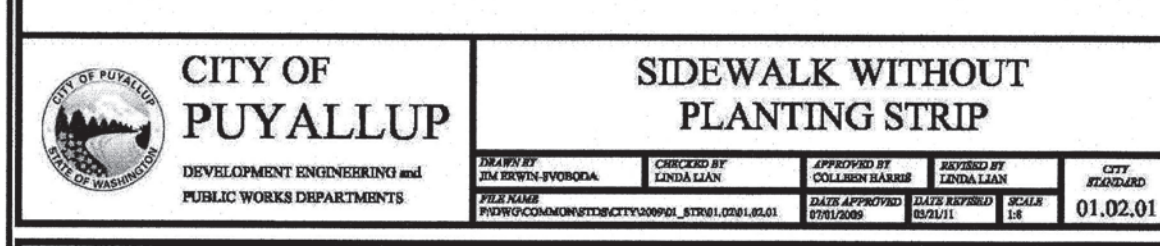
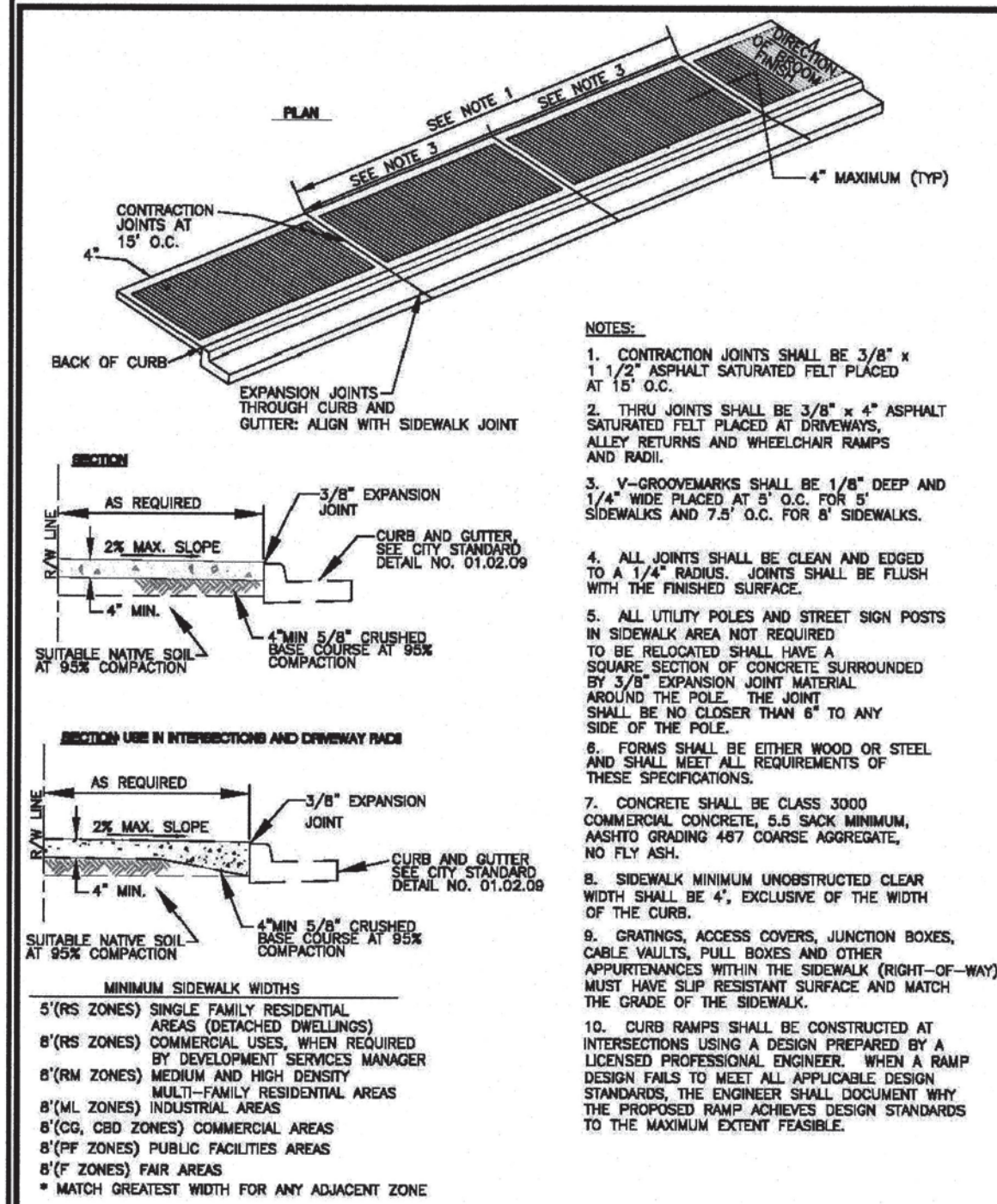
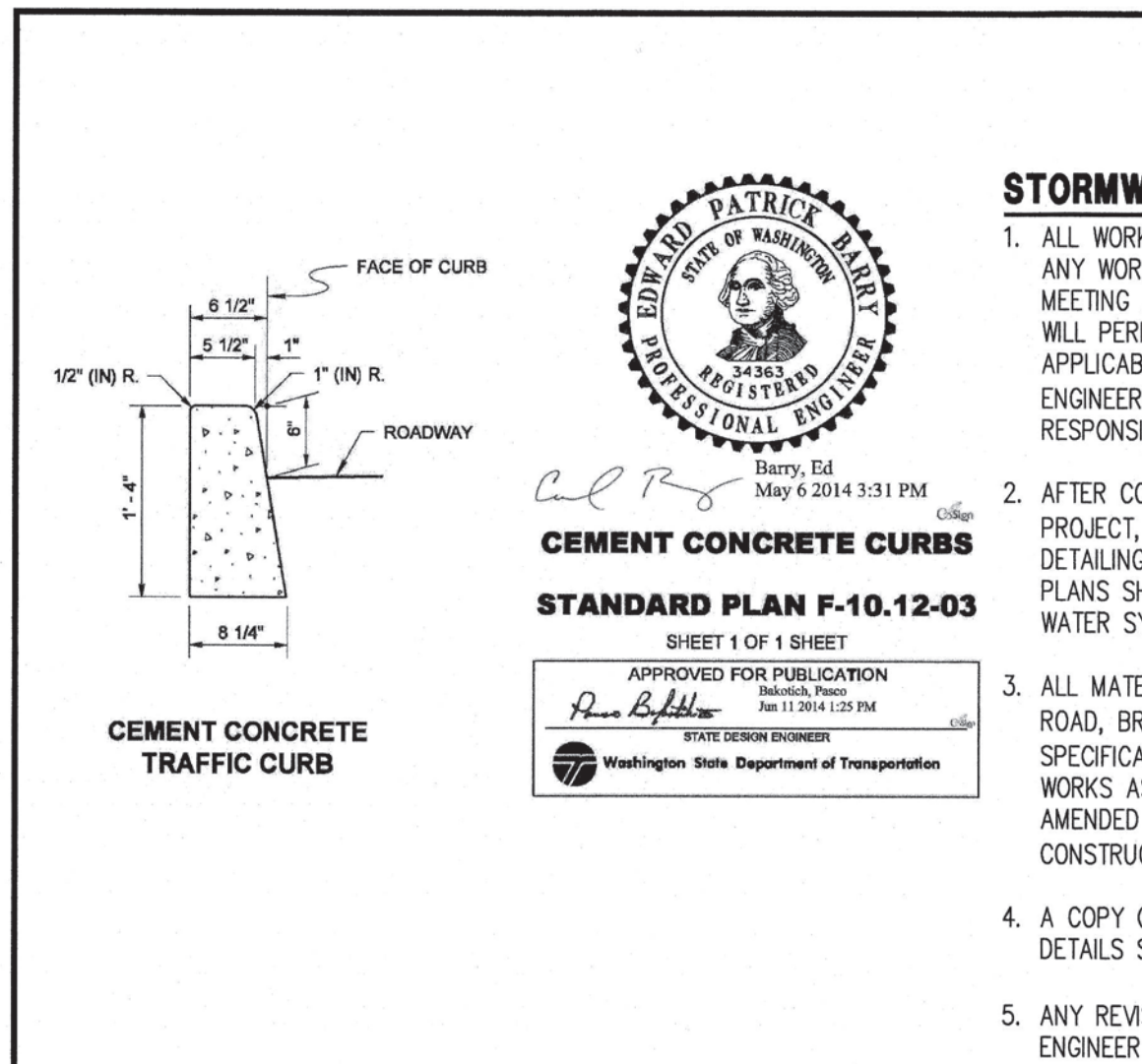


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PUYALLUP, WA 98372
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OLSON BROTHERS STORAGE
NOTES & DETAILS
MIKE GRIMT

Project: GMITARCHITECTURECENTURYLINK.NET
Client: GMITARCHITECTURECENTURYLINK.NET
Designed: DPS
Drawn: JEH
Checked: CAD
Scale: NTS
Date: 12/9/23
Job No.: 20083

Sheet No.: **C6**
6 of 20 Sheets



**A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON**

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 835-5100. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS"), OR AS DIRECTED BY FRUITLAND MUTUAL WATER COMPANY (FMWC), VALLEY WATER (VW), OR TACOMA CITY WATER (TCW) IS THE PURVEYOR.
4. A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
5. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER, THE ENGINEERING SERVICES STAFF, AND THE FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR, PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
6. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
7. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
8. BACTERIOLOGICAL (COLIFORM AND IRON BACTERIA) TEST SAMPLES WILL BE TAKEN BY THE CITY (OR FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR) AND PAID FOR BY THE CONTRACTOR, EXCEPT FOR CAPITAL IMPROVEMENT PROJECTS (CIP) WHICH SHALL BE PAID FOR BY THE CITY.
9. WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES FROM PAVED FINAL GRADE. IN IMPROVED RIGHT-OF-WAY AND IMPROVED EASEMENTS, AND A MINIMUM OF 48 INCHES IN UNIMPROVED RIGHT-OF-WAY AND UNIMPROVED EASEMENTS.
10. PIPE FOR WATER MAINS SHALL BE DUCTILE IRON CONFORMING TO SECTION 7-09 OF THE STANDARD SPECIFICATIONS, CLASS 52 WITH TYTON OR APPROVED EQUAL JOINTS. PIPE SHALL BE CEMENT LINED IN ACCORDANCE WITH A.S.A. SPECIFICATION A 21.4-1964.
11. CONNECTIONS TO EXISTING WATER MAINS TYPICALLY SHALL BE WET TAPS THROUGH A TAPPING TEE AND TAPPING VALVE AND SHALL BE MADE BY A CITY APPROVED CONTRACTOR. THE TAPPING SLEEVE SHALL BE ROMAC SST ALL STAINLESS STEEL TAPPING SLEEVE OR APPROVED EQUAL. A TWO-PIECE EPOXY COATED OR DUCTILE IRON TAPPING SLEEVE MAY BE USED ON DUCTILE IRON PIPE, WHEN THE TAP IS SMALLER THAN THE WATER MAIN SIZE I.E. 6-INCH TAP ON 8-INCH PIPE. THE CITY (OR FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR) SHALL APPROVE THE TIME AND LOCATION FOR THESE CONNECTIONS.
12. ALL WATER MAINS AND APPURTENANCES SHALL BE HYDROSTATICALLY TESTED AT 200 PSI IN ACCORDANCE WITH STANDARD SPECIFICATION 7-09.3(23). PRESSURE TESTING SHALL NOT BE PERFORMED UNTIL SATISFACTORY PURITY SAMPLES HAVE BEEN RECEIVED, EXCEPT WHEN NEW WATER MAINS ARE INSTALLED INDEPENDENTLY FROM THE WATER SYSTEM PIPING.
13. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAIL 03.05.01 AND AS DIRECTED BY THE CITY OF PUYALLUP FIRE CODE OFFICIAL.
14. VALVE MARKER POSTS SHALL BE INSTALLED WHERE VALVE BOXES ARE HIDDEN FROM VIEW OR IN UNPAVED AREAS. THE INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARD DETAIL 03.01.02.

15. RESILIENT SEATED WEDGE GATE VALVES SHALL BE USED FOR 10-INCH MAINS AND SMALLER. BUTTERFLY VALVES SHALL BE USED FOR MAINS GREATER THAN 10 INCHES.
16. PIPE FITTING FOR WATER MAINS SHALL BE DUCTILE IRON AND SHALL BE MECHANICAL JOINT CONFORMING TO AWWA SPECIFICATION C111-72.
17. WATER MAIN PIPE AND SERVICE CONNECTIONS SHALL BE A MINIMUM OF 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.
18. WHERE A WATER MAIN CROSSES THE NORTHWEST GAS PIPELINE, THE WATER LINE SHALL BE CASED WITH PVC PIPE A MINIMUM OF 10 FEET BEYOND EACH SIDE OF THE GAS LINE EASEMENT. CONTACT WILLIAMS NORTHWEST PIPELINE BEFORE THE CROSSING IS MADE.
19. TRENCHING, BEDDING, AND BACKFILL FOR WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAIL 06.01.01.
20. ALL COMMERCIAL AND INDUSTRIAL DEVELOPMENTS, IRRIGATION SYSTEMS, AND MULTI-FAMILY WATER SERVICE CONNECTIONS SHALL BE PROTECTED BY A DOUBLE CHECK VALVE ASSEMBLY OR A REDUCED PRESSURE BACKFLOW ASSEMBLY AS DIRECTED BY THE CITY (OR FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR) CONFORMING TO CITY STANDARD DETAILS 03.04.01, 03.04.02, AND 03.04.03.
21. ANY LEAD JOINT FITTING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH A MECHANICAL JOINT FITTING AT THE CONTRACTOR'S EXPENSE.
22. WHEN HYDRAULIC FIRE FLOW MODELING IS REQUIRED FOR A PROJECT, THE CITY WILL ISSUE A PERMIT. THE HYDRAULIC MODELING CRITERIA BASED ON THE PROJECTED 2030 WATER DEMAND, WHILE MAINTAINING A MINIMUM SYSTEM PRESSURE OF 20 POUNDS PER SQUARE INCH AND A MAXIMUM VELOCITY OF 10 FEET PER SECOND.
23. WHEN USING A FIRE HYDRANT FOR NON-FIREFIGHTING PURPOSES, A CITY HYDRANT METER MUST BE USED. COORDINATE THE ACQUISITION OF THE HYDRANT METER WITH THE CITY'S UTILITY BILLING DIVISION AT PUYALLUP CITY HALL. A CITY APPROVED BACKFLOW PROTECTION ASSEMBLY SHALL BE INSTALLED BY THE PERSON REQUESTING USE OF A FIRE HYDRANT. THE ASSEMBLY SHALL BE ACCOMPANIED BY A CURRENT BACKFLOW ASSEMBLY TEST REPORT. THE TEST REPORT SHALL BE AVAILABLE AT THE SITE FOR THE DURATION OF THE HYDRANT USE.
24. SHOULD A BREAK OCCUR ON ANY CITY WATER MAIN, THE CONTRACTOR SHALL FOLLOW THE CITY'S ADOPTED "WATER MAIN BREAK PROCEDURE" ISSUED TO THEM AT THE PRE-CONSTRUCTION MEETING AND NOTIFY THOSE CONNECTED TO THE SYSTEM IN THE IMPACTED AREA AS OUTLINED IN THE PROCEDURE.
25. WATER MAIN REPAIRS (REFERENCES: AWWA C651-14 AND WSDOT STANDARD SPECIFICATION SECTION 7-09)

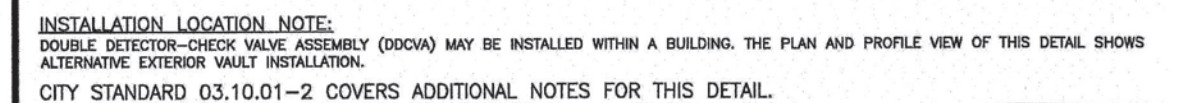
a. REPAIR WITHOUT DEPRESSURIZATION – SMALL LEAKS SHALL BE REPAIRED USING REPAIR BANDS WHILE MAINTAINING POSITIVE PRESSURE IN THE WATER MAIN. VALVES SURROUNDING THE LEAK WILL BE PARTIALLY SHUT BY THE CITY WATER DEPARTMENT TO REDUCE THE FLOW AND PRESSURE TO THE AREA. BLOWOFFS AND HYDRANTS IN THE REDUCED PRESSURE AREA MAY BE OPENED AS NEEDED TO FURTHER REDUCE THE PRESSURE. THE WATER MAIN TRENCH SHALL BE OVER-EXCAVATED TO ALLOW WATER IN THE TRENCH TO BE PUMPED OUT AND MAINTAINED BELOW THE LEVEL OF THE WATER MAIN. THE REPAIR SHALL BE COMPLETED WITH THE WATER MAIN PRESSURE REMAINING POSITIVE. AFTER THE REPAIR IS MADE, THE SYSTEM SHALL BE FULLY PRESSURIZED AND A VISUAL LEAK INSPECTION WILL BE COMPLETED. THE WATER MAIN IN THE AFFECTED AREA SHALL BE FLUSHED TO ACHIEVE THREE PIPE VOLUMES PULLED FROM THE PIPE (DISTANCE MEASURED FROM VALVE OPENED FOR FLUSHING TO THE EXIT HYDRANT OR BLOWOFF).

b. REPAIR/CUT-IN WITH DEPRESSURIZATION – TRENCH SHALL BE OVER EXCAVATED AND DEWATERED BELOW THE WATER MAIN. FLUSH WATER FROM PIPE FROM EACH DIRECTION UNTIL IT RUNS CLEAR. IMMEDIATELY PRIOR TO INSTALLATION OF A NEW PIPE SECTION FOR REPAIR OR CUT-IN, ALL RUST FITTINGS AND PIPE SPOOLS SHALL BE SWABBED WITH A FIVE PERCENT (5%) CHLORINE SOLUTION (MINIMUM). THE INTERIOR OF THE EXISTING PIPE SHALL BE SWABBED WITH A FIVE PERCENT (5%) CHLORINE SOLUTION AT LEAST 6 FEET IN EACH DIRECTION FROM EXPOSED END. THE WATER MAIN IN THE AFFECTED AREA SHALL BE FLUSHED TO ACHIEVE THREE PIPE VOLUMES PULLED FROM THE PIPE (DISTANCE MEASURED FROM THE VALVE OPENED FOR FLUSHING TO THE EXIT HYDRANT OR BLOWOFF). CUSTOMERS SHALL BE NOTIFIED AFTER THE WATER MAIN IS FLUSHED AND REPAIRS HAVE BEEN COMPLETED, AS OUTLINED IN THE "WATER MAIN BREAK PROCEDURE."

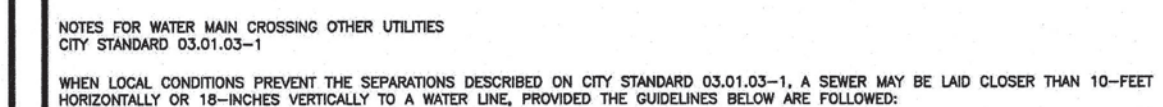
- c. EACH NEW WATER MAIN SECTION SHALL BE DELIVERED, STACKED AND STORED ONSITE WITH ENDS PLUGGED. THE PLUGS SHALL REMAIN IN THE PIPE UNTIL EACH PARTICULAR SECTION IS INSTALLED. NATIONAL SANITATION FOUNDATION (NSF) APPROVED SIXTY-FIVE PERCENT (65%) CALCIUM HYPOCHLORITE SHALL BE ADDED TO THE UPSTREAM END OF EACH PIPE SECTION, AND AT EACH HYDRANT TEE IN THE AMOUNT GIVEN IN THE TABLE BELOW (OR PER APPROVED MANUFACTURER SPECIFICATIONS). THE MINIMUM AMOUNT OF CALCIUM HYPOCHLORITE ADDED SHOULD BE SUFFICIENT TO ACHIEVE A 50 MG/L CONCENTRATION WITHIN THE IMPACTED AREA.

PIPE DIAMETER (INCHES)	PIPE VOLUME PER 18 FEET (GAL)	5-GRAM TABLETS PER PIPE SECTION	HYPOCHLORITE OUNCES PER 500 FEET	GRANULES TEASPOONS PER 18 FEET	MAXIMUM FILL RATE (GPM)
4	35	1	1.7	0.2	40
6	53	1	3.8	0.4	90
8	70	2	6.7	0.7	150
12	106	4	15.1	1.4	350
16	141	6	27	2.7	600

- c. NEW WATER MAINS SHALL BE FILLED USING AN APPROVED BACKFLOW PREVENTION ASSEMBLY. THE WATER MAIN SHALL BE FILLED FROM THE LOWER ELEVATION END SO THAT AS THE WATER MAIN IS FILLED, THE CHORINE IS CONTACTED, DISSOLVED AND SPREAD RELATIVELY UNIFORM THROUGH THE LENGTH OF THE NEW WATER MAIN. THE FILL RATE SHALL BE MINIMIZED SO THAT THE VELOCITY OF THE WATER IS LESS THAN 1 FT/SEC (SEE TABLE ABOVE). SUCCESSFUL PRESSURE TEST AND BACTERIOLOGICAL TESTS SHALL BE COMPLETED AND PROVIDED TO THE CITY PRIOR TO ANY NEW WATER MAIN CONNECTION TO THE EXISTING WATER SYSTEM.
- d. THE CHLORINATED WATER WILL BE ALLOWED TO REMAIN IN CONTACT WITH THE NEW WATER MAIN SYSTEM FOR 24 TO 72 HOURS. AFTER 24 HOURS, WATER MAY BE ADDED TO THE WATER MAIN FOR THE PURPOSES OF PRESSURE TESTING. THE WATER IN THE MAIN USED FOR PRESSURE TESTING MUST REMAIN IN THE WATER MAIN UNTIL PRESSURE TESTING IS COMPLETED. IF NECESSARY, LIQUID CHLORINE SHALL BE INJECTED INTO THE WATER MAIN WITH FILL WATER TO MAINTAIN A CONCENTRATION IN THE WATER MAIN ABOVE .50 MG/L. UNDER NO CIRCUMSTANCE SHALL "SUPER" CHLORINATED WATER BE ALLOWED TO SIT WITHIN A NEW WATER MAIN FOR MORE THAN 5 DAYS.
- e. PRESSURE TESTING INCLUDES TESTING AGAINST NEW VALVES AND HYDRANTS. EACH VALVE SHALL BE TESTED BY CLOSING EACH IN TURN AND REDUCING THE PRESSURE BEYOND THE VALVE. THE PRESSURE ON THE BACK SIDE OF THE VALVE SHOULD NOT BE ELIMINATED. CARE MUST BE TAKEN THAT, DURING THIS PROCESS, POSITIVE PRESSURE REMAINS THROUGHOUT THE SYSTEM BEING TESTED AT ALL TIMES. ALL HYDRANT FOOT VALVES SHALL BE OPEN DURING PRESSURE TESTING SO THAT THE PRESSURE TEST IS AGAINST THE HYDRANT VALVE. PRESSURE TESTING WILL NOT BE ALLOWED AGAINST ANY EXISTING VALVES.
- f. AFTER SUCCESSFUL PRESSURE TESTING, THE WATER MAIN SHALL BE THOROUGHLY FLUSHED TO REMOVE ALL "SUPER" CHLORINATED WATER FROM THE NEW WATER MAIN. FLUSHING OF NEW OR EXTENDED WATER MAINS SHALL BE CONDUCTED PER WSDOT SPECIFICATION 7-09.3(24) WITH A MINIMUM VELOCITY DEVELOPED WITHIN THE PIPE WHILE FLUSHING OF 2.5 FEET PER SECOND (FPS). ALL FLUSHED WATER SHALL BE DECHLORINATED PRIOR TO DISPOSAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL CHLORINATED WATER FLUSHED FROM MAINS. THE CITY SHALL APPROVE THE DISPOSAL METHOD PRIOR TO IMPLEMENTATION IN THE FIELD. THE CONTRACTOR SHALL UTILIZE ON- SITE DISPOSAL METHODS, IF AVAILABLE. DISPOSAL OF FLUSH WATER TO THE SANITARY SEWER SYSTEM SHALL NOT BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE WATER POLLUTION CONTROL PLANT SUPERVISOR. ANY PLANNED DISCHARGE TO A STORMWATER SYSTEM SHALL BE DECHLORINATED TO A CONCENTRATION OF 0.1 PPM OR LESS, PH ADJUSTED (IF NECESSARY) TO BE BETWEEN 6.5 AND 8.5, AND VOLUMETRICALLY AND VELOCITY CONTROLLED TO PREVENT ANY RESUSPENSION OF SEDIMENTS. THE CITY WILL REQUIRE INDEPENDENT TESTING THROUGHOUT THE WATER DISCHARGE PROCESS TO ENSURE COMPLIANCE OF THESE STANDARDS ARE MET.
- g. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED AFTER FLUSHING AND AGAIN 24 HOURS AFTER THE FIRST SET OF SAMPLES.
- h. ALL CLOSURE/FINAL CONNECTION FITTINGS SHALL BE SPRAYED CLEAN AND THEN SWABBED WITH A FIVE PERCENT (5%) CHLORINE SOLUTION IMMEDIATELY PRIOR TO INSTALLATION PER AWWA STANDARD C651. ADDITIONAL SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED FROM THE IMMEDIATE VICINITY OF THE NEW OR REPLACED WATER MAIN AND ANALYZED AFTER THE FINAL CONNECTIONS ARE MADE. IF NECESSARY, ADDITIONAL FLUSHING SHALL BE CONDUCTED AND ADDITIONAL SAMPLES SHALL BE COLLECTED UNTIL SATISFACTORY RESULTS ARE OBTAINED.



- 1. BACKDOOR ASSEMBLY MUST BE SELECTED FROM WASHINGTON STATE DEPARTMENT OF HEALTH'S LIST OF BACKDOOR PREVENTION ASSEMBLIES.
- 2. THE BACKDOOR SHALL BE INSTALLED WITH ADEQUATE SPACE TO FACILITATE MAINTENANCE AND TESTING. IT SHALL BE TESTED AFTER INSTALLATION, BY A WASHINGTON STATE LICENSED PLUMBING CONTRACTOR, TO VERIFY PROPER OPERATION. THE CONTRACTOR SHALL PROVIDE OCCUPANCY, AND ANNUALLY RE-TEST THE DOOR TO TEST RESULTS TO CITY OF PUYALLUP.
- 3. DOOR MUST BE PURCHASED AS A UNIT. NO MODIFICATIONS TO THE ASSEMBLY ARE ALLOWED.
- 4. THE DOOR IS ALLOWED TO BE LOCATED WITHIN A BUILDING AS APPROVED BY THE FIRE CODE OFFICIAL, WHEN THE DOOR IS LOCATED WITHIN A BUILDING, THE DOOR SHALL BE INSTALLED WITHIN A WALL OR PARTITION. THE DOOR SHALL BE APPROVED ON BOTH STORE DRUM AND STRUCTURE DRUM.
- 5. IN A WALL INSTALLATION, IF WALL CANNOT BE DRILLED TO INSTALL, A 1/4 HP SUMP PUMP SHALL BE INSTALLED IN THE SUMP OF THE "WALL". IT SHALL BE WIRED PER WASHINGTON STATE ELECTRICAL CODE, AND INSPECTED BY A STATE ELECTRICAL INSPECTOR. THE DISCHARGE SHALL BE CONNECTED TO THE EXISTING SEWAGE LINE.
- 6. DOOR OUTSIDE SEAL AND OVEN (OS&O) GATE VALVES, AND THE POST INDICATOR VALVE (PIV), SHALL HAVE SUPERHEATED THERMIST SWITCHES.
- 7. ALL ELECTRICAL SHALL BE INSPECTED BY A WASHINGTON STATE ELECTRICAL INSPECTOR.
- 8. IN A WALL INSTALLATION, RUN TWO 3/4" SCH40E 80 P.V.C. CONDUITS TO THE VALVE. ONE WILL BE USED FOR A GFCI PROTECTED OUTLET AND ONE WILL BE FOR LOW VOLTAGE CORDING FROM THE FIRE ALARM PANEL. INSTALL AN SPLITTER FUSE OR FACA CASE WITH DOUBLE BOX OR END OF THE CONDUIT IN THE WALL.
- 9. IN A WALL INSTALLATION, RUN LOW VOLTAGE WIRE INSIDE WALL AND TO PIV THROUGH SEAL-TIGHT FLEX CONDUIT. CONDUIT SHALL BE SECURELY FASTENED PERPENDICULAR OR HORIZONTAL TO THE WALLS OF THE VALVE.
- 10. THE DOOR AND PIV SHALL BE A SMOOTH OR FIN TYPE, RESIN OR 1.06 IN. STEEL.
- 11. THE PIV SUPPORTS SHALL BE RUST-PROTECTED WITH ALUMINUM PAINT.
- 12. THE FDC SHALL BE LOCATED WITHIN 15 FEET OF A FIRE HYDRANT, BUT NOT LESS THAN 10 FEET.
- 13. THE FDC AND PIV SHALL BE A MINIMUM OF 50 FEET FROM A BUILDING, UNLESS APPROVED BY THE CITY OF PUYALLUP FIRE CODE OFFICIAL, BUT NEVER LESS THAN 5 FEET FROM BUILDING.
- 14. A DOOR INSTALLED MORE THAN 5 FEET ABOVE THE FLOOR LEVEL MUST HAVE A PLATFORM UNDER IT FOR THE TESTER AND PERSONNEL TO STAND. THE PLATFORM MUST BE 24" WIDE, APPROX. 18" HIGH AND MEET ALL APPLICABLE SAFETY STANDARDS AND CODES.



1. SEWER LINE IS LAID IN A SEPARATE TRENCH FROM THE WATER LINE.
2. WHEN 18-INCH VERTICAL SEPARATION CANNOT BE OBTAINED, THE SEWER SHALL BE CONSTRUCTED OF MATERIALS AND JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION AND SHALL BE PRESSURE TESTED TO ENSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
3. THE WATER LINE SHALL BE PLACED ON A BENCH OF UNDISTURBED EXISTING WITHIN THE BOTTOM OF THE WATER PIPE AT LEAST 18-INCHES ABOVE THE CROWN OF THE SEWER, AND SHALL HAVE AT LEAST 5-FEET OF HORIZONTAL SEPARATION AT ALL TIMES. THE CITY RESERVES THE RIGHT TO REQUIRE SUPPLEMENTAL MITIGATION, SUCH AS IMPERMEABLE BARRIERS OR OTHER MEANS, FOR ADDITIONAL PROTECTION.
4. THE SEWER SHALL NOT BE INSTALLED IN THE SAME DITCH AS A POTABLE WATER LINE WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY UTILITIES DEPARTMENT.

- UNUSUAL CONDITIONS (PERPENDICULAR SYSTEMS)

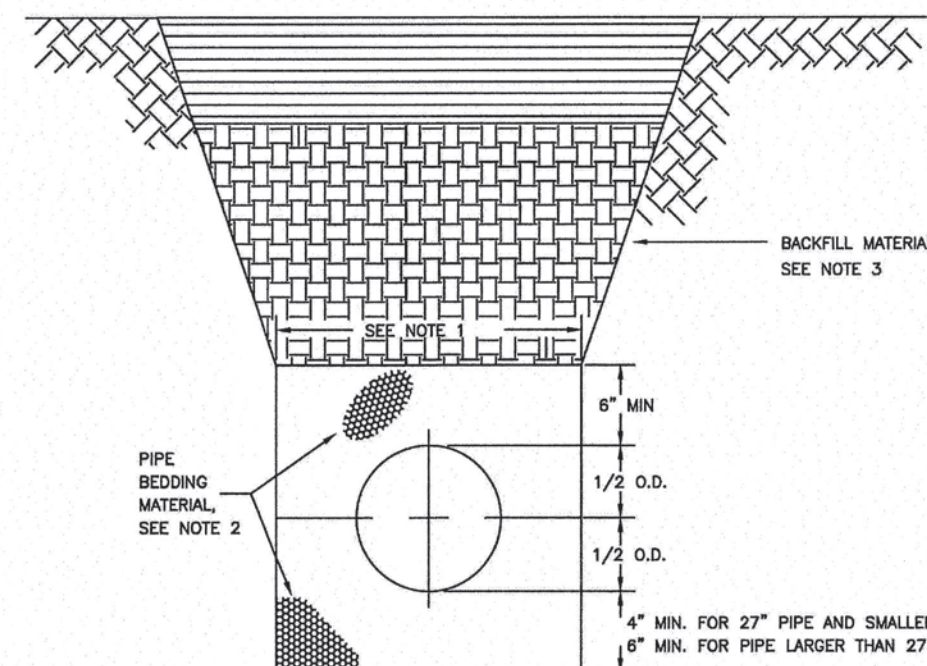
1. ONE FULL SEGMENT (NOT LESS THAN 18-FEET LONG) OF DUCTILE IRON CLASS 52 WATER PIPE, AND THE LONGEST STANDARD SOWER LENGTH AVAILABLE FROM THE MANUFACTURER SHALL BE USED WITH THE JOINTS CENTERED TO MAXIMIZE JOINT SEPARATION.
 2. STANDARD GRAVITY-SEWER MATERIAL ENCASED IN CONCRETE OR IN A ONE-QUARTER-INCH THICK CONTINUOUS STEEL, DUCTILE IRON PRESSURE RATED PVC PIPE WITH A DIMENSION RATIO (THE RATIO OF THE OUTSIDE-DIAMETER TO THE PIPE WALL THICKNESS) OF 18 OR LESS, WITH ALL JOINTS PRESSURE-GROUTED WITH SAND-CEMENT GROUT OR BENTONITE.
- EXAMPLE OF DIMENSION RATIO (DR): OUTSIDE PIPE DIAMETER DIVIDED BY THE WALL THICKNESS OR OD/T.

EXAMPLE OF DIMENSION RATIO (DR): OUTSIDE PIPE DIAMETER DIVIDED BY THE WALL THICKNESS OR OD/
WT. OF WALL CALL TO THE PIPE OF 0.5 INCHES. THE OD IS 3.605 (0.5 x 7.21)

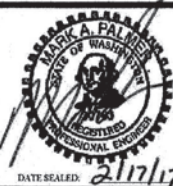
- CONDITION B - GRAVITY SEWER PASSING OVER WATER LINES

WATER LINES SHALL BE PROTECTED BY PROVIDING:

1. A VERTICAL SEPARATION OF AT LEAST 10 FEET BETWEEN THE INLET OF THE SEWER AND THE CROWN OF THE WATER LINE.
2. ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER LINE TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING ON AND BREAKING THE WATER LINE.
3. THE SEWER PIPE SHALL BE THE LONGEST STANDARD SEWER PIPE LENGTH AVAILABLE FROM THE MANUFACTURER WITH THE WATER SEWER PIPES CENTERED TO MAXIMIZE JOINT SEPARATION.
4. THE SEWER LINE CASING EQUIVALENT TO THAT SPECIFIED IN A(2) ABOVE.



1. TRENCHING SHALL MEET THE REQUIREMENTS OF SECTION 7-08.3(1)A AND 2-06.3(1) OF THE WSDOT SPECIFICATIONS.
2. BEDDING MATERIAL SHALL CONFORM TO 9-03.12(3) GRAVEL BACKFILL FOR PIPE ZONE BEDDING.
3. GRAVEL BACKFILL SHALL CONFORM TO 9-03.12(1)A GRAVEL BACKFILL FOR FOUNDATIONS, CLASS A.



CITY OF
PUYALLUP
OFFICE
of
THE CITY ENGINEER

PIPE TRENCHING BEDDING AND BACKFILL

CITY
STANDARD

OLSON BROTHERS STORAGE
WATER NOTES & DETAILS

Subject:

Designed:	DPS
Drawn:	JEH
Checked:	CAD

Scale: NTS
Date: 12/9/22
Job No.: 20083

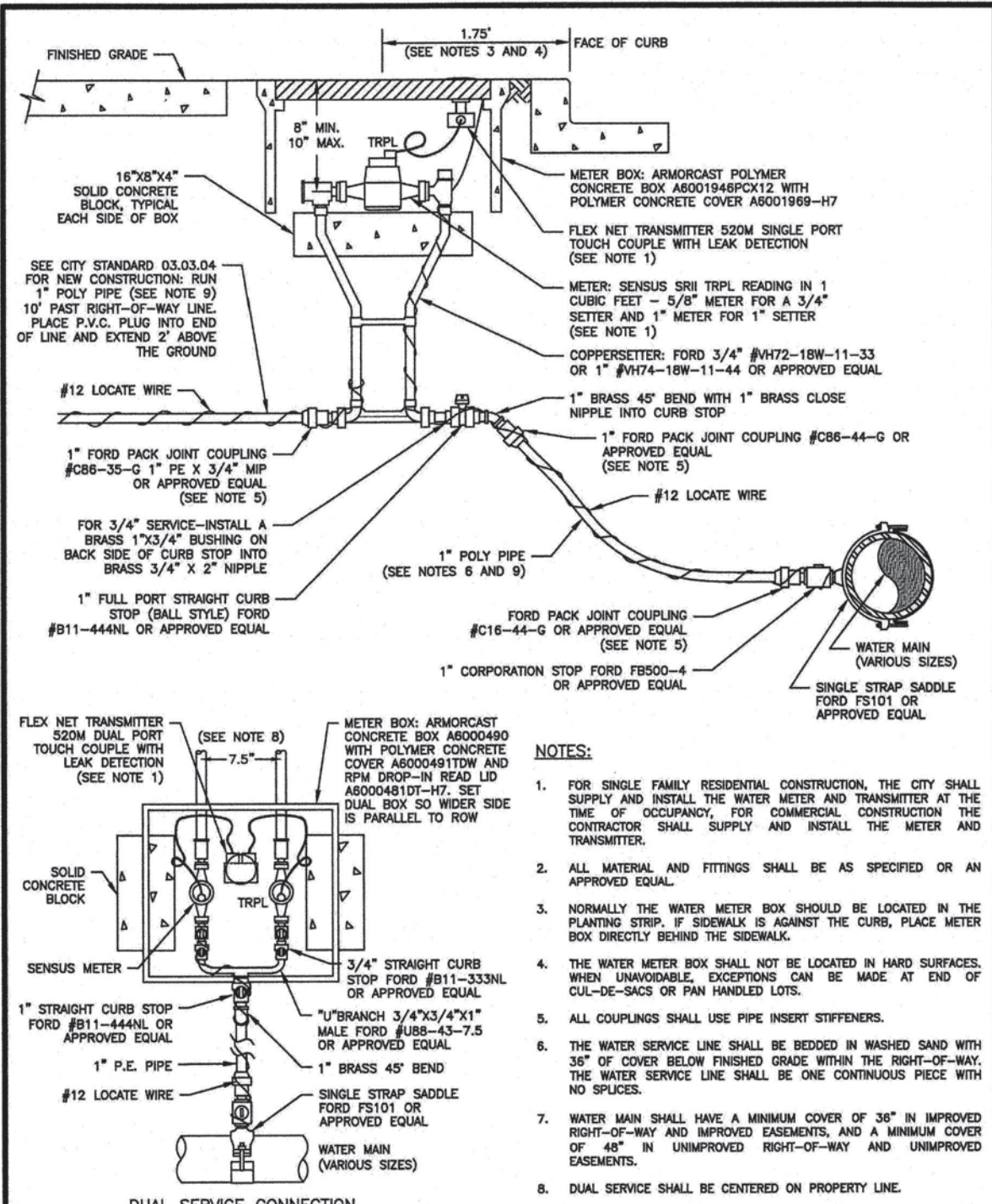
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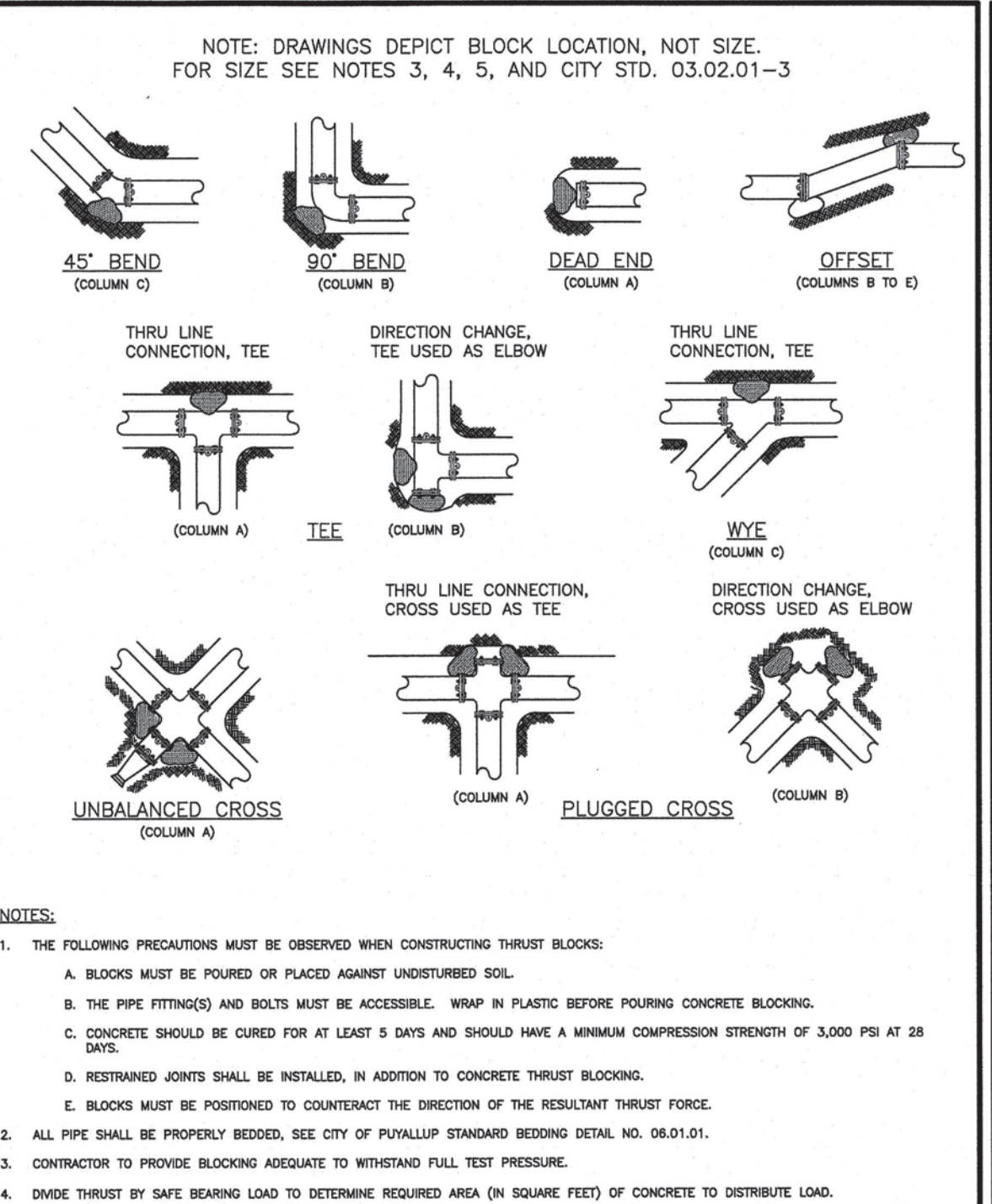
7 of 20 Sheets

OLSON BROTHERS STORAGE
A PORTION OF NW1/4 OF THE SE1/4 OF SEC. 26, T20N, R04E
WILLAMETTE MERIDIAN, PIERCE COUNTY, WASHINGTON

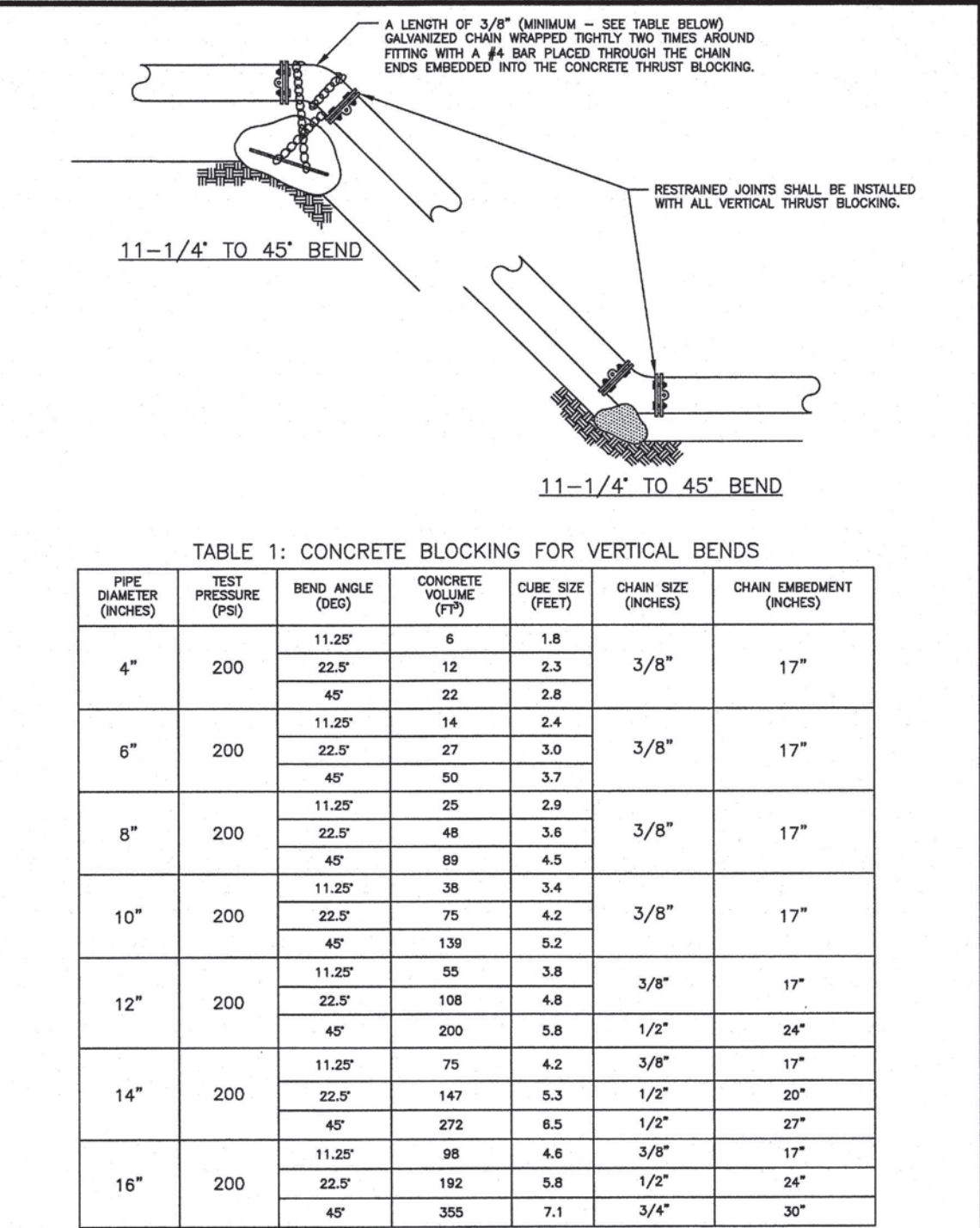
FIRE HYDRANT/FDC LOCATION/ACCESS APPROVED		APPROVED	
BY	CITY OF PUYALLUP FIRE CODE OFFICIAL	BY	CITY OF PUYALLUP DEVELOPMENT ENGINEERING
DATE		DATE	
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE FIRE CODE OFFICIAL.		NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.	



CITY OF PUYALLUP OFFICE THE CITY ENGINEER	APPROVED FOR PUBLICATION DATE: 2/15/2019 NOT TO SCALE CITY STANDARD: 03.03.01
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CITY OF PUYALLUP OFFICE THE CITY ENGINEER	APPROVED FOR PUBLICATION DATE: 2/15/2019 NOT TO SCALE CITY STANDARD: 03.02.01-1
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CITY OF PUYALLUP OFFICE THE CITY ENGINEER	APPROVED FOR PUBLICATION DATE: 2/15/2019 NOT TO SCALE CITY STANDARD: 03.02.01-2
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TABLE 2: THRUST AT FITTINGS AT 200 PSI						
SIZE	TEST PRESSURE (PSI)	THRUST FITTINGS AT 200 PSI				
		A	B	C	D	E
4"	200	3,140	4,440	2,405	1,225	815
6"	200	7,070	9,895	5,410	2,760	1,585
8"	200	12,565	17,770	9,820	4,905	2,465
10"	200	19,835	27,770	15,020	7,660	3,850
12"	200	28,275	38,985	21,640	11,030	5,545
14"	200	38,485	54,425	29,455	15,015	7,545
16"	200	50,285	71,085	38,470	19,815	9,855

TABLE 3: BEARING VALUE OF SOIL	
SOIL TYPE	SAFE BEARING LOAD LB/FS
MUCK, PEAT, ETC.	0
SOFT CLAY/ALLUVIAL SOIL	1,000
SAND	2,000
SAND AND GRAVEL	3,000
SAND AND GRAVEL CEMENTED WITH CLAY	4,000
HARD SHALE	10,000

SEE CITY STANDARDS 03.02.01-1 AND 03.02.01-2 FOR ADDITIONAL INFORMATION.

NOTES:

① TO DETERMINE THRUST AT PRESSURES OTHER THAN PSI SHOWN, MULTIPLY THE THRUST OBTAINED IN TABLE 2 BY THE RATIO OF THE PRESSURE TO 200 PSI.

EXAMPLE:
THE THRUST ON A 12 INCH, 90° BEND AT 300 PSI.

$38,275 \times \frac{300}{200} = 59,978 \text{ LBS}$

② TO DETERMINE THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET (SF):

SEE TABLE 3, BEARING VALUE OF SOIL.

EXAMPLE:
FOR SAND AND GRAVEL BEARING VALUE FROM TABLE 3 IS 3,000 LB/SF

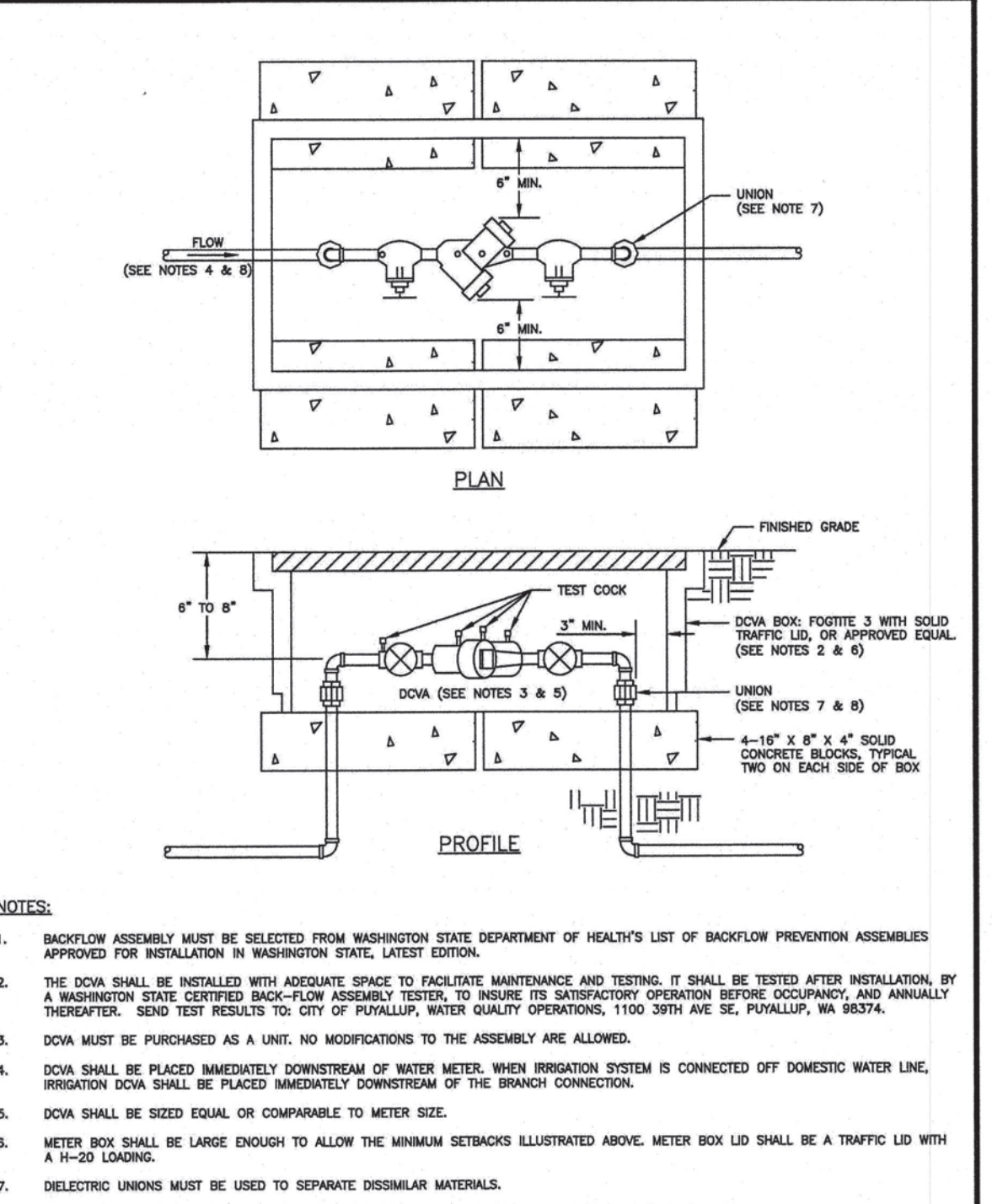
$59,978 \text{ LBS} \div 3,000 \text{ LB/SF} = 20 \text{ SF OF AREA}$

③ CONTRACTOR TO PROVIDE BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE

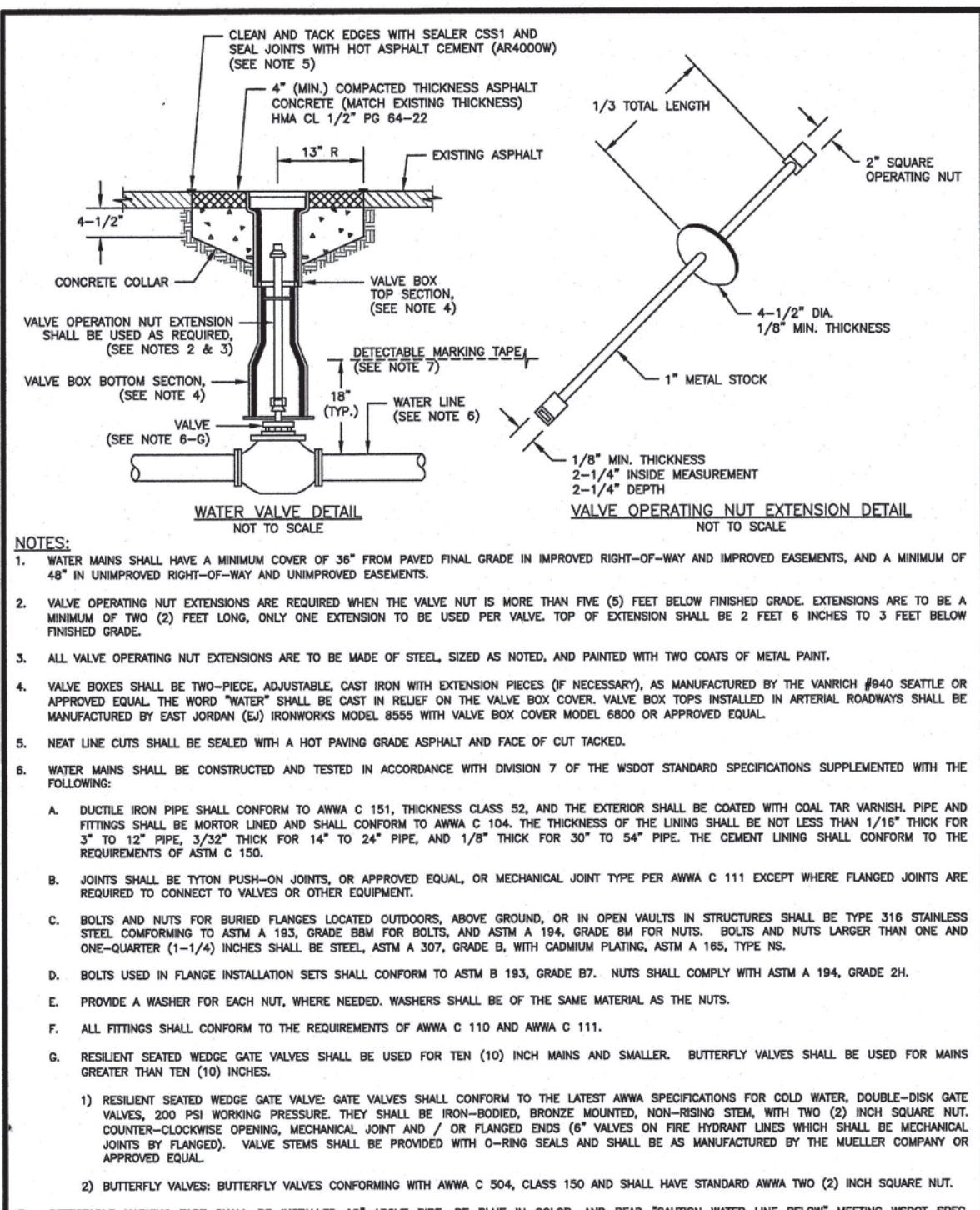
④ AREAS SHALL BE ADJUSTED FOR OTHER PRESSURE CONDITIONS.

⑤ NO WATER MAIN SHALL LEAK ENJOINT AGAINST A MAIN LINE VALVE, DEAD END WATER MAINS SHALL BE BLOCKED AGAINST A RESTRAINED MECHANICAL

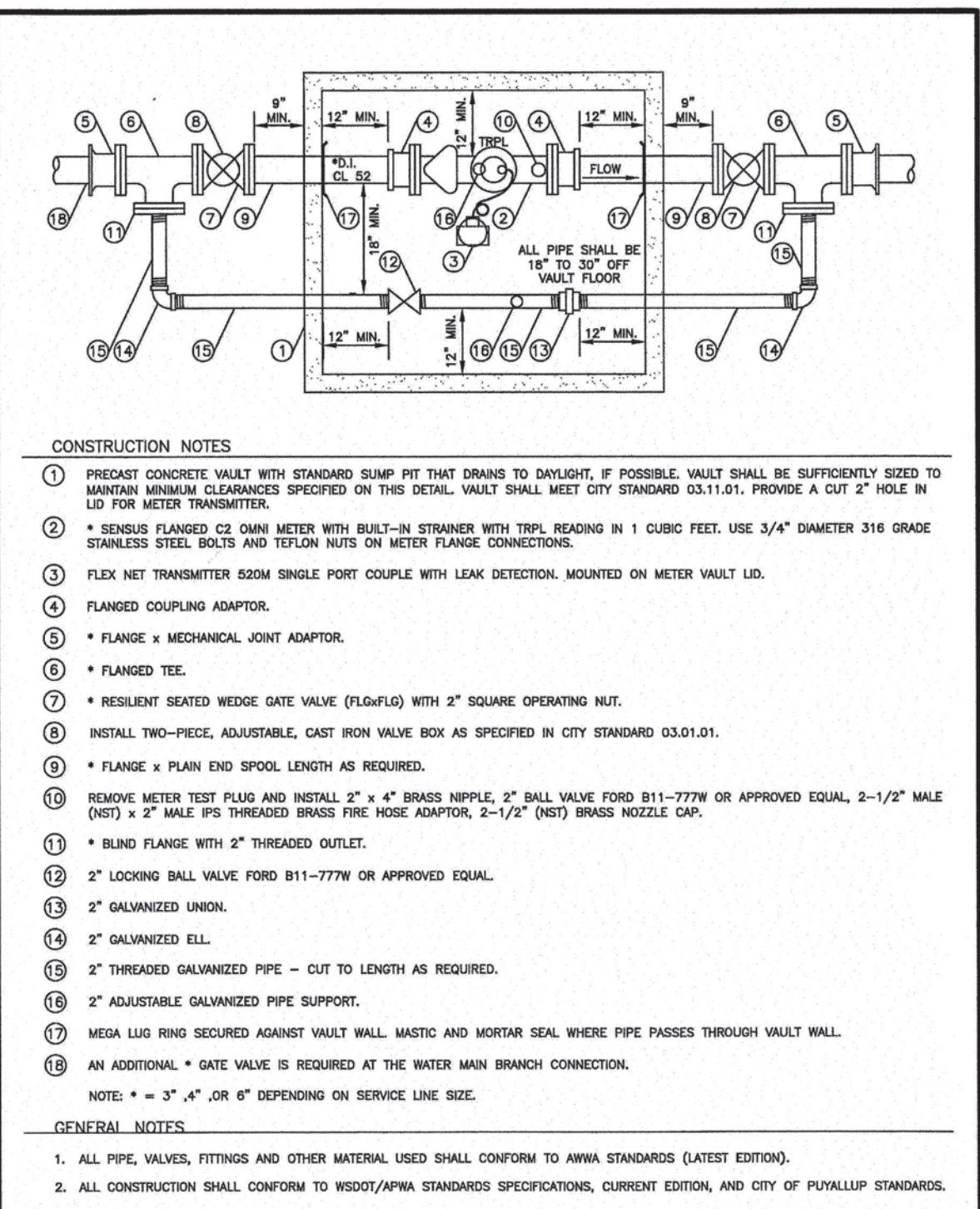
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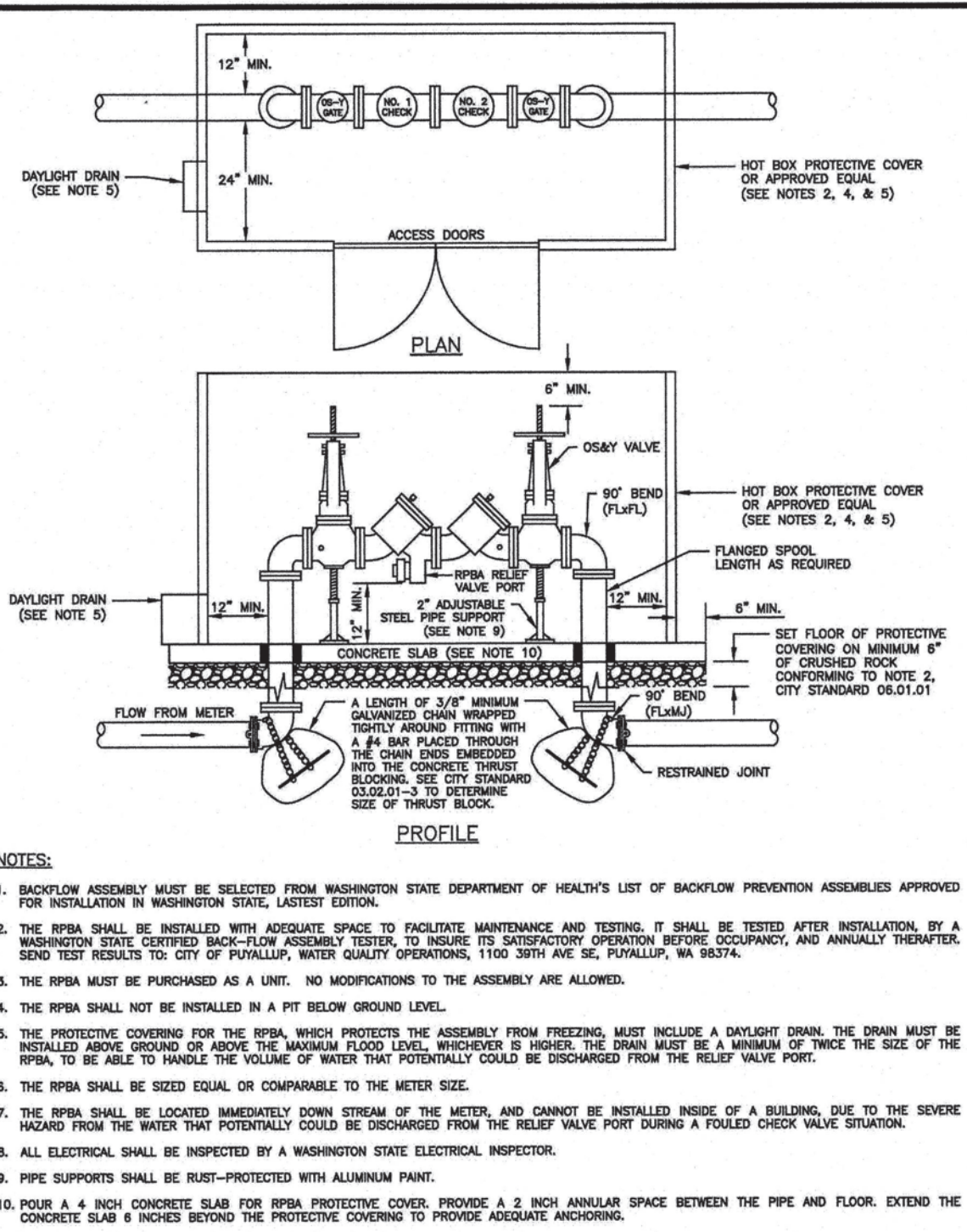
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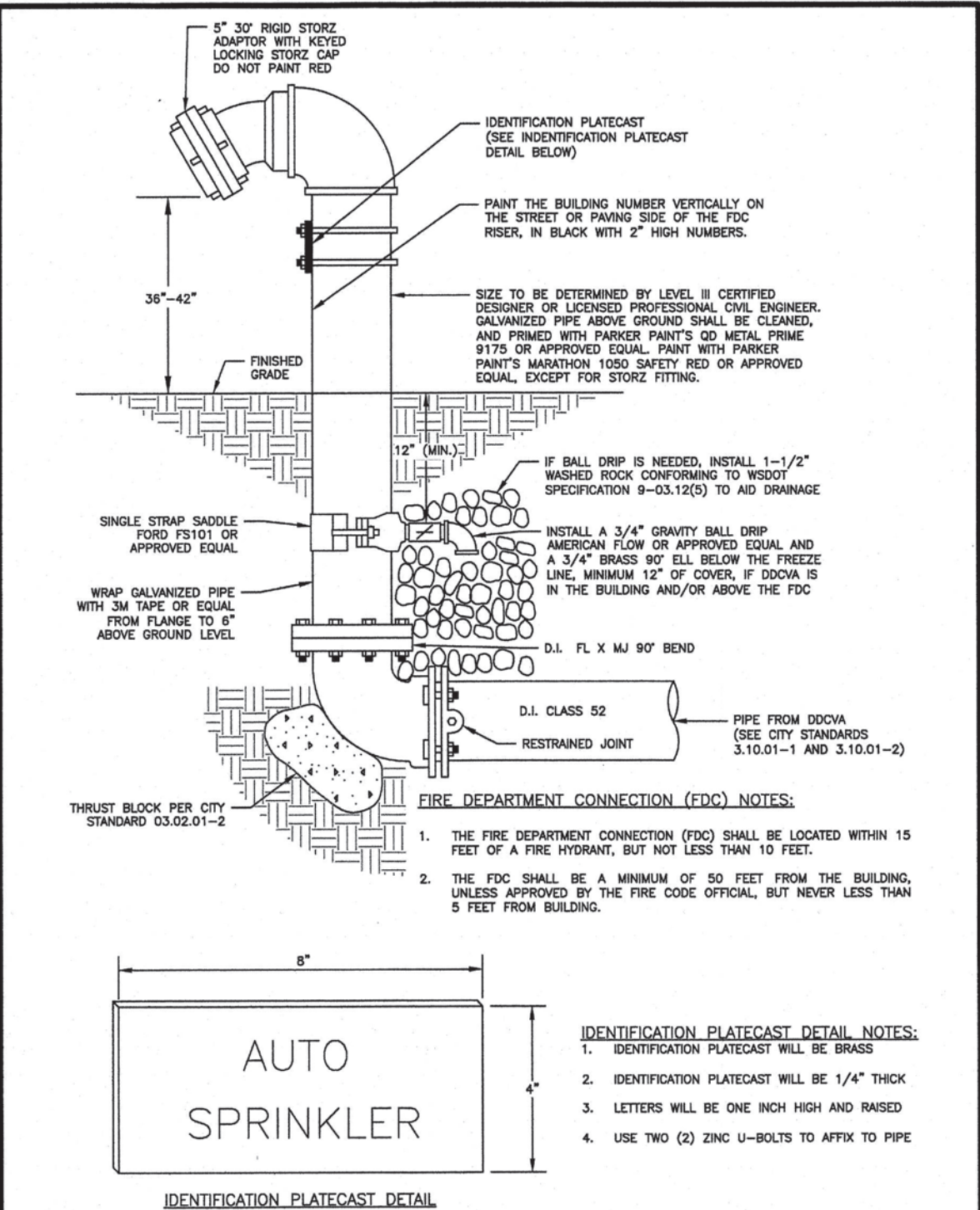
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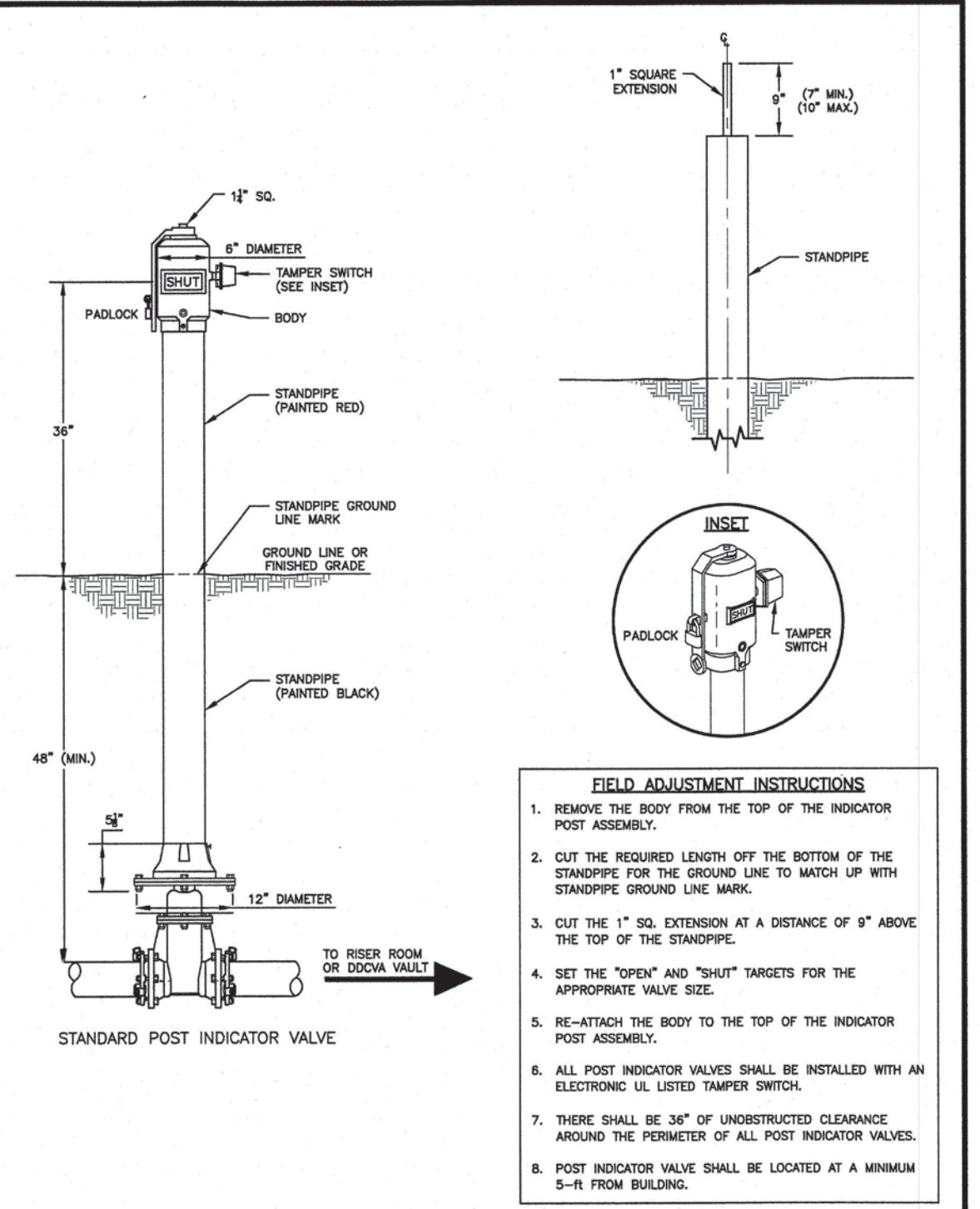
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CITY OF PUYALLUP OFFICE THE CITY ENGINEER	APPROVED FOR PUBLICATION DATE: 2/15/2019 NOT TO SCALE CITY STANDARD: 03.10.02
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






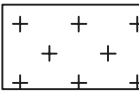
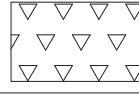



CITY OF PUYALLUP OFFICE THE CITY ENGINEER	APPROVED FOR PUBLICATION DATE: 2/15/2019 NOT TO SCALE CITY STANDARD: 03.10.03
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Project: OLSON BROTHERS STORAGE
Water Notes & Details
Designed: JEH
Checked: JEH
Scale: NTS
Date: 12/9/22
Job No.: 20083
Sheet No.: C8
8 of 20 Sheets

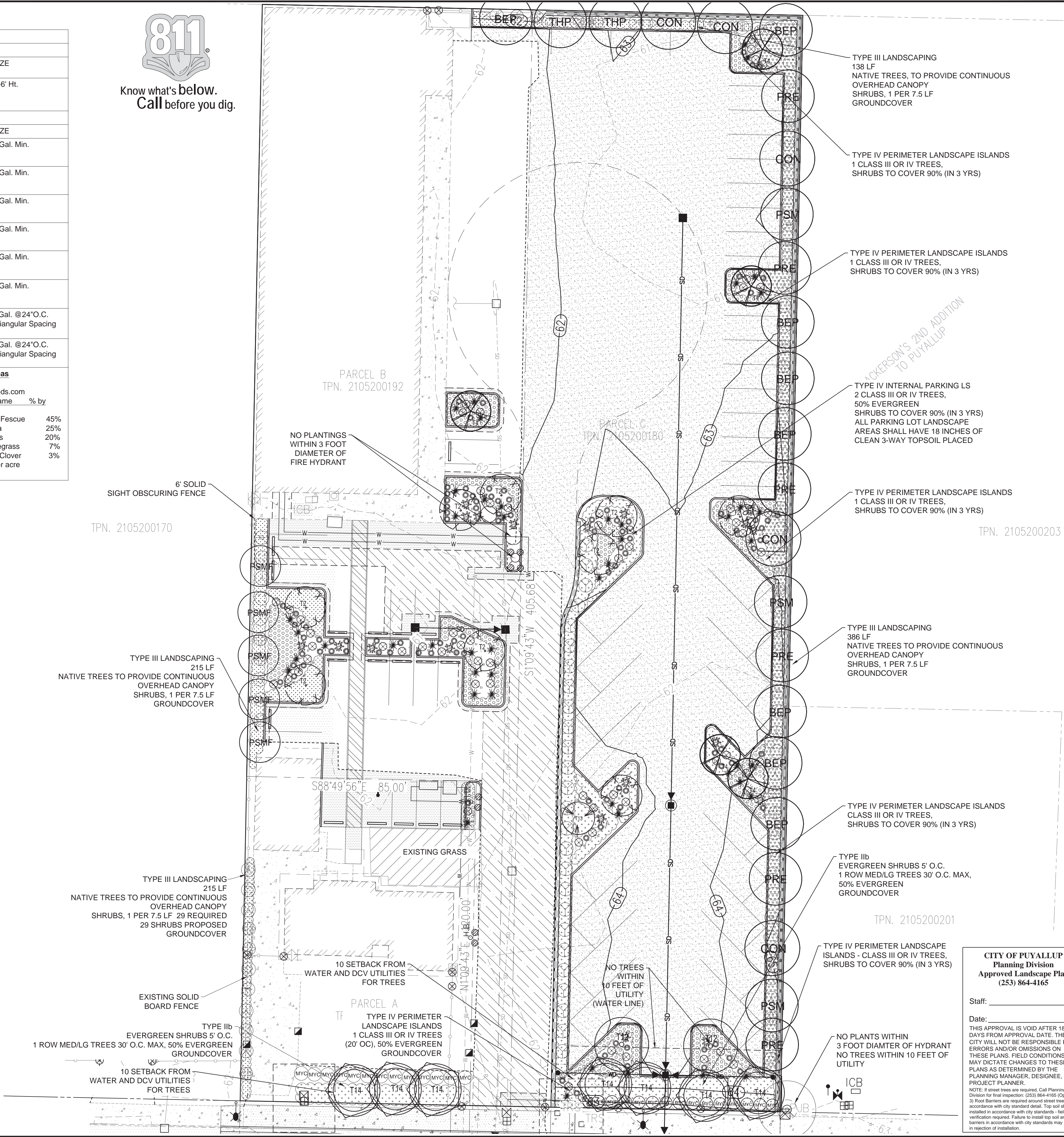
Client: GMITARCHITECTURE@GMAIL.COM
Mike Gritmit
C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 - 29TH ST. NE, SUITE D
PUYALLUP, WA 98072
PH: (206) 848-4282
ceservices@cesanwinc.com

Revision:
No.
Int.
Date:

TREES																					
SYMBOL	QTY	DESCRIPTION	SIZE																		
	3	Picea omorika Serbian Spruce	5'-6' Ht.																		
SHRUBS																					
SYMBOL	QTY	DESCRIPTION	SIZE																		
	3	Oemleria cerasiformis Indian Plum	2 Gal. Min.																		
	4	Mahonia aquifolium Tall Oregon Grape	2 Gal. Min.																		
	1	Philadelphica lewisii Mock Orange	2 Gal. Min.																		
	1	Rosa nutkana Nootka Rose	2 Gal. Min.																		
	2	Ribes sanguineum Flowering Red Currant	2 Gal. Min.																		
	13	Myrica californica Pacific Wax Myrtle	5 Gal. Min.																		
		Arctostaphylos uva-ursi Kinnikinnick	1 Gal. @24"O.C. Triangular Spacing																		
		Fragaria chiloensis Beach Strawberry	1 Gal. @24"O.C. Triangular Spacing																		
		Hydroseed for Typical Lawn Areas SUNMARK NATIVE ECOTURF- Sunmark Seeds www.sunmarkseeds.com <table><tr><th>Botanical Name</th><th>Common Name</th><th>% by Weight</th></tr><tr><td>Festuca rubra</td><td>Native Red Fescue</td><td>45%</td></tr><tr><td>Bouteloua gracilis</td><td>Blue Grama</td><td>25%</td></tr><tr><td>Buchate dactyloides</td><td>Buffalograss</td><td>20%</td></tr><tr><td>Koeleria macrantha</td><td>Prairie Junegrass</td><td>7%</td></tr><tr><td>Trifolium fragiferum</td><td>Strawberry Clover</td><td>3%</td></tr></table> 1 lbs per 1,000 SF or 43.67 lbs per acre		Botanical Name	Common Name	% by Weight	Festuca rubra	Native Red Fescue	45%	Bouteloua gracilis	Blue Grama	25%	Buchate dactyloides	Buffalograss	20%	Koeleria macrantha	Prairie Junegrass	7%	Trifolium fragiferum	Strawberry Clover	3%
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PRO VAC
2511/2515 INTER AVE
PUYALLUP, WA 98372

PROJECT.

REVISIONS:

REV B: REVISED PER NEW SITE LAYOUT
REV C: LS, PERMIT 1 & 2
REV E: REVISED PER NEW SITE PLAN LAYOUT
REV F: REVISED PER NEW STRM LAYOUT
REV G: REVISED PER AGENCY COMMENTS REGARDING
VEGETATION PLACEMENT AROUND UTILITIES
REV H: ADDED LOT 1 BACK INTO PLAN
REVISED PER AGENCY COMMENTS 10/26/2022

DRAWING ISSUED FOR:
AGENCY
REVIEW
DATE: DECEMBER 8, 2022



PROJECT NO.: 2057
FILE NAME: 2057LSI
-REFS: CIVIL
DRAWN BY: KLO
CHECKED BY: KLO
LOT SCALE: 1:1
DRAWING SCALES: 1:20

RAWING CONTENTS

LANDSCAPE

PLANTING PLAN

DRAWING NO.:

L1

ELECTRICAL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
LIGHTING		FIRE ALARM	
	SURFACE OR PENDANT MOUNT LIGHT FIXTURE (CIRCLE INDICATES RECESSED OR CONCEALED JUNCTION BOX)	FACP	FIRE ALARM / EMERGENCY COMMUNICATION SYSTEM CONTROL PANEL
	WALL MOUNT LIGHT FIXTURE	FAPS	FIRE ALARM SYSTEM POWER SUPPLY FOR NOTIFICATION DEVICES
	SURFACE OR RECESSED LIGHT FIXTURE	AES	AES WIRELESS TRANSCEIVER
	SURFACE OR PENDANT MOUNT STRIP LIGHT (CIRCLE INDICATES RECESSED OR CONCEALED JUNCTION BOX)	BAT	BATTERY CABINET
	EGRESS FIXTURE WITH EMERGENCY BATTERY PACK. PROVIDE UNSWITCHED HOT LEG.	FS	SPRINKLER SYSTEM FLOW SWITCH
	EXIT LIGHT FIXTURE (PROVIDE DIRECTION ARROWS AS INDICATED) PROVIDE UNSWITCHED HOT LEG.	TS	SPRINKLER SYSTEM TAMPER SWITCH
	WALL MOUNTED EXIT LIGHT FIXTURE (PROVIDE DIRECTION ARROWS AS INDICATED) PROVIDE UNSWITCHED HOT LEG.	M	FIRE ALARM / EMERGENCY COMMUNICATION SYSTEM MONITOR MODULE
RECEPTACLES			FIRE ALARM SMOKE DETECTOR
	DUPLEX RECEPTACLE (E INDICATES EXISTING TO BE REPLACED)	SWITCHES	
	DUPLEX RECEPTACLE (G INDICATES GROUND FAULT CIRCUIT INTERRUPTER)		SINGLE POLE SWITCH
	DUPLEX RECEPTACLE (C INDICATES ABOVE COUNTER)		DIMMING SWITCH - SINGLE POLE
	FOURPLEX RECEPTACLE		COMBINATION SWITCH / OCCUPANCY SENSOR
EQUIPMENT, WIRING AND RACEWAYS			THREE WAY SWITCH
	CONDUIT STUB OUT (PROVIDE CONCRETE MARKER ON EXTERIOR)		MULTI-GANGED SWITCH (LOWER CASE LETTERS INDICATES SWITCHING)
	DEDICATED CONDUIT HOMERUN TO PANEL & CIRCUIT NUMBERS AS INDICATED ON PLANS		PHOTOCELL CONTROL
	RACEWAY CONCEALED IN WALL OR CEILING		CEILING MOUNTED OCCUPANCY SENSOR (LIGHTING CONTROL) - HB INDICATES HIGH BAY SENSOR
	RACEWAY CONCEALED UNDERGROUND OR UNDER FLOOR SLAB, P = PRIMARY , S = SECONDARY	MISCELLANEOUS	
	MARKS INDICATE NUMBER OF #12 AWG UNLESS NOTED OTHERWISE		CONSTRUCTION NOTES
	GROUNDING CONDUCTOR		DEMOLITION NOTES
	GROUNDING SYSTEM PER CODE		ALL DEVICES WITH LIGHT LINE WEIGHT INDICATES EXISTING TO BE RETAINED
	JUNCTION BOX - SIZE PER CODE (F INDICATES FIRE ALARM SYSTEM)		ALL DEVICES WITH DASH LINE INDICATES EXISTING TO BE REMOVED
	EXHAUST FAN		DETAIL CALL OUT - A INDICATES DETAIL IDENTIFICATION, X INDICATES SHEET DRAWN ON
	MOTOR CONNECTION		MECHANICAL EQUIPMENT CONNECTION

ELECTRICAL ABBREVIATIONS	
AWG	AMERICAN WIRE GUAGE
C	MOUNT ABOVE COUNTER
C.	CONDUIT
CO	CONDUIT ONLY
CU	COPPER
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
FA	FIRE ALARM
FLA	FULL LOAD AMPERE(S)
G	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
KVA	KILOVOLT-AMPERE(S)
KW	KILOWATT(S)
LED	LIGHT-EMITTING DIODE(S)
LTG	LIGHTING
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NTS	NOT TO SCALE
RECPT	RECEPTACLE
SL	SURFACE MOUNTED LED LIGHT FIXTURE
UG	UNDER GROUND
V	VOLT(S)
VA	VOLT-AMPERE(S)
W	WEATHERPROOF
XFMR	TRANSFORMER

E-001

GRMIT ARCHITECTURE
MICHAEL P. GRMIT, ARCHITECT
516 WANA WANA PLACE NORTHEAST
TACOMA, WA. 98422-1732

OLSON BROTHERS PRO-VAC, LLC
BUILDING REMODEL
2505, 2511, 2515 INTER AVENUE
PUYALLUP, WA. 98373

ELECTRICAL LEGEND
AND LIGHTING
FIXTURE SCHEDULE

OCTOBER 30, 2020

GENERAL NOTES FOR LIGHTING FIXTURE SCHEDULE						
1. SEE DRAWINGS FOR EMERGENCY LIGHTING FIXTURES.						
2. FOR LIGHTING CONTROLS WHICH INCLUDE DAYLIGHT, OCCUPANCY SENSORS AND TIME CLOCK CONTROLS, THE ELECTRICAL CONTRACTOR SHALL PROVIDE TESTING OF THE CONTROL DEVICES, COMPONENTS, EQUIPMENT AND SYSTEMS TO MAKE SURE THEY ARE CALIBRATED, ADJUSTED AND OPERATE IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS. SEQUENCES OF OPERATION SHALL BE FUNCTIONALLY TESTED IN THE PRESENCE OF THE ENGINEER. A COMPLETE REPORT OF TEST PROCEDURES AND RESULTS SHALL BE PREPARED AND FILED WITH THE OWNER.						
LIGHTING FIXTURE SCHEDULE						
SYMBOL	FIXTURE DESCRIPTION	MANUFACTURER/MODEL #	LAMPS	V	W	MOUNTING & REMARKS
EX1	EXIT SIGN	LITHONIA LHOMLED-RHQ-ELA-T-010300-SD	LED	120	3	WALL MOUNT. PROVIDE WITH INTEGRAL BATTERY PACK.
PL1	STREET LIGHT POLE FIXTURE	LEOTEK GCM1-60J-MV-2R-40K-GY-105-XX ARM-12 ARM	LED	120 257	65	30' POLE WITH COBRA HEAD STYLE FIXTURE. SEE STREET LIGHT POLE DETAILS AND ADDITIONAL INFORMATION ON SHEET E-701 AND E-702.
WL1	WEDGE WALL 2' LED LIGHT FIXTURE	AXIS/PRIME PWWLED-500-80-35-S-2-UNV	3500K	120	10	WALL MOUNT CENTERED ABOVE MIRROR LOCATION.

GENERAL DEMOLITION NOTES	
1.	IT IS THE CONTRACTOR'S RESPONSIBILITY TO INCLUDE ALL COSTS ASSOCIATED WITH NECESSARY DEMOLITION TO ALLOW THE NEW CONSTRUCTION SHOWN IN CONTRACT DOCUMENTS.
2.	THESE DOCUMENTS DELINEATE THE BASIC SCOPE OF WORK FOR THE REMOVAL OF EXISTING MATERIAL. THE DEMOLITION DRAWINGS AND NOTES ARE PROVIDED WITH THE INTENT TO GENERALLY DESCRIBE AREAS AND LIMITS OF WORK. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SITE AND CONDITIONS, AND SHALL NOT RELY SOLELY ON REVIEW OF THE BIDDING DOCUMENTS IN DETERMINING THE EXTENT OF DEMOLITION WORK REQUIRED. COORDINATION OF THESE DRAWINGS WITH REQUIREMENTS FOR CONTRACT WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.
3.	REMOVE ALL CABLES, CONDUCTORS, SURFACE RACEWAYS AND APPURTENANCES WHICH SERVE EXISTING EQUIPMENT TO BE DEMOLISHED.
4.	CONTRACTOR TO REMOVE AND DELIVER TO OWNER ALL DEVICES THAT ARE IDENTIFIED BY THE OWNER TO BE RETAINED. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO ASSURE THAT ALL ITEMS TO BE RETAINED ARE IDENTIFIED PRIOR TO THE START OF DEMOLITION. ALL ITEMS NOT SO IDENTIFIED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF SITE.
5.	ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR FOR ALL CUTTING, PATCHING & FINISH WORK.
6.	ANY INTERRUPTED CIRCUIT TO REMAIN SHALL BE MADE CONTINUOUS.

GENERAL CONSTRUCTION NOTES	
1.	ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SITE AND CONDITIONS, AND SHALL NOT RELY SOLELY ON REVIEW OF THE DOCUMENTS IN DETERMINING THE EXTENT OF WORK REQUIRED. COORDINATION OF THESE DRAWINGS WITH REQUIREMENTS FOR CONTRACT WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.
2.	CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND UTILITY FEES.
3.	PROVIDE CONDUIT SUPPORTS AS REQUIRED.
4.	FLEX CONNECTIONS SHALL BE MADE WITH STEEL, LIQUID TIGHT CONDUIT.
5.	PROVIDE A GROUND WIRE FOR ALL CIRCUITS.
6.	SEE EACH SHEET FOR ADDITIONAL GENERAL NOTES THAT ARE SPECIFIC TO AN AREA OR SHEET.
7.	PROVIDE MANUFACTURER APPROVED BACK BOXES IN AREAS WITH CEILINGS THAT ARE OPEN TO STRUCTURE. ALL CABLE/CONDUIT ROUTING SHALL USE THE EXISTING PATHS AS THE MAIN ROUTING PATH AS MUCH AS POSSIBLE BEFORE CROSSING INTO OTHER AREAS TO GET TO DEVICE LOCATIONS. LINE OF SIGHT ROUTING OF THE CABLE/CONDUITS WILL NOT BE ACCEPTABLE.
8.	ALL CONDUIT SHALL BE RUN PARALLEL OR PERPENDICULAR TO STRUCTURE.
9.	PROVIDE SURFACE-MOUNTED DEVICES AND THEIR ASSOCIATED SURFACE-MOUNT BACK BOXES AND SURFACE-MOUNTED METAL RACEWAY (WIREMOLD OR EQUAL) IN AREAS WITH CEILINGS THAT ARE OPEN TO STRUCTURE ON THE INTERIOR AND CONDUIT ON THE EXTERIOR. PAINT EACH BACKBOX , RACEWAY, AND CONDUIT TO MATCH THE ADJACENT SURFACE.
10.	WHERE OPEN CABLING IS PERMITTED BY CODE, EACH LOW VOLTAGE SYSTEM SHALL HAVE THEIR CABLES SUSPENDED SEPARATE FROM OTHER LOW VOLTAGE SYSTEMS (I.E. FIRE ALARM CABLES IN ONE J-HOOK, INTRUSION ALARM IN ANOTHER J-HOOK, AND SO ON). CATEGORY RATED TELECOMMUNICATIONS CABLING FOR DATA, VOICE, IP INTERCOM/CLOCK SPEAKER, CCTV AND ACCESS CONTROL MAY SHARE THE SAME J-HOOK AND PATHWAYS. IF EXISTING J-HOOK/CABLE TRAY IS ALREADY FULL, THEN NEW J-HOOK/CABLE TRAY SYSTEM SHALL BE PROVIDED FOR WIRING THIS PROJECT.
11.	ALL TYPICAL DEVICES SHALL BE MOUNTED AT CONSISTENT LOCATIONS AND HEIGHTS THROUGHOUT THIS PROJECT, UNLESS NOTED OTHERWISE.
12.	FIRE ALARM DEVICES ARE SHOWN FOR GENERAL COMPLIANCE PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE TO DESIGN AND PROVIDE A COMPLETE SYSTEM THAT IS IN COMPLIANCE WITH CITY OF PUYALLUP REQUIREMENTS.

DIVISION 26 - ELECTRICAL SPECIFICATIONS	
<u>SECTION 26 00 00 - ELECTRICAL GENERAL CONDITIONS</u> <ul style="list-style-type: none">THE ELECTRICAL CONTRACTOR SHALL CONFORM TO THE GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, AND RELATED WORK IN OTHER DIVISIONS FOR ALL WORK IN DIVISION 26, 27 AND 28.THE WORK SHALL COMPLY WITH THE LATEST EDITION OF THE APPLICABLE STANDARDS AND CODES OF THE FOLLOWING: ASTM, NBFU, NEC, WAC, NESC, NEMA, NFPA, U.L., IPCEA, CBM, ETL.THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LICENSES, PERMITS AND INSPECTIONS REQUIRED BY LAWS, ORDINANCES AND RULES GOVERNING WORK.THE CONTRACTOR SHALL MAINTAIN A SET OF AS-BUILT DRAWINGS.THE CONTRACTOR SHALL PROVIDE A WRITTEN WARRANTY OF WORKMANSHIP FOR A 12 MONTH PERIOD.THE CONTRACTOR SHALL PROVIDE CLOSEOUT DOCUMENTS AS REQUIRED BY THE WASHINGTON STATE ENERGY CODESHOP DRAWINGS AND OPERATION AND MAINTENANCE MANUALS SHALL BE SUBMITTED IN ACCORDANCE WITH DIVISION 1 SPECIFICATIONS.	
<u>SECTION 26 05 19 - WIRES AND CABLES</u> <ul style="list-style-type: none">ALL WIRING SHALL BE COPPER THW OR THHN.MC CABLE MAY BE USED FOR BRANCH CIRCUITS UP TO 30 AMPS.CONDUCTORS SHALL BE TESTED WITH A "MEGGER" TYPE TESTER. FEEDERS SHALL BE CHECKED TO ENSURE PHASE ROTATIONS FOR MOTORS AND EQUIPMENT.	
<u>SECTION 26 05 26 - GROUNDING</u> <ul style="list-style-type: none">A GROUNDING SYSTEM SHALL BE PROVIDED FOR NEUTRAL GROUND AND EQUIPMENT GROUND AS REQUIRED BY CODE.PROVIDE GROUND WIRE IN ALL CONDUITS.METAL INTERNAL PIPING SHALL BE GROUNDED.	
<u>SECTION 26 05 32 - OUTLETS AND PULL BOXES</u> <ul style="list-style-type: none">OUTLET AND PULL BOXES SHALL BE PRESSED STEEL, ZINC COATED, 4" SIZE MINIMUM.ALL WORK IN THIS SECTION SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS.DEVICE MOUNTING HEIGHTS SHALL BE AS FOLLOWS: SWITCHES - 4 FEET; RECEPTACLES - 18 INCHES; OTHER DEVICES AS NOTED ON PLANS OR IN OTHER SECTIONS OF THE SPECIFICATIONS.	

<u>SECTION 26 05 33 - RACEWAY</u> <ul style="list-style-type: none">ALL RACEWAYS SHALL BE GRS, IMC, OR EMT UNLESS NOTED OTHERWISE.PVC CONDUIT MAY BE USED FOR UNDERGROUND RACEWAYS.FLEXIBLE CONDUITS SHALL BE PERMITTED IN 6 FOOT LENGTHS TO MOTORS AND LAY-IN LIGHT FIXTURES. UTILIZE LIQUID TIGHT FLEXIBLE METAL CONDUIT IN UP TO 6 FOOT LENGTHS FOR EXTERIOR MOTOR CONNECTIONS.	
<u>SECTION 26 27 26 - SWITCHES AND RECEPTACLES</u> <ul style="list-style-type: none">SWITCHES SHALL BE SPECIFICATION GRADE, QUIET TYPE, WHITE COLOR WITH IMPACT RESISTANT WHITE NYLON PLATES.STANDARD AND GFCI RECEPTACLES SHALL BE HEAVY DUTY TYPE NEMA 5-20R CONFIGURATION, WHITE COLOR WITH IMPACT RESISTANT WHITE NYLON PLATES.	

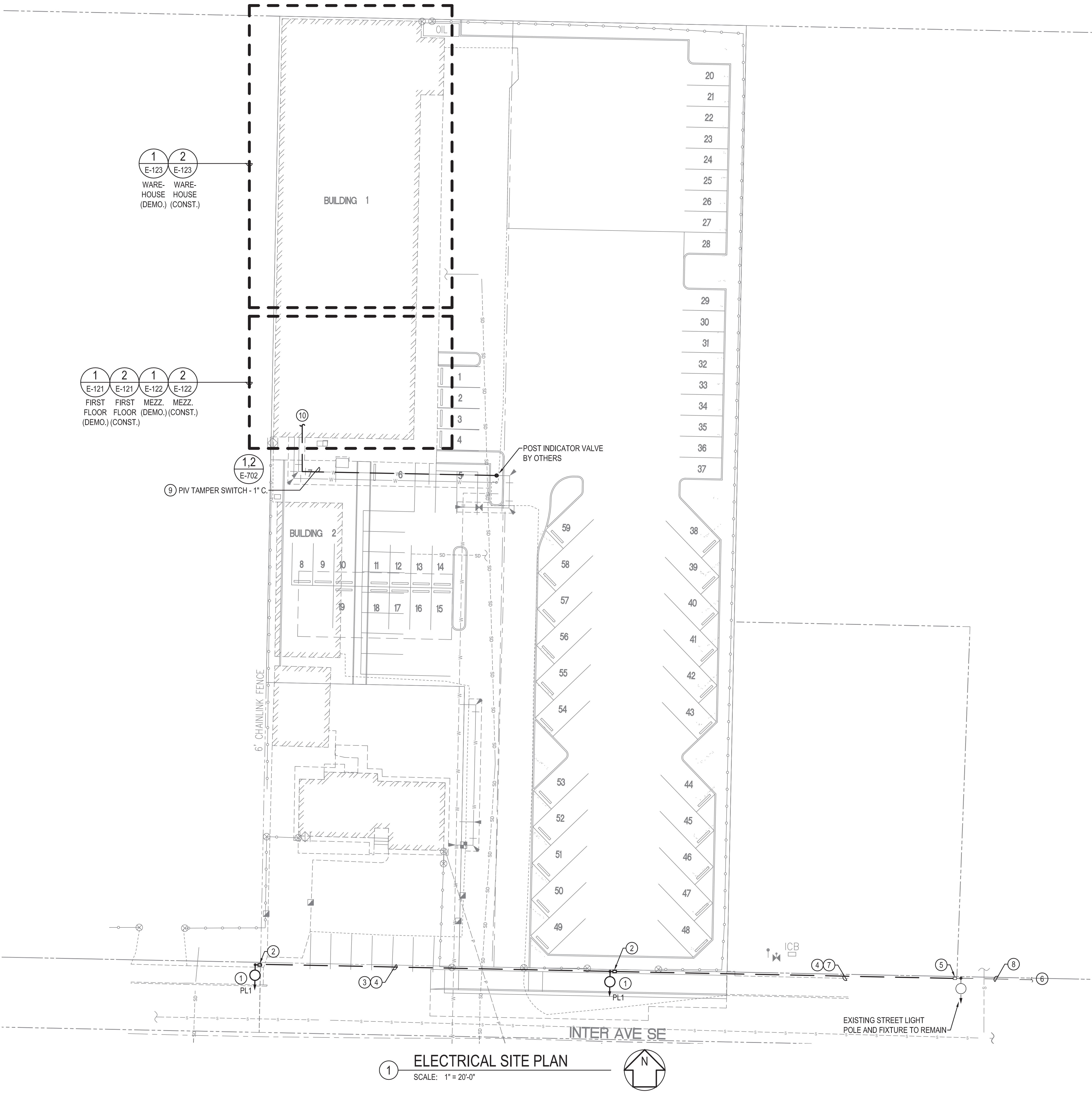
<u>SECTION 26 50 00 - LIGHTING</u> <ul style="list-style-type: none">LUMINAIRE TYPE SHALL BE LED WITH A MINIMUM L70 RATING OF 50,000 HOURS.MINIMUM CRI SHALL BE 80.DRIVERS SHALL BE RATED FOR 50,000 HOURS AND SELECTED TO MATCH CONTROLS AND BE DIMMING OR STATIC AS REQUIRED.OCCUPANCY/VACANCY SENSORS SHALL BE DUAL TECHNOLOGY CEILING MOUNTED TYPE.	
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FIRE ALARM SYSTEM GENERAL NOTES	
1.	PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, DESIGN AND PROGRAMMING FOR THE <i>INSTALLATION OF A COMPLETE, ADDRESSABLE LOW VOLTAGE 24 VOLT D.C., FULLY OPERATIONAL FIRE ALARM SYSTEM</i> ; ALL EQUIPMENT PROVIDED FOR THIS PROJECT SHALL BE NEW, CURRENTLY MANUFACTURED, AND SHALL BE DELIVERED TO THE PROJECT SITE WITH THE ORIGINAL FACTORY SEAL INTACT. MATERIALS AND WORKMANSHIP SHALL FULLY COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.F.P.A. #70), NATIONAL FIRE ALARM AND SIGNALING CODE (N.F.P.A. #72), THE LAWS AND REGULATIONS OF WASHINGTON STATE, THE CITY OF PUYALLUP MUNICIPAL CODE.
1.1.	THIS BUILDING IS WITHIN THE CITY OF PUYALLUP CITY LIMITS. PER THE CITY OF PUYALLUP MUNICIPAL CODE THE FIRE ALARM SYSTEM SHALL BE TOTAL COVERAGE SMOKE DETECTION IN ALL SPACES PER NFPA #72.
1.2.	THE NICET DESIGNER SHALL BE RESPONSIBLE FOR DESIGN, LAYOUT, AND COORDINATION OF SMOKE DETECTION COVERAGE IN ALL CONCEALED SPACES PER NFPA #72
1.3.	THE CITY OF PUYALLUP REQUIRES THAT THE FIRE ALARM SYSTEM CONTRACTOR SHOW SECTION VIEWS OF ALL INTERSTITIAL SPACES, ABOVE CEILING GRID, ABOVE CEILING HARD LIDS, BEAM POCKETS ABOVE AND BELOW CEILINGS, CLOUDS, AND ROOF SLOPE FOR ATTIC DETECTION.
1.4.	TOTAL COVERAGE IS DEFINED IN SECTION 17.5.3.1 OF NFPA #72
1.4.1.	17.5.3.1 TOTAL (COMPLETE) COVERAGE. WHERE REQUIRED BY LAWS, CODES, OR STANDARDS, AND UNLESS OTHERWISE MODIFIED BY 17.5.3.1.1 THROUGH 17.5.3.1.5, TOTAL COVERAGE SHALL INCLUDE ALL ROOMS, HALLS, STORAGE AREAS, BASEMENTS, ATTICS, LOFTS, SPACES ABOVE SUSPENDED CEILINGS, AND OTHER SUBDIVISIONS AND ACCESSIBLE SPACES, AS WELL AS THE INSIDE OF ALL CLOSETS, ELEVATOR SHAFTS, ENCLOSED STAIRWAYS, DUMBWAITER SHAFTS, AND CHUTES.
1.5.	CITY OF PUYALLUP MUNICIPAL CODE 17.16.070 INSTALLATION REQUIREMENTS.
1.5.1.	THE FIRE ALARM SYSTEM SHALL BE DESIGNED TO "TOTAL COVERAGE" PER NFPA 72 UNLESS A LESSER COVERAGE IS APPROVED BY THE FIRE CODE OFFICIAL. (ORD. 2801 § 6, 2004).
1.6.	SHOP DRAWINGS
1.6.1.	PREPARE DETAILED WORKING DRAWINGS FOR THE SYSTEM LAYOUT IN ACCORDANCE WITH N.F.P.A. #72 AND THE FOLLOWING:
1.6.1.1.	SHOP DRAWING REQUIREMENTS: THE INSTALLING VENDOR'S/CONTRACTOR'S COMPLETE AND FULL-SIZE SET OF SHOP DRAWINGS SHALL BE ISSUED IN THE FOLLOWING FORMAT: <ul style="list-style-type: none">THEY SHALL BE CLEAR AND LEGIBLE.THE SAME SHEET SIZE AS THE CONTRACT DRAWINGS (I.E. 30" X 42").A MINIMUM OF 1/8" TEXT HEIGHT SHALL BE USED FOR ALL TEXT, SYMBOL TEXT, AND SUBSCRIPT TEXT.SCALE OF DRAWINGSANY SITE PLAN DRAWINGS SHALL BE THE SAME SCALE AS ISSUED IN THE CONTRACT DOCUMENTS.FLOOR PLAN DRAWINGS SHALL BE 1/8"=1'-0", UNLESS DIRECTED TO DO OTHERWISE.THE ELECTRICAL LEGEND, WIRE LEGEND, LOAD AND BATTERY CALCULATIONS, RISER DIAGRAM, SEQUENCE OF OPERATION INFO, WIRING DETAILS, AND MOUNTING DETAILS SHALL PRECEDE THE SITE PLANS AND FLOOR PLANS.ALL SHEETS, INCLUDING THE COVER, SHALL INCLUDE A TITLE BLOCK ALONG THE EDGE OF EACH OF THE DRAWINGS THAT, WHEN THE DRAWINGS ARE ROLLED UP, THE FOLLOWING INFORMATION SHALL BE VISIBLE:<ul style="list-style-type: none">THE SYSTEM-SPECIFIC SHEET NUMBERPROJECT NAME, SPECIFICATION SECTION NUMBER AND SECTION TITLE NAMEFLOOR NAME, AREA, AND/OR SECTION OF THE BUILDING (USE THE NAME OF THE AREA AND/OR FLOOR DESCRIPTION THAT IS ON THE CONTRACT DRAWINGS.)ARCHITECTURAL INFORMATION ON THE CONTRACT DRAWINGS SHALL BE INCLUDED ON THE INSTALLING VENDOR'S/CONTRACTOR'S SHOP DRAWINGS, INCLUDING, BUT NOT LIMITED TO: MATCH LINES, GRID LINES, GRID BUBBLES, KEY PLAN, AND ENLARGED FLOOR PLANS.
2.	COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL WALL MOUNTED DEVICES WITH ARCHITECTURAL ELEVATIONS.
3.	CORE DRILLED HOLES SHALL NOT PENETRATE THROUGH ANY STRUCTURAL BEAMS, REBAR CONCRETE SLABS, AND / OR WALLS THAT MAY COMPROMISE THE STRUCTURAL INTEGRITY OF THE BUILDING.
4.	WHEN PENETRATING FIRE RATED WALLS, FLOORS, OR CEILINGS, THE CONTRACTOR SHALL UTILIZE APPROVED FIRE RATED PENETRATION METHODS. THE FIRE RATING OF THE WALLS, FLOORS, OR CEILINGS SHALL BE MAINTAINED AFTER THE CONDUIT HAS BEEN INSTALLED.
5.	PRIOR TO ROUGH-IN, COORDINATE EXACT LOCATIONS OF FIRE ALARM APPLIANCES AND DEVICES WITH THE GENERAL ELECTRICAL, MECHANICAL, AND FIRE PROTECTION CONTRACTORS.
6.	THE GENERAL CONTRACTOR AND FIRE ALARM SYSTEM CONTRACTOR SHALL COORDINATE ALL CUTTING, PATCHING AND FINISH WORK.
7.	ALL MANUAL PULL STATIONS SHALL BE DUAL ACTION, KEY OPERABLE. THE USE OF BREAK GLASS FRONT STATIONS ARE NOT ALLOWED.
8.	EACH NEW WATER FLOW SWITCH, PRESSURE SWITCH, OR TAMPER SWITCH SHALL HAVE A SEPARATE AND UNIQUE ADDRESS.
9.	ALL DEVICES AND DETECTOR BASES SHALL BE PERMANENTLY AND CLEARLY LABELED WITH THE DEVICE ZONE AND DEVICE NUMBER IN CIRCUIT IN A READILY VISIBLE LOCATION DIRECTLY ON THE DEVICE.

FIRE ALARM SYSTEM CABLING AND CONDUIT REQUIREMENTS	
1.	ALL INITIATING AND NOTIFICATION CIRCUITS SHALL BE "CLASS B" WIRING.
2.	ALL "CLASS B" WIRING CIRCUITS SHALL BE PROVIDED WITH AN "END-OF-LINE" RESISTOR INSTALLED AT THE END OF EACH CIRCUIT.
3.	THE USE OF T-TAPPING IS NOT ALLOWED ON I.D.C. (INITIATING DEVICE CIRCUIT) CIRCUITS. T-TAPPING IS NOT ALLOWED ON ANY CIRCUIT REQUIRING AN END OF LINE RESISTOR.
4.	ALL WIRE TERMINATIONS SHALL BE BY USE OF WIRE NUTS OR SCREW TYPE TERMINATION BLOCKS.
5.	THE USE OF CRIMPED CONNECTORS, TWISTING OF WIRES, ETC. SHALL NOT BE ALLOWED IN J-BOXES, TERMINAL CABINETS, OR ENCLOSURES.
6.	ALL WIRES OUTSIDE OF J-BOXES, TERMINAL CABINETS, OR ENCLOSURES SHALL BE FREE OF SPLICES.
7.	CONDUITS SHALL BE CONCEALED IN CEILING SPACES, WALLS, AND OTHER AREAS WHEREVER POSSIBLE.
8.	ALL CONDUIT SHALL BE INSTALLED IN A PARALLEL OR PERPENDICULAR FASHION THAT IS TIGHT TO STRUCTURE. THE CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING WITH OTHER TRADES.
9.	FIRE ALARM CABLING INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE ALLOWED TO BE INSTALLED AS OPEN CABLING. PROVIDE "D" RING HANGER FOR ALL OPEN CABLING AT A MAXIMUM SPACING OF 5'-0" ON CENTER.
10.	CABLING THAT IS INSTALLED IN WALLS, CABLING THAT IS INSTALLED BELOW 8'-0" IN ELEVATION THAT IS SUBJECT TO DAMAGE, AND CABLING THAT IS INSTALLED ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED IN CONDUIT.
11.	CONDUITS PASSING THROUGH BUILDING EXPANSION JOINTS OR BUILDING SEISMIC JOINTS SHALL HAVE JUNCTION BOXES AT EACH SIDE OF THE EXPANSION / SEISMIC JOINT. PROVIDE SECTION OF FLEXIBLE CONDUIT BETWEEN JUNCTION BOXES AND GROUNDING BUSHINGS WITH #12 GROUNDING CABLE TO MAINTAIN CONTINUITY BETWEEN ALL (2) JUNCTION BOXES. PROVIDE FLEX CONDUIT AND GROUNDING CABLE OF SUFFICIENT LENGTH TO ACCOMMODATE THE CALCULATED BUILDING MOVEMENT PLUS 6" OF ADDITIONAL MOVEMENT. PROVIDE QUANTITIES AS REQUIRED.
12.	ALL EXPOSED SURFACE MOUNTED RACEWAYS IN FINISHED SPACES BELOW 8'-0" IN ELEVATION SHALL BE A MINIMUM OF SERIES 700 METAL WIREMOLD OR EQUAL. THE INSTALLATION OF EXPOSED ELECTRICAL METALLIC TUBING (EMT) IN FINISHED SPACES BELOW 8'-0" IN ELEVATION WILL NOT BE ALLOWED.
13.	CONDUITS SHALL NOT EXCEED FILL RATING OF 40% AS DEFINED BY THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (N.F.P.A. #70). PROVIDE SIZES AND QUANTITIES AS REQUIRED.
14.	WHERE EXPOSED TO VIEW IN FINISHED SPACES, PAINT ALL NEW CONDUITS, MOUNTING HARDWARE, AND RACEWAYS TO MATCH THE ADJACENT SURFACES.
15.	ALL NEW FIRE ALARM SYSTEM JUNCTION BOXES SHALL BE PAINTED RED AND ANNOTATED "FIRE ALARM POWER LIMITED" ON THE COVER IN BLACK BOLD PRINT HAVING MINIMUM CHARACTER FONT SIZE ¼" TALL X ¾" WIDE.

FIRE ALARM SYSTEM AUDIBILITY REQUIREMENTS	
1.	THE FIRE ALARM SYSTEM CONTRACTOR SHALL PERFORM AUDIBILITY TESTING IN EACH SPACE OF THE BUILDING PRIOR TO ACCEPTANCE TESTING. DOCUMENTATION OF DECIBEL (dB) VALUES RECORDED IN ALL SPACES SHALL BE PROVIDED TO THE ARCHITECT / ENGINEER PRIOR TO ACCEPTANCE TESTING. <ul style="list-style-type: none">DECIBEL READINGS SHALL BE TAKEN AT A POINT 10'-0" FROM THE APPLIANCE AT AN ELEVATION OF 5'-0" ABOVE FINISHED FLOOR.THE SOUND LEVEL SHALL BE A MINIMUM OF 15 DECIBELS (dBs) ABOVE THE AVERAGE AMBIENT SOUND LEVEL.THE SOUND LEVEL SHALL BE A MAXIMUM OF 30 DECIBELS (dBs) ABOVE THE AVERAGE AMBIENT SOUND LEVEL.THE SOUND LEVEL SHALL BE A MINIMUM OF 5 DECIBELS (dBs) ABOVE THE MAXIMUM SOUND LEVEL HAVING A MINIMUM DURATION OF 60 SECONDS.IN SPACES THAT DO NOT MEET THE MINIMUM AUDIBLE (dB) VALUES, THE FIRE ALARM SYSTEM CONTRACTOR SHALL PROVIDE ADDITIONAL AUDIBLE NOTIFICATION APPLIANCES UNTIL THE MINIMUM DECIBEL (dB) VALUES ARE OBTAINED.

FIRE ALARM SYSTEM EQUIPMENT REQUIREMENTS	
1.	THE FIRE ALARM SYSTEM SHALL BE FULLY FUNCTIONAL WITHOUT THE USE OF PRIMARY POWER. THE FIRE ALARM SYSTEM SHALL BE PROVIDED WITH A MINIMUM OF 24 HOURS OF STANDBY OPERATION FOLLOWED BY AN ADDITIONAL 5 MINUTES OF ALARM OPERATION.
2.	ALL BATTERIES SHALL PROVIDE AT LEAST 25% SPARE CAPACITY.
3.	PROVIDE POWER SUPPLIES AS REQUIRED FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. THE FIRE ALARM SYSTEM CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ELECTRICAL CONTRACTOR FOR ALL POWER CONNECTIONS THE FIRE ALARM SYSTEM CONTRACTOR SHALL BE RESPONSIBLE FOR THE ELECTRICAL COSTS ASSOCIATED WITH ALL NON-COORDINATED POWER CONNECTIONS.
4.	PROVIDE 25% SPARE CAPACITY FOR NOTIFICATION POWER SUPPLIES.
5.	PROVIDE MULTIPLE INITIATING DEVICE CIRCUITS SO THAT FAILURE OF ONE CIRCUIT DOES NOT CAUSE THE FACILITY TO LOSE OVER 50% OF ITS DETECTION CAPABILITY PER FLOOR.
6.	EACH CIRCUIT SHALL HAVE A MAXIMUM OF 20 DEVICES PER ZONE.
7.	PROVIDE BATTERY CALCULATIONS FOR ALL FIRE ALARM SYSTEMS.



GENERAL NOTES

- SEE GENERAL NOTES ON SHEET E-002 AND STREET LIGHT POLE DETAILS ON SHEET E-701 AND E-702 FOR ADDITIONAL INFORMATION.
- FOR STANDARDIZATION, STREET LIGHTING DESIGN AND INSTALLATION SHALL BE BASED ON CITY OF PUYALLUP STREET LIGHTING STANDARDS.
- STREET LIGHTING FIXTURES AND JUNCTION BOX LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO STARTING WORK.
- ALL SITE WORK SHALL BE COORDINATED WITH PUGET SOUND ENERGY (PSE) PRIOR TO ROUGH-IN ANY WORK.
- COORDINATE ALL TRENCHING WITH CIVIL CONTRACTOR, PSE, TELECOMMUNICATIONS, CATV, GAS LINES, AND ALL OTHER UTILITIES.
- ALL STREET LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ANY NECESSARY EQUIPMENT AND DEVICES FOR A COMPLETE AND OPERATIONAL LIGHTING SYSTEM.

CONSTRUCTION NOTES

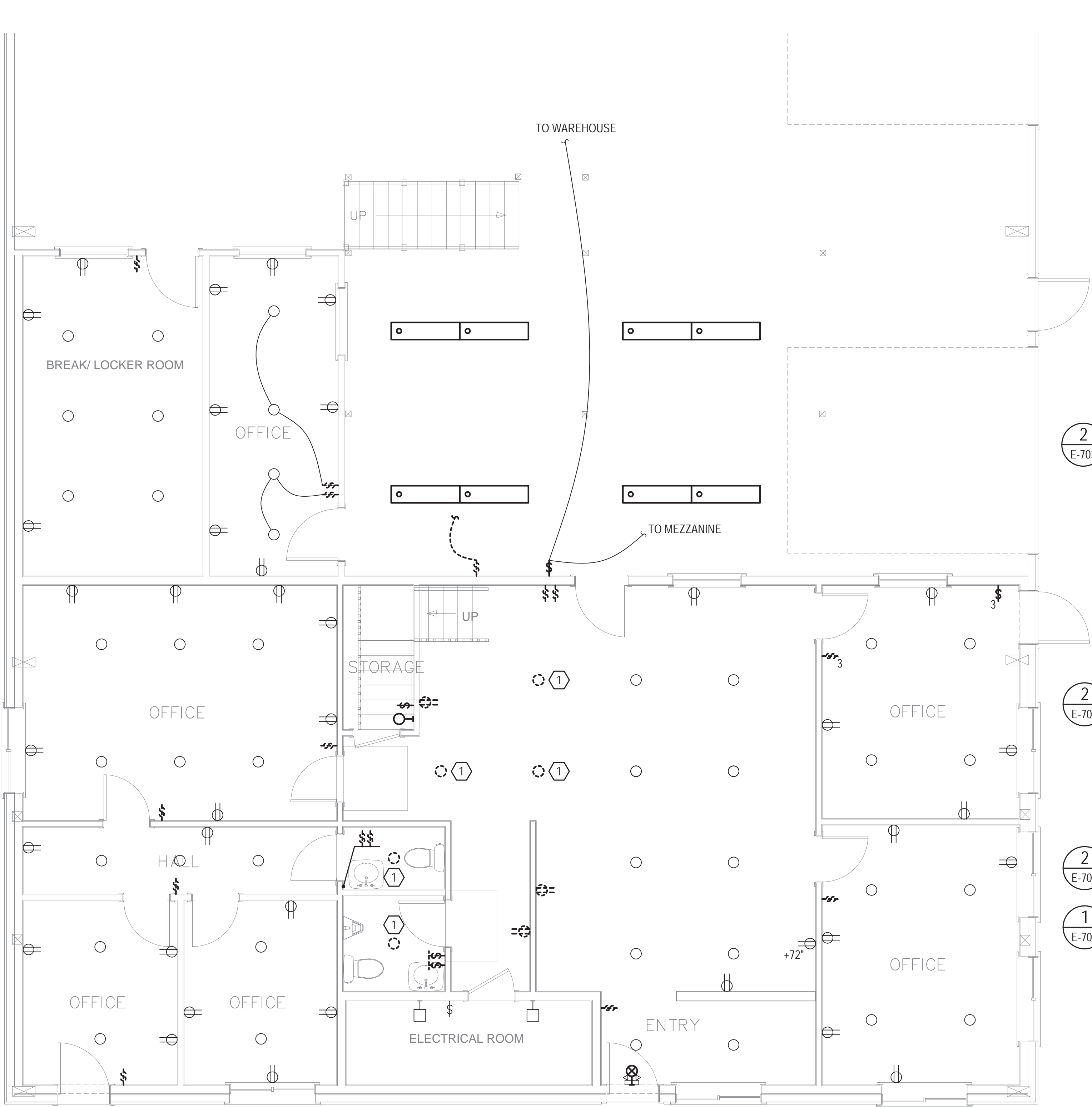
- ELECTRICAL CONTRACTOR SHALL MAINTAIN 150FT SPACING REQUIREMENT BETWEEN STREET LIGHTING POLES PER CITY OF PUYALLUP STANDARDS. FIELD VERIFY AND COORDINATE LIGHT POLE LOCATION WITH PSE AND CITY OF PUYALLUP PRIOR TO ROUGH-IN.
- PROVIDE TYPE 1 JUNCTION BOX WITH SLIP RESISTANT COATING AND 6" X 6" CONCRETE COLLAR PER CITY OF PUYALLUP STANDARDS.
- PROVIDE (1) 2" PVC SCHEDULE 80 CONDUIT - (2) #8 CU. & (1) #10 CU. GND. AND (1) 2" PVC SCHEDULE 80 CONDUIT - SPARE WITH PULLSTRING.
- PROVIDE SAW CUTTING, AS NECESSARY, AND REPAIR TRENCH AND EXISTING ROADWAY AS REQUIRED BY THE CITY OF PUYALLUP.
- INTERCEPT STREET LIGHTING CIRCUIT AT EXISTING HANDHOLE AND EXTEND APPROXIMATELY 150FT TO NEW STREET LIGHT.
- EXISTING CONNECTION TO TESCO SERVICE CABINET LOCATED APPROXIMATELY 600FT EAST OF SITE AT 2526 INTER AVENUE.
- PROVIDE (2) 2" PVC SCHEDULE 80 CONDUIT - (2) #8 CU. & (1) #10 CU. GND. AND (1) 2" PVC SCHEDULE 80 CONDUIT - SPARE WITH PULLSTRING.
- EXISTING TO REMAIN (1) 2" PVC SCHEDULE 80 CONDUIT - (2) #8 CU. & (1) #10 CU. GND. AND (1) 2" PVC SCHEDULE 80 CONDUIT - SPARE WITH PULLSTRING.
- PROVIDE 1" CONDUIT WITH NYLON PULL STRING FOR CONNECTION OF TAMPER SWITCH AT POST INDICATOR VALVE TO FIRE ALARM CONTROL PANEL. COORDINATE INSTALLATION WITH NEW WATER LINES. PROVIDE CUTTING AND PATCHING AS REQUIRED.
- SEE E-121 FOR CONTINUATION.

APPROVED

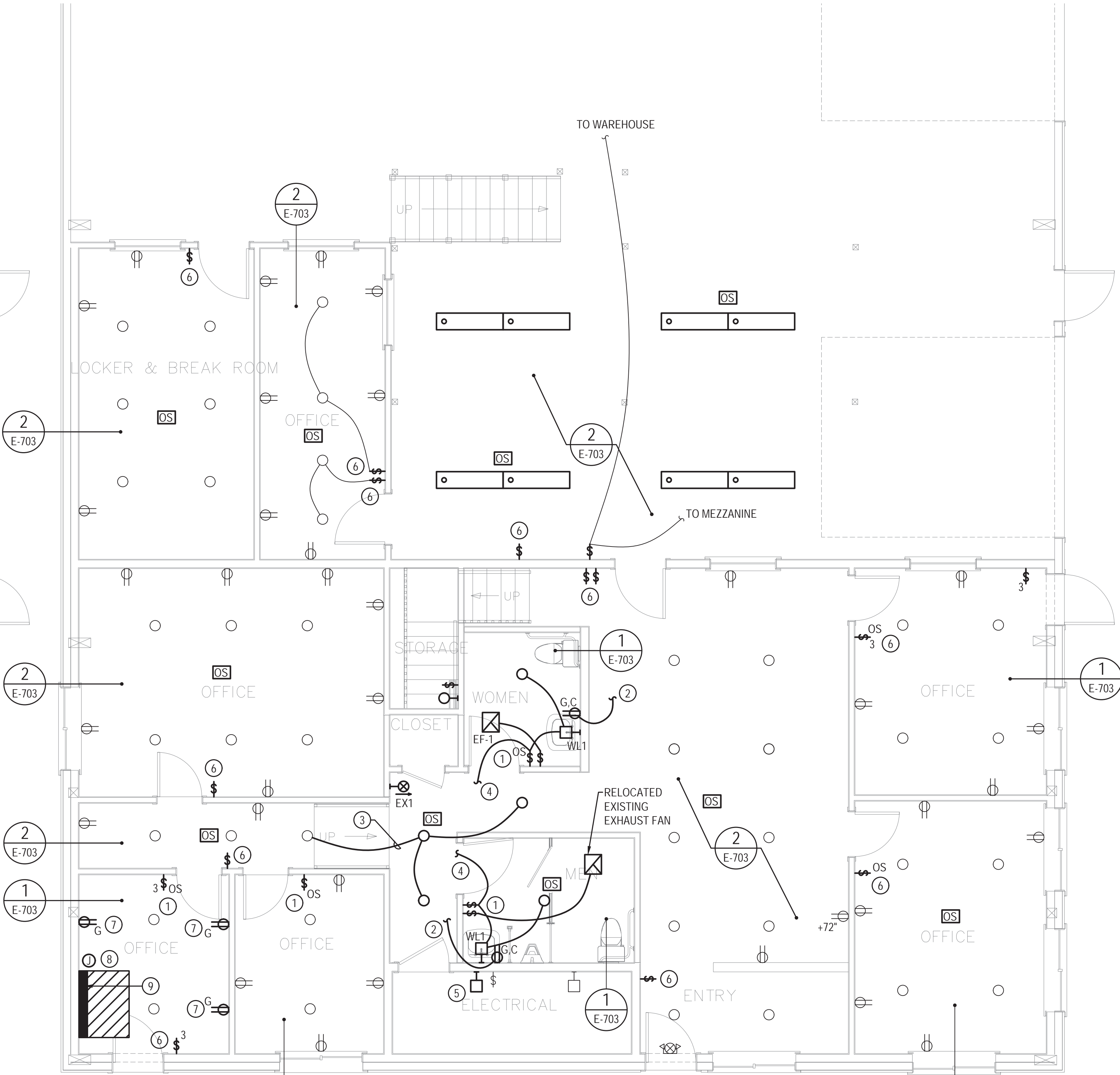
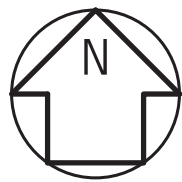
BY: CITY OF PUYALLUP
ENGINEERING SERVICES

DATE:

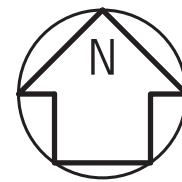
NOTE: THIS APPROVAL IS VOID AFTER 1 YEAR FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICE MANAGER



1
FIRST FLOOR LIGHTING
AND POWER DEMOLITION PLANS
SCALE: 1/4" = 1'-0"



2
FIRST FLOOR LIGHTING AND
POWER CONSTRUCTION PLANS
SCALE: 1/4" = 1'-0"



DEMOLITION NOTES

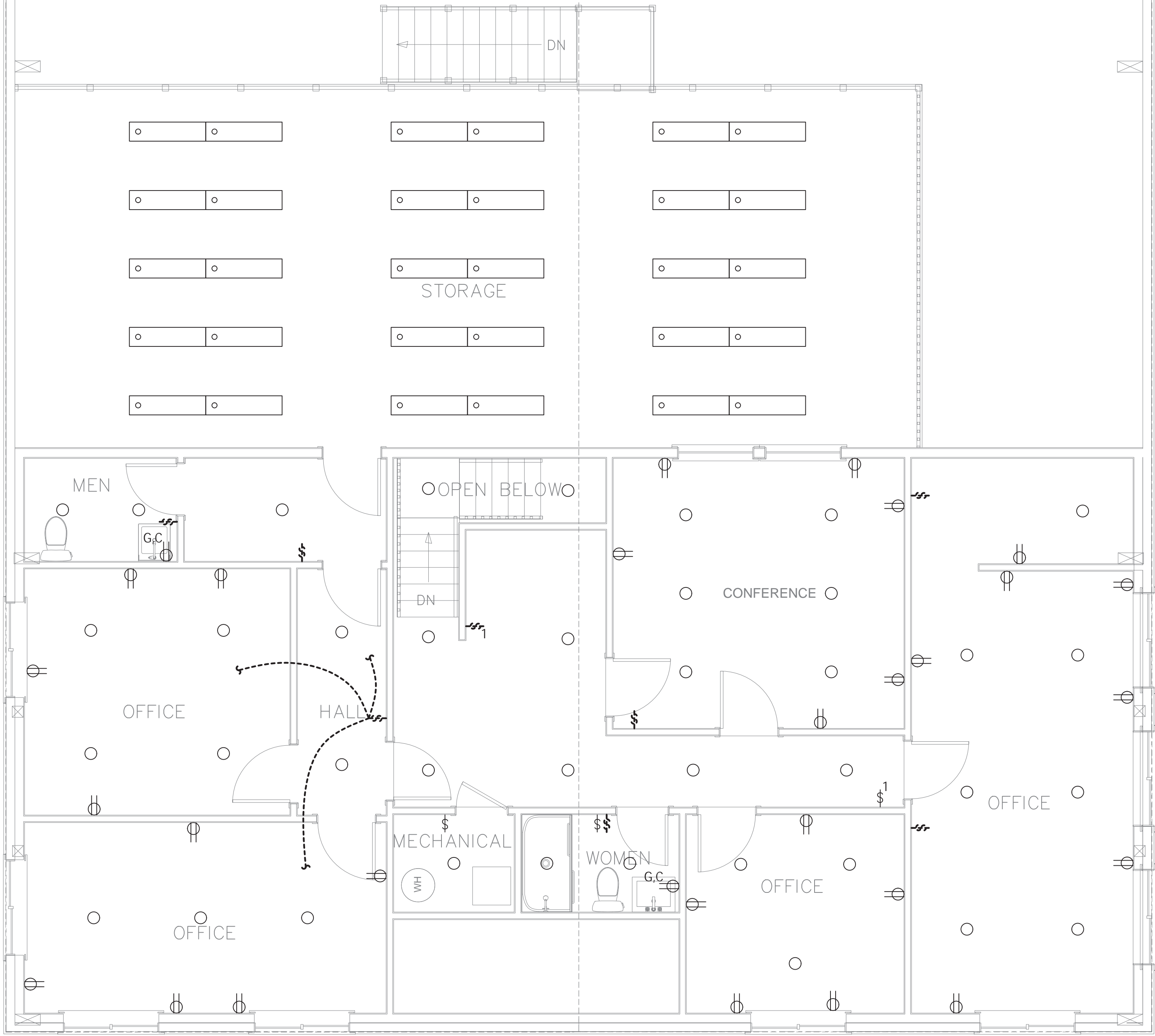
- 1 SALVAGE AND PROTECT EXISTING LIGHT FIXTURE FOR RELOCATION ON FIRST FLOOR CONSTRUCTION PLANS ON THIS SHEET.

GENERAL NOTES

1. SEE GENERAL NOTES ON SHEET E-002 FOR ADDITIONAL INFORMATION AND SPECIFICATIONS.
2. REFER TO E-002 FOR FIRE ALARM SYSTEM DESIGN NOTES.

CONSTRUCTION NOTES

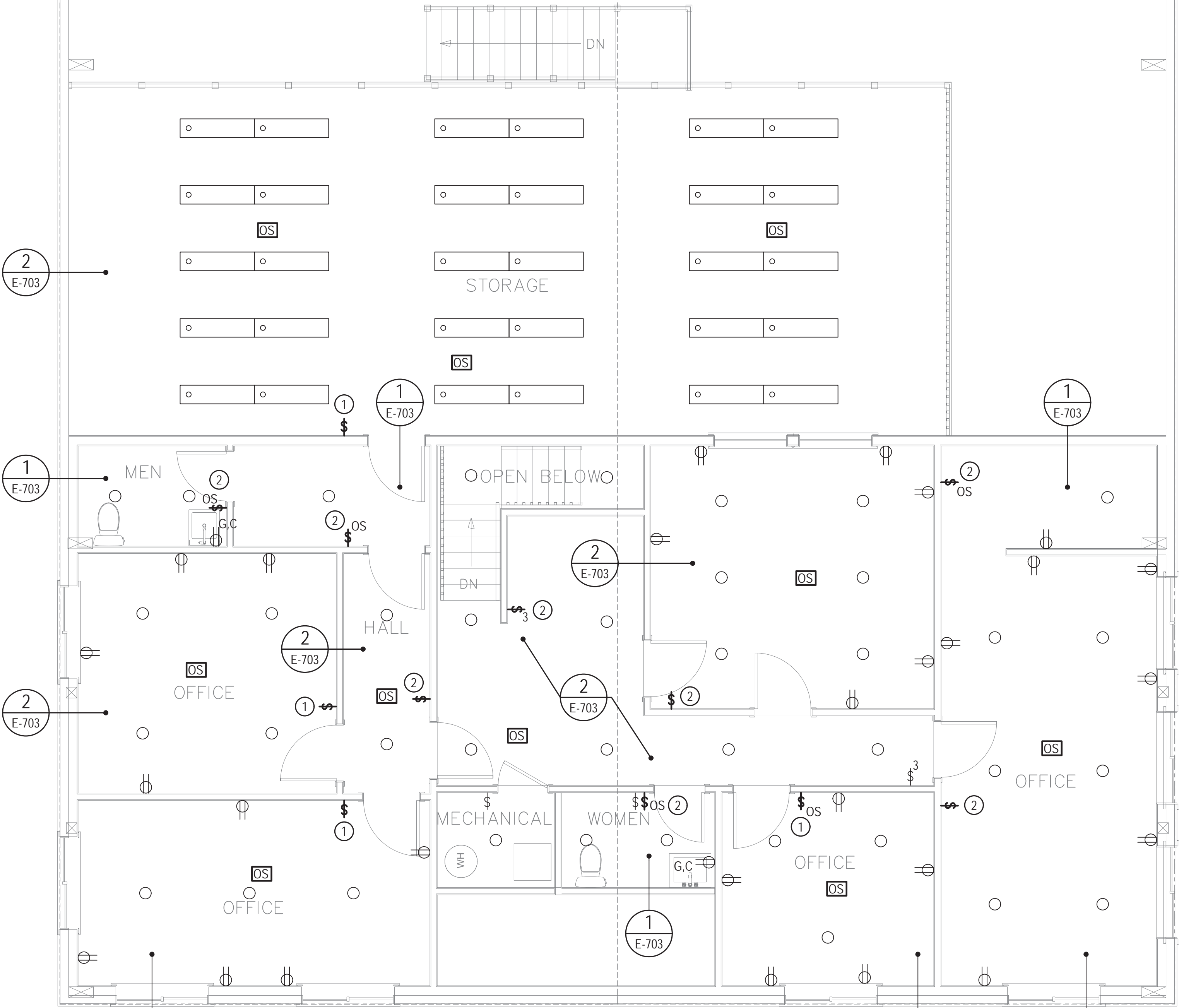
- 1 PROVIDE NEW SWITCH LOCATION AND RECONFIGURE WIRING, AS NECESSARY, TO TIE NEW WIRELESS SWITCH INTO NEW OCCUPANCY SENSOR FOR LOCAL CONTROL OF OFFICE LIGHTING.
2 INTERCEPT, SPICE, AND EXTEND CONDUIT AND WIRE FROM NEAREST UNSWITCHED RECEPTACLE CIRCUIT.
3 PROVIDE CONNECTIONS TO EXISTING LIGHTING CIRCUIT.
4 EXTEND NEAREST UNSWITCHED HOT LEG TO NEW SWITCH LOCATION.
5 RELOCATE EXISTING LIGHT FIXTURE IF NECESSARY TO AVOID CONFLICT WITH NEW DOOR.
6 NEW SWITCH IN EXISTING LOCATION.
7 PROVIDE NEW GFCI RECEPTACLE IN EXISTING LOCATION.
8 PROVIDE 1P/20A CIRCUIT FOR 120V POWER TO FIRE ALARM CONTROL PANEL. PROVIDE NEW BREAKER, AS NECESSARY, MATCHING PANEL AIC RATING.
9 RESERVE 48" WIDE SPACE, FLOOR TO CEILING, WITH 36" OF CLEARANCE FOR FIRE ALARM PANEL.



1 MEZZANINE LIGHTING
AND POWER DEMOLITION PLANS
SCALE: 1/4" = 1'-0"

GENERAL NOTES

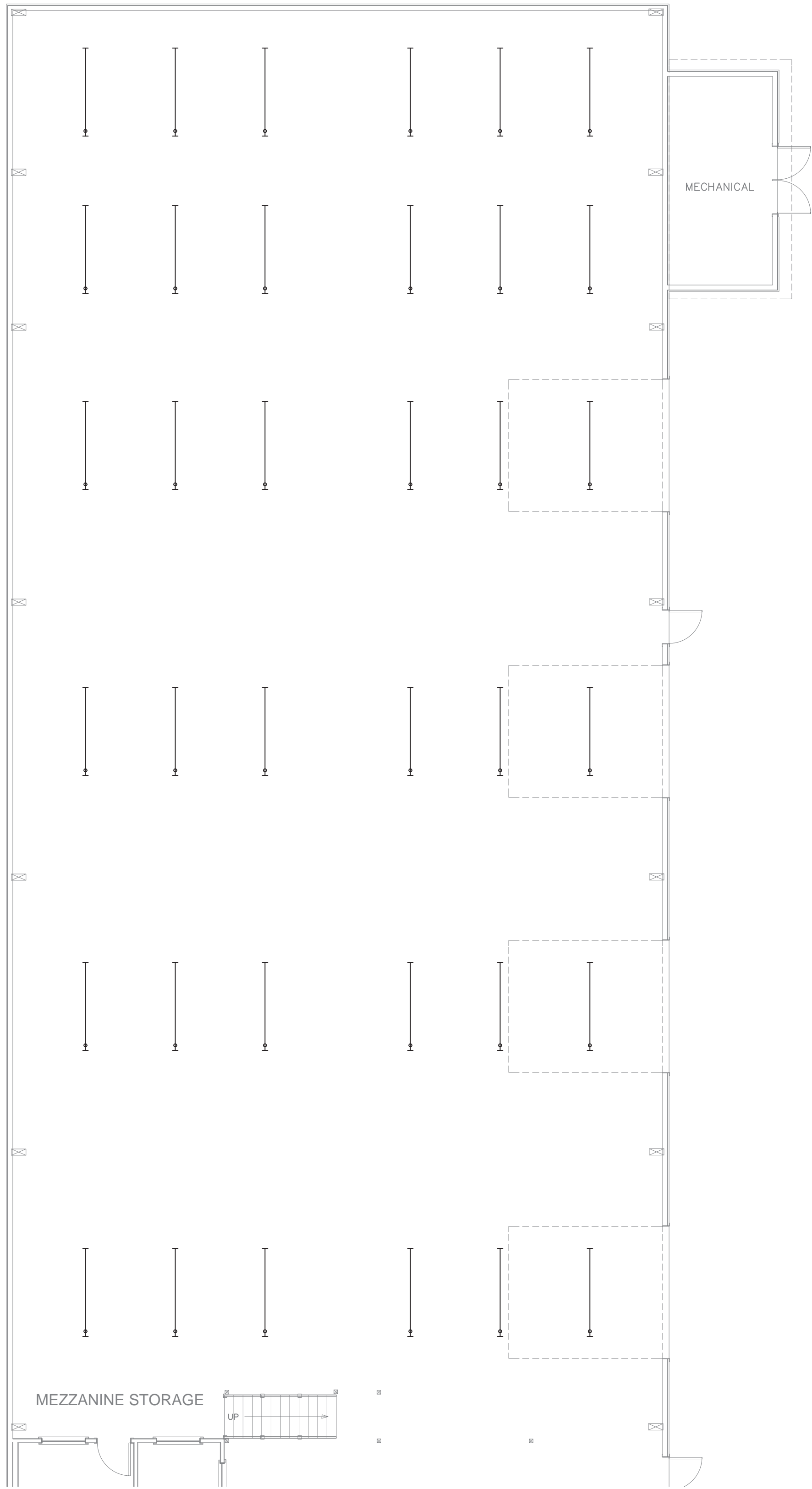
1. SEE GENERAL NOTES ON SHEET E-002.



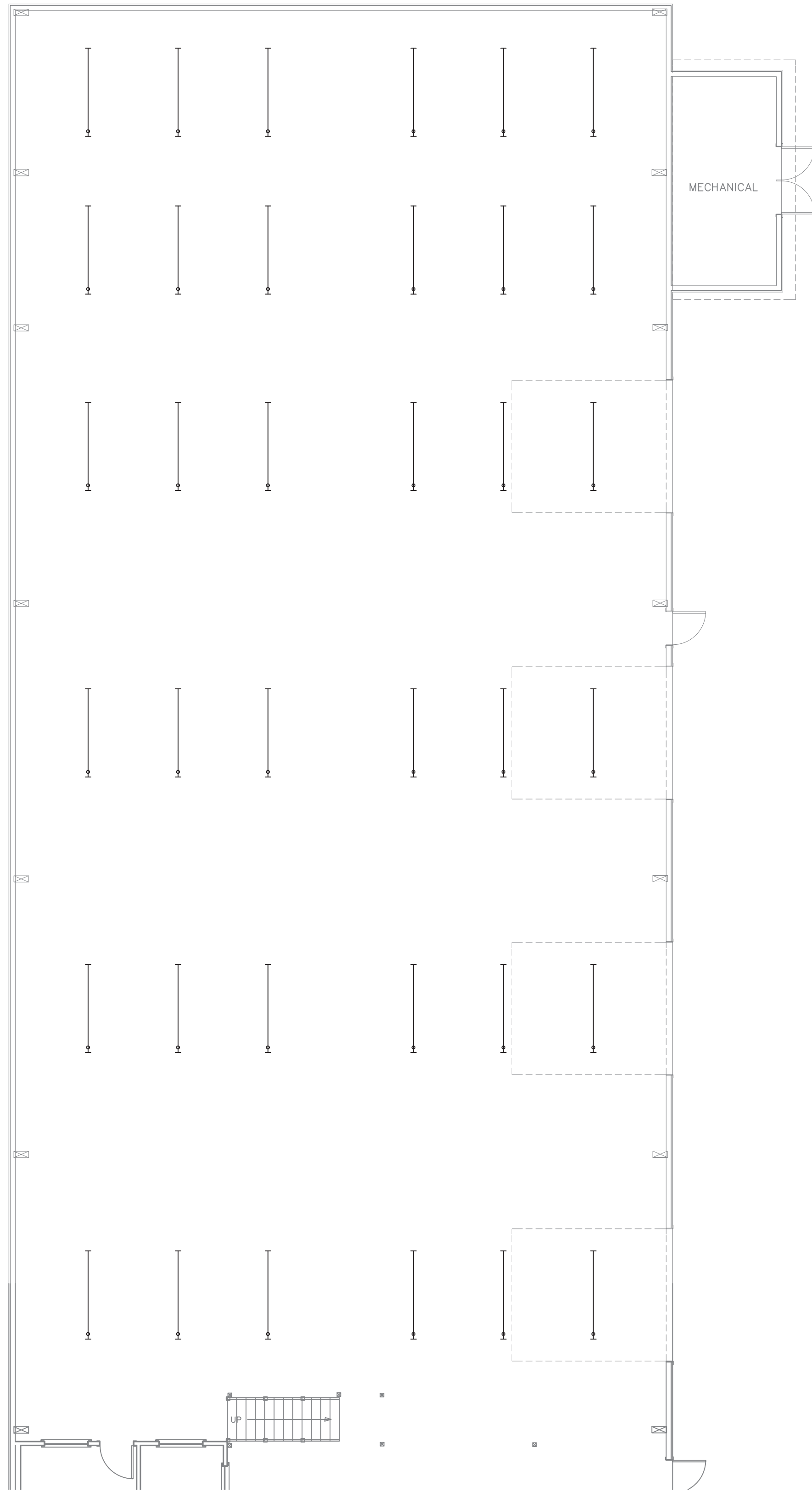
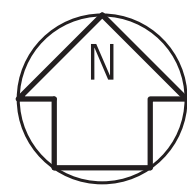
2 MEZZANINE LIGHTING AND
POWER CONSTRUCTION PLANS
SCALE: 1/4" = 1'-0"

CONSTRUCTION NOTES

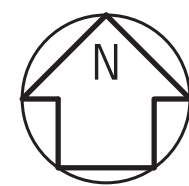
- 1 PROVIDE NEW SWITCH LOCATION AND RECONFIGURE WIRING, AS NECESSARY, TO TIE NEW WIRELESS SWITCH INTO NEW OCCUPANCY SENSOR FOR LOCAL CONTROL OF OFFICE/STORAGE LIGHTING.
- 2 NEW SWITCH IN EXISTING LOCATION.



1 WAREHOUSE LIGHTING
AND POWER DEMOLITION PLANS
SCALE: 1/8" = 1'-0"



2 WAREHOUSE LIGHTING AND
POWER CONSTRUCTION PLANS
SCALE: 1/8" = 1'-0"



GENERAL NOTES

1. SEE GENERAL NOTES ON SHEET E-002.
2. ALL EXISTING LIGHTING AND SWITCHING TO REMAIN.

E-123

GRIMIT ARCHITECTURE
MICHAEL P. GRIMIT, ARCHITECT
516 WANA WANA PLACE NORTHEAST
TACOMA, WA. 98422-1732

OLSON BROTHERS PRO-VAC, LLC
BUILDING REMODEL
2505, 2511, 2515 INTER AVENUE
PUYALLUP, WA. 98373

WAREHOUSE
LIGHTING AND
POWER PLANS

OCTOBER 30, 2020



STREET LIGHTING SPECIFICATIONS

1. 30-FOOT STEEL STREETLIGHT STANDARD

a. DIMENSIONS

STREETLIGHT STANDARDS SHALL PROVIDE A FIXTURE MOUNTING HEIGHT OF 30'0" PLUS OR MINUS 6" WITH A TYPICAL 12 FOOT MAST ARM WITH A THREE FOOT OVERHANG.

BASE PLATE SHALL HAVE SLOTTED HOLES TO ACCOMMODATE 1-INCH ANCHOR BOLTS, AND 1 1/2" BOLT CIRCLE WITH MINIMUM CLEARANCE OF 1" BETWEEN BOLT AND POLE.

HANDHOLE CENTER SHALL BE LOCATED APPROXIMATELY 12 INCHES FROM THE BASE PLATE, ROTATED 270 DEGREES FROM MAST ARM SO AS THE HANDHOLE IS LOCATED ON THE SIDE OPPOSING ONCOMING TRAFFIC.

b. STRENGTH

POLES SHALL MEET ALL STRENGTH REQUIREMENTS OF AASHTO FOR 90 MPH ISOTACH WHEN USED WITH A LUMINAIRE WEIGHING 48 POUNDS WITH A E.P.A. OF 1.1 SQUARE FEET. ALL ATTACHING BOLTS AND SCREWS THAT ARE NOT GALVANIZED SHALL BE STAINLESS STEEL.

c. FINISH

THE POLES AND ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED, MINIMUM 3 MIL THICKNESS.

d. MAST ARM ATTACHMENT SHALL BE SECURED BY 3 BOLTS.

e. EACH POLE SHALL HAVE HANDHOLE (WITH COVER), GROUND LUG AND REMOVABLE POLE CAP.

f. EACH CITY POLE SHALL HAVE A BLACK 4" TO 6" LETTER C STENCILED ON ROADWAY SIDE OF POLE 16" ABOVE GRADE.

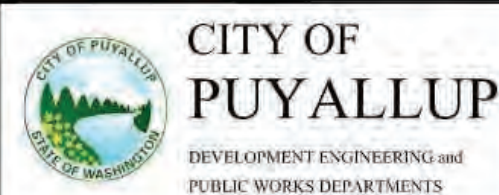
2. ANCHORAGE

a. POLES SHALL BE ANCHORED WITH 4 BOLTS. 1"x3/8"x4" #BUNC WITH HOT DIPPED GALVANIZING AFTER THREADS ARE CUT. GALVANIZED AREA SHALL EXTEND FROM THREADED END FOR A MINIMUM OF 12 INCHES. BOLTS SHALL BE PROVIDED WITH 2 GALVANIZED NUTS AND FLAT WASHERS FOR LEVELING. SHIMS WILL NOT BE USED.

b. A NON-SHRINKING GROUT SHALL BE INSTALLED WITH ONE 1/2" DRAIN HOLE UNDER THE BASE PLATE AFTER THE ENGINEER HAS APPROVED THE POLE INSTALLATION.

3. CONDUIT

ALL CONDUIT SHALL BE BURIED A MINIMUM OF 24 INCHES DEEP. ALL ROADWAY CROSSINGS SHALL BE RIGID METALLIC OR SCHEDULE 80 PVC. CONDUIT SHALL CONFORM TO SECTION 9-29 OF WSDOT STANDARD SPECIFICATIONS. SCHEDULE 80 PVC MAY BE USED IN LOCATIONS OTHER THAN ROADWAY CROSSINGS.



STREET LIGHT SPECIFICATIONS

DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.01
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(STR LIGHT SPECS CONTINUED)

4. JUNCTION BOXES (WHEN REQUIRED)

JUNCTION BOXES SHALL BE INSTALLED AT LOCATIONS AS SHOWN ON THE PLANS. THEY WILL CONFORM TO WSDOT STANDARD PLAN J-40.10-02, TYPE 1. THEY SHALL BE LEVEL WITH THE SIDEWALK GRADE AND FIRMLY BLOCDED TO PREVENT FUTURE SETTLING. JUNCTION BOXES ARE PREFERRED NOT TO BE INSTALLED IN THE SIDEWALK. THE COVER SHALL BE GALVANIZED AND GROUNDED. THE LETTERS "JT" SHALL BE ETCHED ON THE COVER. (SEE CITY STANDARD DETAIL NO. 01.05.01). IF THE JUNCTION BOX IS NOT IN THE SIDEWALK THEN IT SHALL HAVE A CONCRETE COLLAR. IF THE JUNCTION BOX IS IN THE SIDEWALK THEN IT SHALL HAVE A NON-SLIP SURFACE TREATMENT. SEE CITY STANDARD DETAIL NO. 01.05.01.

5. CONDUCTORS, WIRES, ETC.

WIRE CONDUCTORS FOR UNDERGROUND FEEDER RUNS AND FOR CIRCUITRY FROM THE IN-LINE FUSE IN THE POLES TO THE JUNCTION BOX SHALL BE 600 VOLT, SINGLE CONDUCTOR STRANDED COPPER AND INSULATED WITH USE GRADE POLYVINYL CHLORIDE COMPOUND (XLP) OR APPROVED EQUAL IN ACCORDANCE WITH THE INSULATED POWER CABLE ENGINEER'S ASSOCIATION SPECIFICATIONS. AN AWG NO. 8 GREEN INSULATED STRANDED COPPER WIRE WILL BE RUN TO THE SERVICE GROUND LUG ON EACH POLE. FEEDERS SHALL BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. WIRES INSIDE THE POLE BETWEEN BALLAST AND IN-LINE FUSES SHALL BE ROME 2C AWG 10 STRANDED POLE AND BRACKET WIRE OR APPROVED EQUAL. SPLICES WILL BE ALLOWED IN JUNCTION BOXES AND POLE BASES ONLY. NO MORE THAN 2 CONDUITS WILL BE ALLOWED INSIDE THE STREET POLE.

6. FUSES

LUMINAIRE FUSING AND ELECTRICAL CONNECTIONS AT LIGHT STANDARD BASES SHALL CONFORM TO SECTION 9-29.7 OF THE STATE OF WASHINGTON STANDARD SPECIFICATIONS AND AS SHOWN ON THE UNIFORM LUMINAIRE WIRING DETAIL IN THE APPENDIX. IN-LINE FUSE HOLDERS SHALL BE SEC. MODEL 1791-SF WITH FNM-5 FUSES OR APPROVED EQUAL. (REFER TO CITY STANDARD DETAIL NO. 01.05.01)

7. LUMINAIRES AND LAMPS

RESIDENTIAL STREETS AND NEIGHBORHOOD COLLECTORS:
LEOTEX LED GC1-40E-MV-NW-2-530 (67 WATT LED)

ARTERIALS AND COMMERCIAL COLLECTORS:
GE EVOLVE LED ERS2-E-D-HK-EX-5-40 (130 WATT LED)

THE CITY WILL ENERGIZE THE STREET LIGHTS WHEN A HOME IS OCCUPIED ADJACENT TO A STREET LIGHT OR IMMEDIATELY ACROSS THE STREET. AT THE DEVELOPER'S REQUEST, STREET LIGHTS MAY BE ENERGIZED PRIOR TO OCCUPANCY OF HOMES. HOWEVER, THE DEVELOPER OR BUILDER SHALL ASSUME FULL RESPONSIBILITY FOR ELECTRICAL POWER COSTS AND REPAIR COSTS DUE TO VANDALISM, THEFT, OR CONSTRUCTION.

8. SAFE WIRING LABELS

THE CONTRACTOR IS ADVISED THAT SAFE WIRING LABELS REQUIRED BY LABOR AND INDUSTRIES SHALL APPLY ON THIS PROJECT. (ELECTRICAL INSPECTION STICKER)

9. GUARANTEE

THE CONTRACTOR SHALL SURRENDER TO THE CITY OF PUYALLUP ANY GUARANTEE OR WARRANTY ACQUIRED BY HIM AS A NORMAL TRADE PRACTICE IN CONNECTION WITH THE PURCHASE OF ANY MATERIALS OR ITEMS USED IN THE CONSTRUCTION OF THE ILLUMINATION.

10. LOCATION

SEE CITY STANDARD SECTION 01.01 ROADWAY DESIGN.

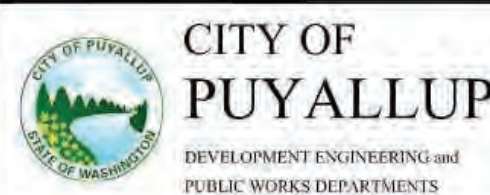
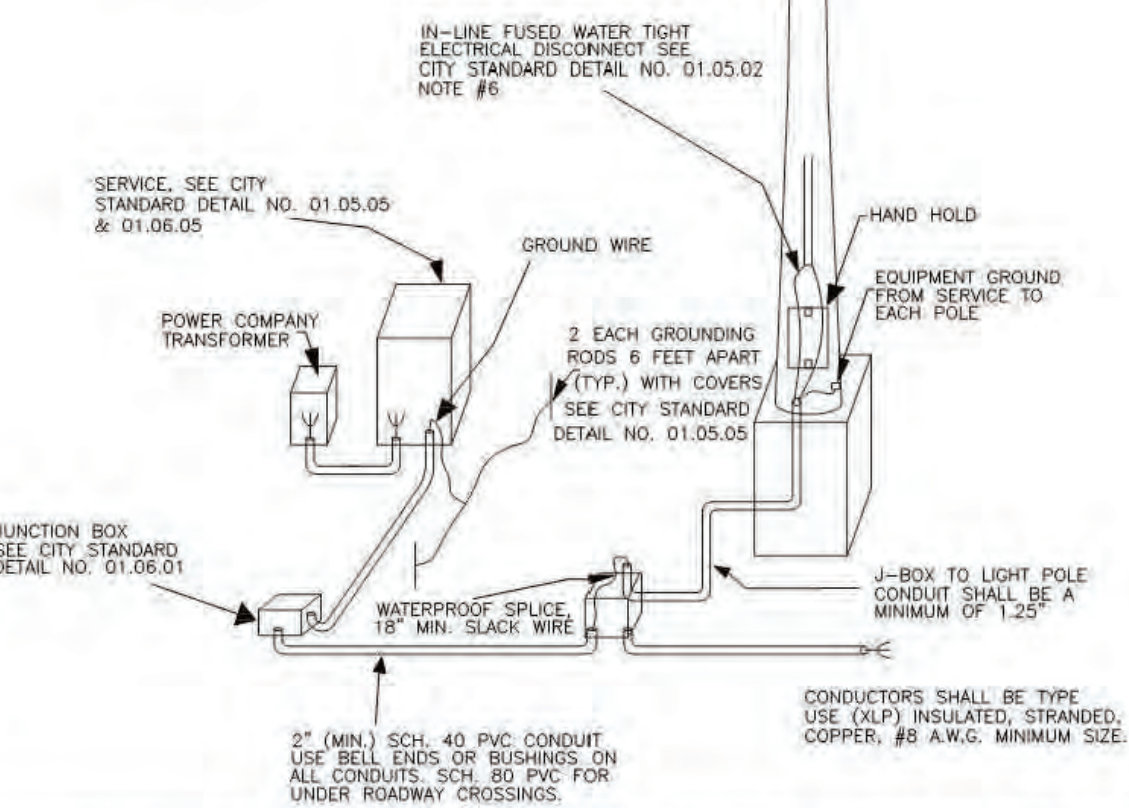


STREET LIGHT SPECIFICATIONS (CONT.)

DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.02
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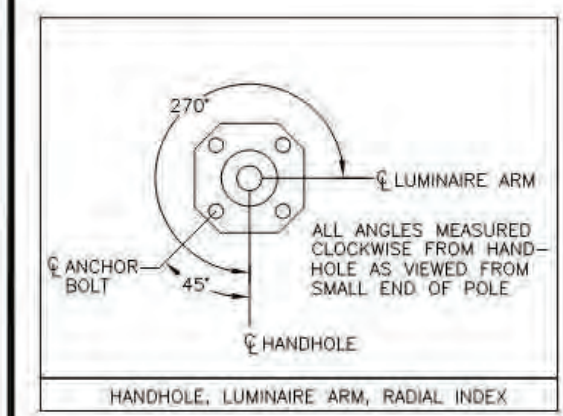
NOTES:

1. A METER SERVICE DISCONNECT IS REQUIRED FOR EACH BRANCH CIRCUIT. SEE CITY STANDARD DETAIL NO. 01.05.05.
2. INSTALLATION SHALL CONFORM TO NATIONAL ELECTRICAL CODE, WSDOT, AND CITY STANDARDS.
3. PHASING TAPE IS NOT ALLOWED.
4. ALL WIRES SHALL BE INSTALLED IN CONDUIT AS SPECIFIED ABOVE.
5. ALL SPLICES SHALL BE MADE IN A JUNCTION BOX. WIRE NUTS WILL NOT BE ALLOWED. SPLICES SHALL BE CENTERED AND ENCASED IN 3M SCOTCHCAST EPOXY KIT TYPE 82-A1, 82-B1, OR CITY APPROVED EQUAL. OTHER GEL TAP SPLICE KITS AND DIRECT BURIAL AND SUBMERSIBLE SPLICES TO BE ALLOWED IF APPROVED BY THE CITY.
6. GROUND ROD COVER SHALL BE UTILITY VAULT #9VB-924 OR APPROVED EQUIVALENT.



TYPICAL STREET LIGHT INSTALLATION

DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.03
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NOTE:

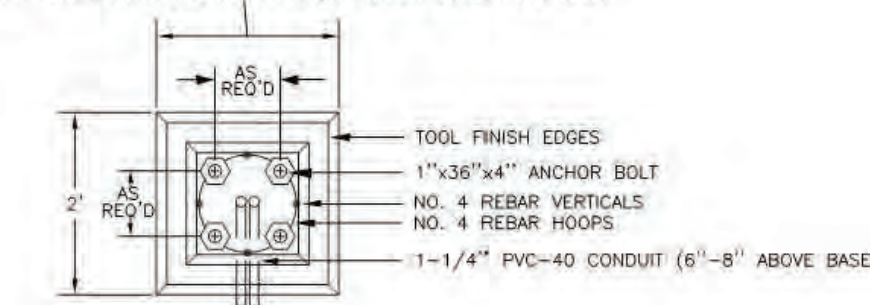
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE INSTALLATION OF THE STREET LIGHT SYSTEM WITH ALL UTILITIES, PRIVATE AND PUBLIC, TO AVOID SCHEDULE AND LOCATION CONFLICTS.
2. FOR RESIDENTIAL STREET LIGHTING THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL ONE METER FOR THE PLANT LIGHTING SYSTEM PER PUGET SOUND ENERGY REQUIREMENTS, ON VERY LARGE PLATS PUGET SOUND ENERGY MAY REQUIRE MORE THAN ONE METER.
3. LUMINAIRE TO BE FLAT LENS GLASS WITH CUT OFF, 150W FOR SIGNALIZED INTERSECTIONS, 150W OR 200W FOR COMMERCIAL AREA AND 100W FOR RESIDENTIAL.



STREET LIGHT

DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.04
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2" MIN. FOR 30" STEEL STREETLIGHT STANDARD
30" MIN. FOR DECORATIVE TYPE #37 UNION METAL POLE BASE

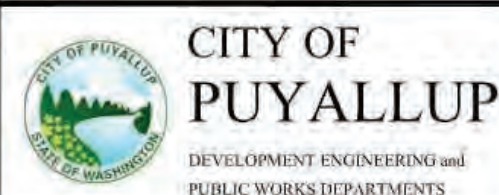


NOTE:

1. CONTRACTOR IS TO VERIFY THAT DETAIL SPECIFICATIONS AND EQUIPMENT LOCATIONS MEET WITH SERVING UTILITIES AND CITY OF PUYALLUP ENGINEERING REQUIREMENTS.
2. FOUNDATION TO BE 30" ROUND, TOP 5-1/2" OF FOUNDATION WILL BE 24" SQUARE.

TEMPLATE FOR ANCHOR BOLT CIRCLE WILL BE A SINGLE PIECE OF 3/4" PLYWOOD WITH 4 BOLT HOLES TO FORM A BOLT CIRCLE OF 11-1/2" TO MATCH POLE MANUFACTURE'S BASE DESIGN.

LOWER LEVELING NUTS SHOULD BE CLOSE TO CONCRETE (ABOUT 1") TO PREVENT EXCESSIVE STRESSES IN THE ANCHOR BOLTS CAUSED BY TORSIONAL FORCES IN THE POLE. ANCHOR BOLTS WILL EXTEND ABOVE TOP NUT, 2 THREADS MINIMUM AND 5/8" MAXIMUM.



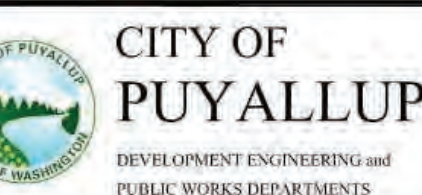
CONCRETE STREETLIGHT FOUNDATION TYPICAL

DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.06
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STREET LIGHT POLE AND BRACKET WIRE SUPPORT AT ARM END

DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.07
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REMOTE PHOTOCELL

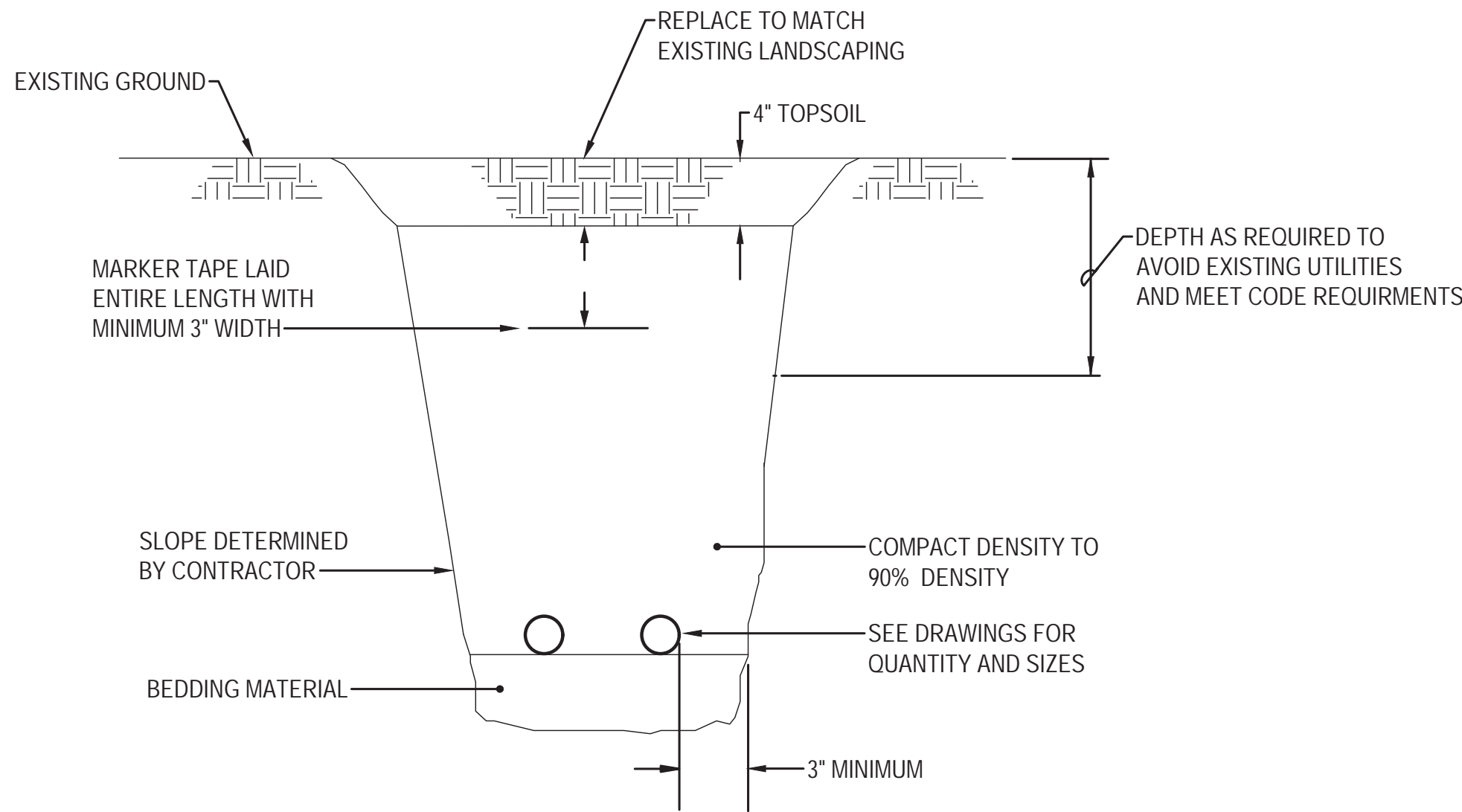
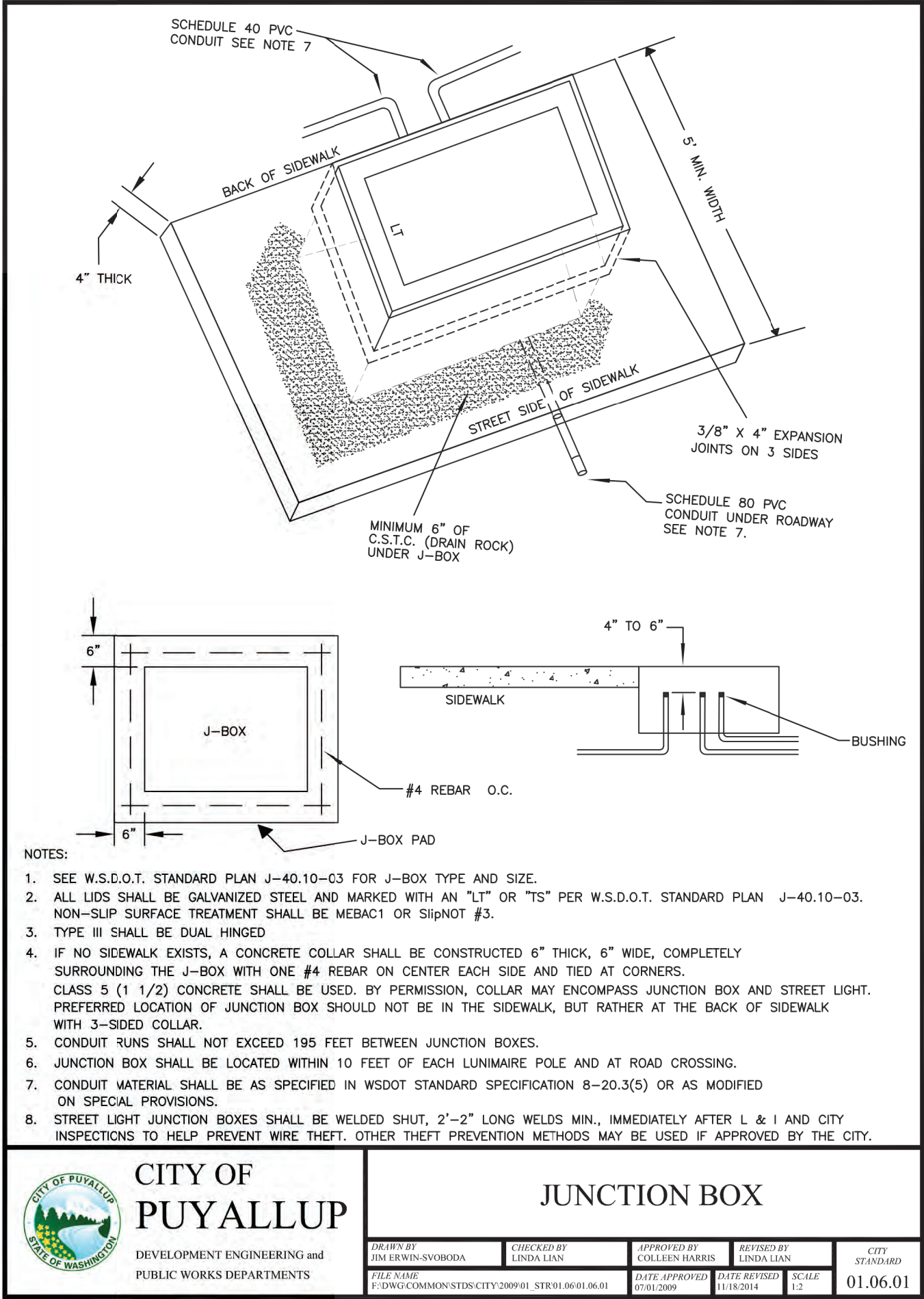
DESIGNED BY H.M. BROWN/4/10/2020	CHECKED BY L.M. LAM/4/10/2020	APPROVED BY CITY ENGINEER/4/10/2020	DATE APPROVED 4/10/2020	DATE REVISION N/A	CITY STANDARD 01.05.10
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APPROVED

BY _____
CITY OF PUYALLUP
ENGINEERING SERVICES

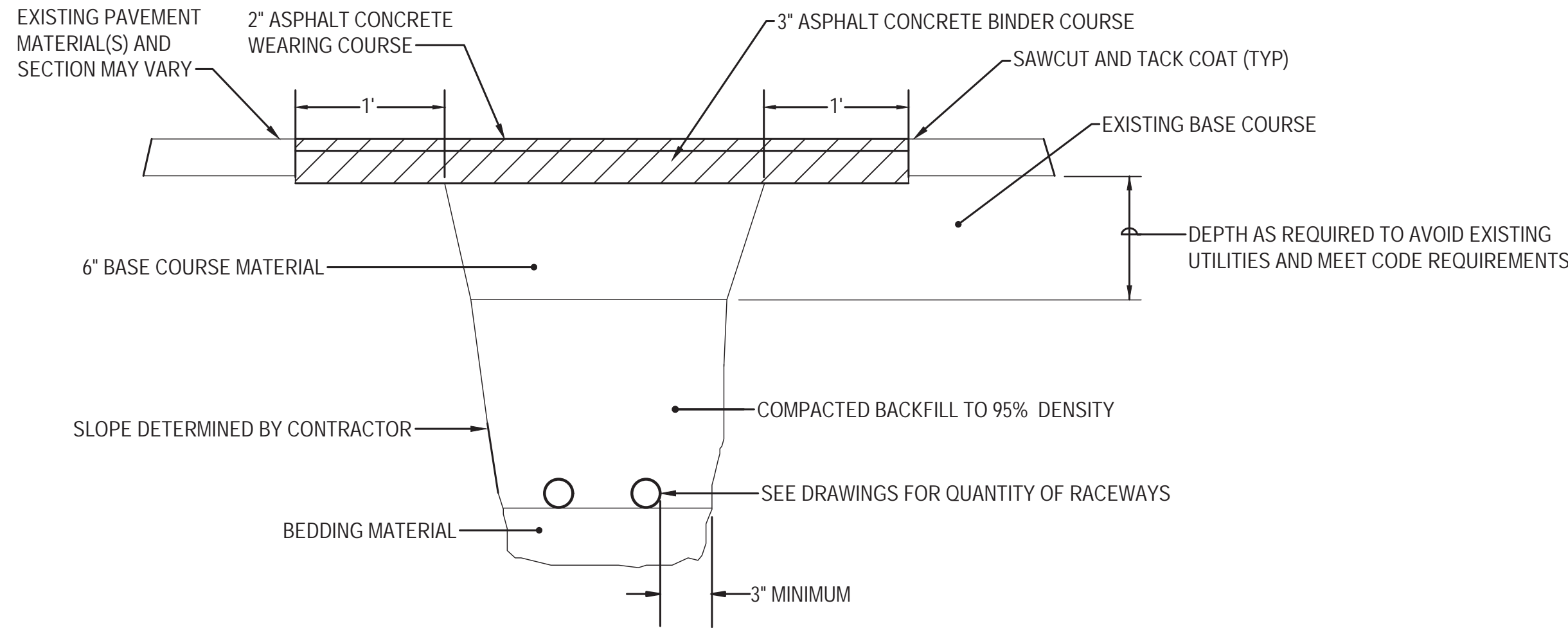
DATE _____

NOTE: THIS APPROVAL IS VOID AFTER 1 YEAR FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICE MANAGER.



1 DIRECT BURY RACEWAY - GRASS/GRAVEL AREAS

SCALE: NTS



2 DIRECT BURY RACEWAY - ASPHALT AREAS

SCALE: NTS

E-702

GRMIT ARCHITECTURE

MICHAEL P. GRMIT, ARCHITECT

516 WANA WANA PLACE NORTHEAST

TACOMA, WA. 98422-1732

OLSON BROTHERS PRO-VAC, LLC

BUILDING REMODEL

2505, 2511, 2515 INTER AVENUE

PUYALLUP, WA. 98373

ELECTRICAL DETAILS

OCTOBER 30, 2020



APPROVED

BY _____

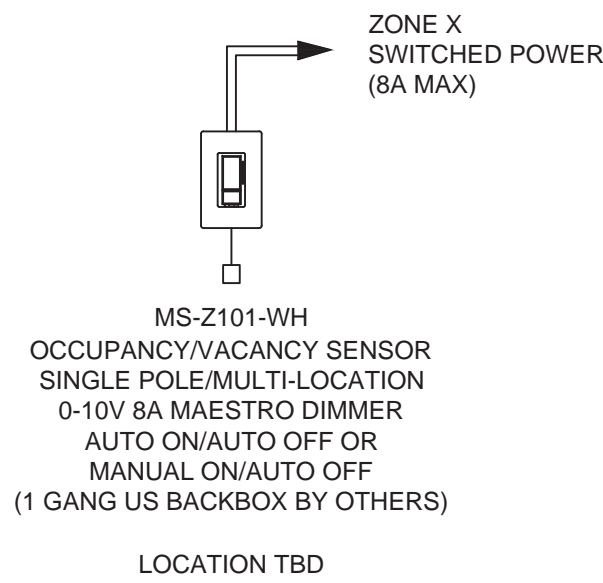
CITY OF PUYALLUP
ENGINEERING SERVICES

DATE _____

NOTE: THIS APPROVAL IS VOID AFTER 1 YEAR FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICE MANAGER.

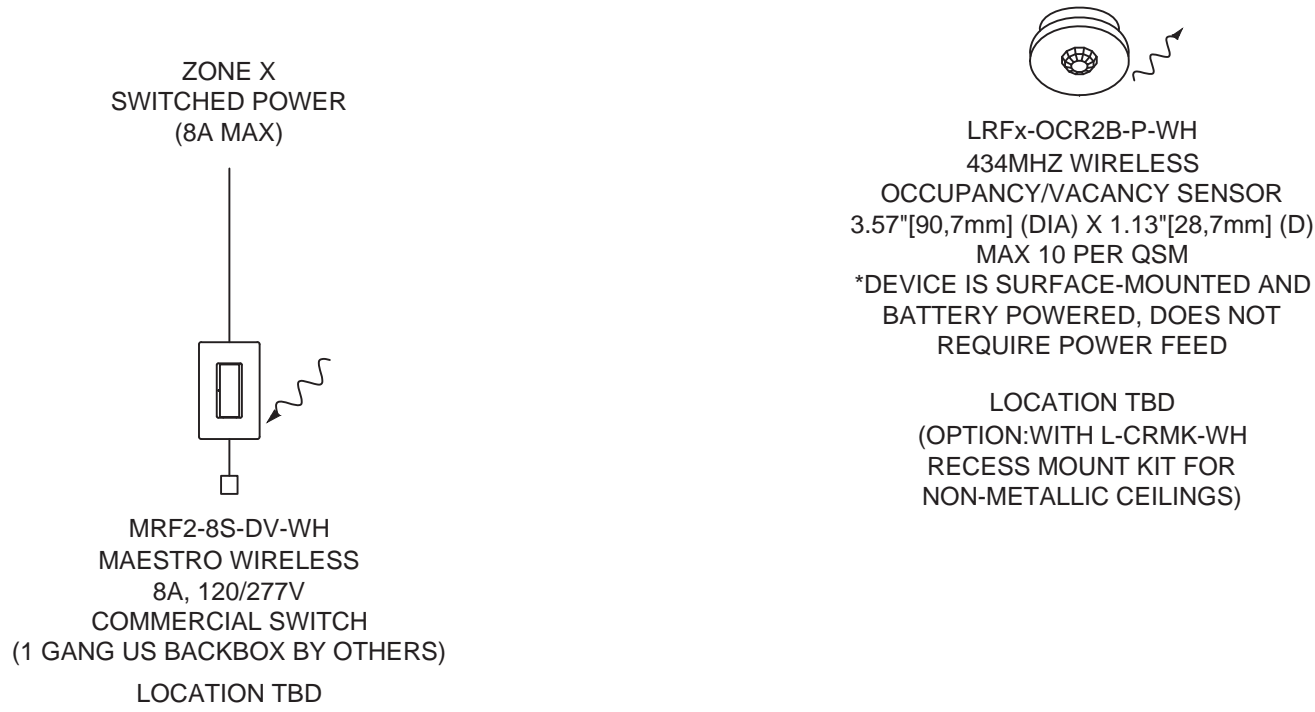
WIRING LEGEND:

- INPUT POWER (NORMAL)
- 2 #12AWG (4 mm²)
- 3 #12AWG (4 mm²)
- ◆ 0-10V SIGNAL: 2 #18AWG (1.0 mm²)
- ◇ ECOSYSTEM BUS/LOOP:
LUTRON CABLE C-CBL-216-GR-1
(2 #16 CONDUCTOR NON-PLENUM) OR
C-PCBL-216-CL-1 (2 #16 CONDUCTOR
PLENUM RATED). OTHERWISE USE 2 #16
AWG (1.5 mm²) BY OTHERS.
- 2 #18AWG (1.0 mm²)
- ⚡ LUTRON SENSOR CABLE C-CBL-522S
OTHERWISE USE 4 #22 AWG (1.0 mm²)
- ~ 1-WAY RF COMMUNICATION
- ~ 2-WAY RF COMMUNICATION



ROOM TYPE 1
LIGHTING CONTROL DIAGRAM

1 SCALE: NTS



ROOM TYPE 2
LIGHTING CONTROL DIAGRAM

2 SCALE: NTS

GENERAL NOTES

- SEE GENERAL NOTES ON SHEET E-002.
- WIRING DIAGRAMS ARE REPRESENTATIVE IN NATURE AND ARE NOT INTENDED TO SHOW EVERY COMPONENT NECESSARY TO MAKE THE SYSTEM WORK. THE CONTRACTOR SHALL PROVIDE ALL COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL SYSTEM.

COMMISSIONING REQUIREMENTS FOR THE LIGHTING CONTROL SYSTEM

TESTING SHALL ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN MANUFACTURER'S INSTALLATION INSTRUCTIONS. WRITTEN PROCEDURES WHICH CLEARLY DESCRIBE THE INDIVIDUAL SYSTEMATIC TEST PROCEDURES, THE EXPECTED SYSTEMS' RESPONSE OR ACCEPTANCE CRITERIA FOR EACH PROCEDURE, THE ACTUAL RESPONSE OR FINDINGS, AND ANY PERTINENT DISCUSSION SHALL BE FOLLOWED. AT A MINIMUM, TESTING SHALL AFFIRM OPERATION DURING NORMALLY OCCUPIED DAYLIGHT CONDITIONS. THE CONSTRUCTION DOCUMENTS SHALL STATE THE PARTY WHO WILL CONDUCT THE REQUIRED FUNCTIONAL TESTING.

- FOR OCCUPANT SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULE CONTROLS, PHOTO-SENSORS OR DAY-LIGHTING CONTROLS THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
- CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME OUT ADJUSTMENTS FOR OCCUPANT SENSORS YIELD ACCEPTABLE PERFORMANCE.
 - CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULES CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
 - CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTO-SENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

LIGHTING CONTROL SEQUENCE FOR COMMISSIONING

- GENERAL REQUIREMENTS
- VACANCY/OCCUPANCY SENSORS SHALL BE CONNECTED TOGETHER FOR CONTROL OF ALL LIGHTS IN THE ROOM. SET UP SENSORS AS INDICATED IN OCCUPANCY OR VACANCY MODE.
 - VACANCY MODE - MANUAL ON, AUTO OFF VIA SENSOR, SET AT 30 MIN.
 - OCCUPANCY MODE - AUTOMATIC ON TO 50%, AUTO OFF VIA SENSOR, SET AT 30 MIN.
 - ALL OCCUPANCY/VACANCY SENSORS SHALL BE DUAL TECHNOLOGY (I.E. INFRARED AND ULTRASONIC).
 - ALL LIGHTS WHERE INDICATED SHALL BE CONTROLLED VIA 0-10V DIMMING.
 - EMERGENCY LIGHTING RELAY REQUIRED FOR CONNECTION TO ANY DESIGNATED EMERGENCY LIGHT FIXTURES WITHIN EACH SPACE FOR AUTOMATIC OVERRIDE UPON A POWER FAILURE.

E-703

GRIMIT ARCHITECTURE
MICHAEL P. GRIMIT, ARCHITECT
516 WANA WANA PLACE NORTHEAST
TACOMA, WA. 98422-1732

OLSON BROTHERS PRO-VAC, LLC
BUILDING REMODEL
2505, 2511, 2515 INTER AVENUE
PUYALLUP, WA. 98373

LIGHTING CONTROL
DIAGRAMS

OCTOBER 30, 2020