

**ABBREVIATIONS**

Table with 4 columns of abbreviations and their corresponding full names. Includes terms like AND ANGLE, INSULATION, CENTERLINE, DIAMETER OF ROUND, etc.

**SYMBOLS**

Table showing symbols for SECTION MARK, EXTERIOR ELEVATION TAG, ELEVATION TAG, ELEVATION MARK, FINISH TAG, WINDOW TAG, DOOR TAG, WALL TAG, and KEYED NOTE.

bp logo and ARCO logo. Text: ARCO 3400 am/pm 1402 S MERIDIAN PUYALLUP, WA 98371

**GENERAL PROJECT NOTES**

- 1. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE BUILDING CODES AND LOCAL RESTRICTIONS. CONTRACTORS MUST COMPLY WITH CONTRACTOR REGISTRATION REQUIREMENTS...
2. IT IS THE INTENT OF THE OWNER, THE ARCHITECT AND THEIR CONSULTANTS, THAT ALL WORK DEPICTED IN THESE DRAWINGS AND SPECIFICATIONS IS TO BE PROVIDED BY THE GENERAL CONTRACTOR...
3. APPROVED PLANS SHALL BE KEPT IN A PLAN BOX AND SHALL NOT BE USED BY WORKMEN...
4. DISCREPANCIES BETWEEN PORTIONS OF THE CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS ARE NOT INTENDED...
5. IT IS THE INTENT OF THE ARCHITECT THAT THIS WORK BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE BUILDING AUTHORITIES...
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES AND TO PROTECT THEM FROM DAMAGE...
7. THE CONTRACTOR TO PROVIDE FIRE SPRINKLER SYSTEM AND ALARM SYSTEM...
8. FOR CONSTRUCTION DETAILS NOT SHOWN, USE THE MANUFACTURER'S APPROVED SHOP DRAWINGS...
9. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL FOOD SERVICE EQUIPMENT...
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE...
11. ALL DEBRIS SHALL BE REMOVED FROM PREMISES REGULARLY...
12. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS...
13. CONTRACTOR SHALL PROVIDE TEMPORARY WATER, POWER, TELEPHONE, FACSIMILE OR METHOD TO RECEIVE E-MAIL, PRINTER AND TOILET FACILITIES AS REQUIRED...
14. GENERAL CONTRACTOR IS RESPONSIBLE FOR RECEIVING, UNLOADING, UN-CRATING, INSTALLATION AND HOOKUP OF ALL FOOD SERVICE EQUIPMENT...
15. GENERAL CONTRACTOR IS REQUIRED TO LABEL ALL ELECTRICAL PANELS, PLUMBING VALVES, AND ROOF TOP EQUIPMENT WITH PLASTIC PHENOLIC ENGRAVED PLATES...
16. CONTRACTOR SHALL SUPPLY, LOCATE AND BUILD INTO THE WORK ALL INSERTS, ANCHORS, ANGLES, PLATES, OPENINGS, SLEEVES, HANGERS, SLAB DEPRESSIONS AND PITCHES AS MAY BE REQUIRED...
17. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE MEANS AND METHODS FOR ERECTION PROCEDURE AND SEQUENCE OF THE CONSTRUCTION...
18. MATERIALS LISTED IN DRAWINGS ARE BASED ON DESIGN INTENT...
19. THE PROJECT BOUNDARIES SHALL BE CONFIRMED BY THE CONTRACTOR...
20. ALL LABOR, MATERIALS AND INSTALLATIONS MUST COMPLY WITH THE CODES AND REGULATIONS OF ALL AUTHORITIES...
21. THE CONTRACTOR SHALL COORDINATE THE WORK WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS...
22. ALL EXPOSED PIPES, CONDUITS OR DUCTS IN FINISHES AREAS...
23. LOCATION OF ACCESS DOORS SUPPLIED BY MECHANICAL TRADES AND INSTALLED BY OTHERS SHALL BE DETERMINED IN THE FIELD...

**PROJECT DATA**

PROJECT ADDRESS: 1402 SOUTH MERIDIAN, PUYALLUP, WA 98371
ASSESSOR'S PARCEL NUMBER: 773000-028-1 & 773000-028-8: TITLE PARCEL A 773000-003-1 & 773000-002-1: TITLE PARCEL B
ZONING: GENERAL COMMERCIAL (GC)
SITE AREA: 51,520 S.F. (1.18 AC)
BUILDINGS: CONVENIENCE STORE
CONSTRUCTION TYPE: V-B (NON SPRINKLERED)
USE GROUP: M
GROSS AREA: 3,349 S.F.
CANOPY
CONSTRUCTION TYPE: II-B
USE GROUP: M
GROSS AREA: 6,321 S.F.
CAR WASH
CONSTRUCTION TYPE: V-B
USE GROUP: B
GROSS AREA: 1,158 S.F.
PARKING REQUIREMENTS
NO. OF SPACES REQUIRED: 1 SPACE PER 300 SQUARE FEET 3,349/300 = 11.16
NO. OF SPACES PROVIDED: 21
NO. OF ACCESSIBLE PARKING: 1 VAN ACCESSIBLE PER 1-25 AUTO STALLS
NO. OF BICYCLE PARKING: 1 PER 25 AUTO STALLS (2 PROVIDED)
NO. OF EV PARKING: PER IBC WA AMENDMENT 429, M-OCCUPANCY IS EXEMPT FROM PROVIDING EV CHARGING INFRASTRUCTURE WHEN IT DOES NOT DESIGNATE EMPLOYEE PARKING. HOWEVER, TWO (2) EV PARKING SPACES ARE PROVIDED.
OCCUPANCY LOAD CALCULATION
SEE SHEET G1.3

**DEVELOPMENT CONTACTS**

Table with 2 columns: ZONING AND LAND USE, FIRE, ENVIRONMENTAL - FUEL, ENVIRONMENTAL - FOOD, ENVIRONMENTAL - FLOOD, STORMWATER, WATER QUALITY, SANITARY SEWER, AIR QUALITY, ELECTRIC.

**SCOPE OF WORK**

CONSTRUCTION OF NEW 3,349 S.F. ARCO AM/PM CONVENIENCE STORE WITH 4,607 S.F. FUEL CANOPY (49'9x4') WITH EIGHT (8) MULTI PRODUCT DISPENSERS, AND TWO (2) UNDERGROUND STORAGE TANKS. CAR WASH AND ASSOCIATED SITE IMPROVEMENTS.

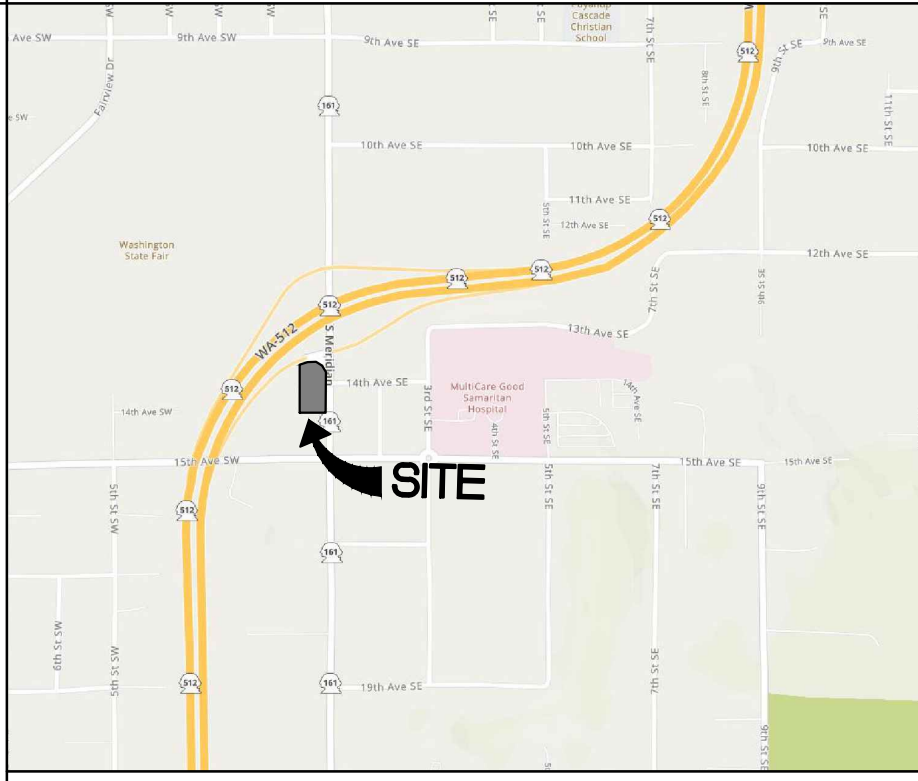
**PERMITTED SEPERATELY**

- SIGNAGE UNDER SEPARATE PERMIT
ELECTRICAL SHEETS ARE FOR REFERENCE ONLY - PERMIT WILL BE ISSUED BY L&I

**APPLICABLE CODES**

Table with 2 columns: CODE TYPE and CODE NAME. Includes BUILDING CODE, PLUMBING CODE, ELECTRICAL CODE, MECHANICAL CODE, ENERGY CODE, FIRE CODE, ACCESSIBILITY CODE, LOCAL CODES.

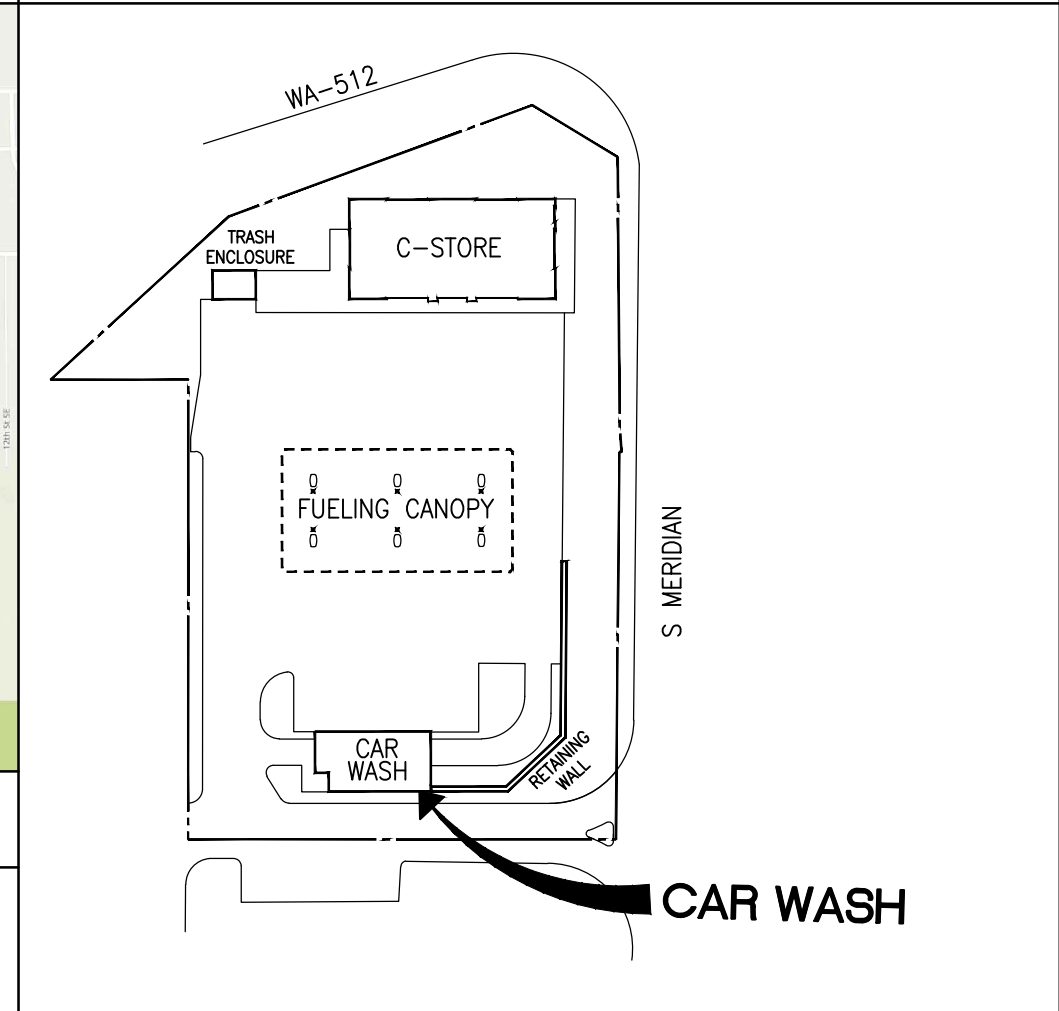
**SITE VICINITY MAP**



**PROJECT DIRECTORY**

Table listing project participants: APPLICANT/DEVELOPER (BP PRODUCTS, NA), ARCHITECT (BARGHAUSEN CONSULTING ENGINEERS, INC.), CIVIL ENGINEER (BARGHAUSEN CONSULTING ENGINEERS, INC.), LANDSCAPE ARCHITECT (BARGHAUSEN CONSULTING ENGINEERS, INC.), STRUCTURAL ENGINEER (PCS STRUCTURAL SOLUTIONS), STRUCTURAL ENGINEER (CANOPY) (PERRY BUILDERS), PLUMBING, MECHANICAL ELECTRICAL ENGINEER (ABOSSEIN ENGINEERING LLC.), FUEL TANKS (BARGHAUSEN CONSULTING ENGINEERS, INC.), and PLUMBING (PCS STRUCTURAL SOLUTIONS).

**SITE KEY PLAN**

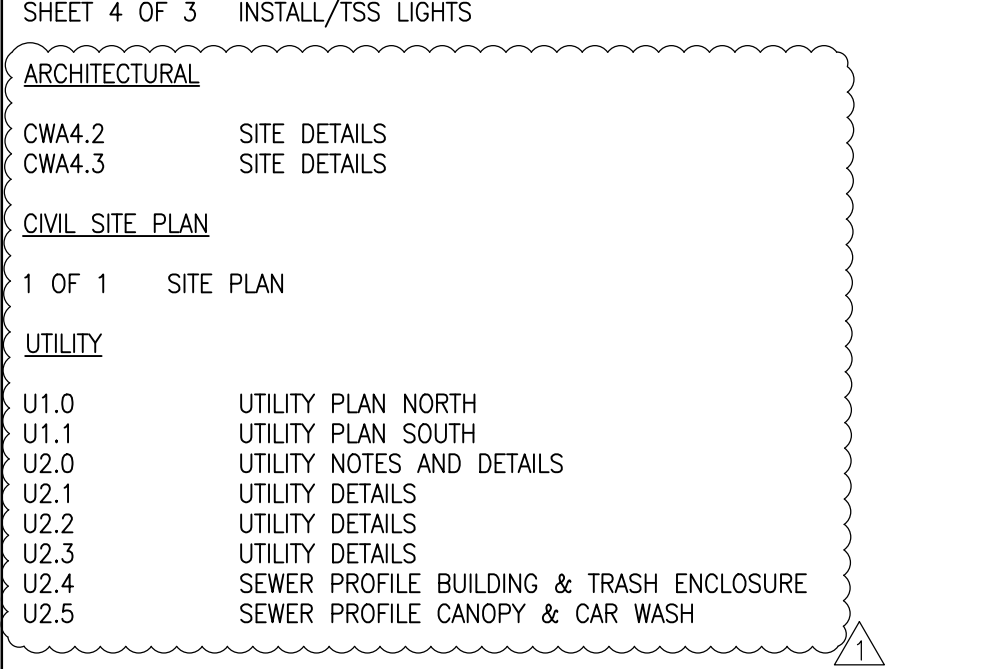


SEE PERMIT PRCNC20231424 FOR ENERGY REPORT FOR EXTERIOR LIGHTING COMPLIANCE.

PRCNC20240007
CAR WASH

**INDEX OF DRAWINGS**

Table listing drawing titles and sheet numbers. Includes sections like GENERAL, SURVEY, ARCHITECTURAL, ARCHITECTURAL (CAR WASH), STRUCTURAL (CAR WASH), ELECTRICAL, ELECTRICAL (CARWASH), PLUMBING, PLUMBING (CARWASH), and CARWASH EQUIPMENT (FOR REFERENCE ONLY).



**PERMIT SUBMITTAL DATES**

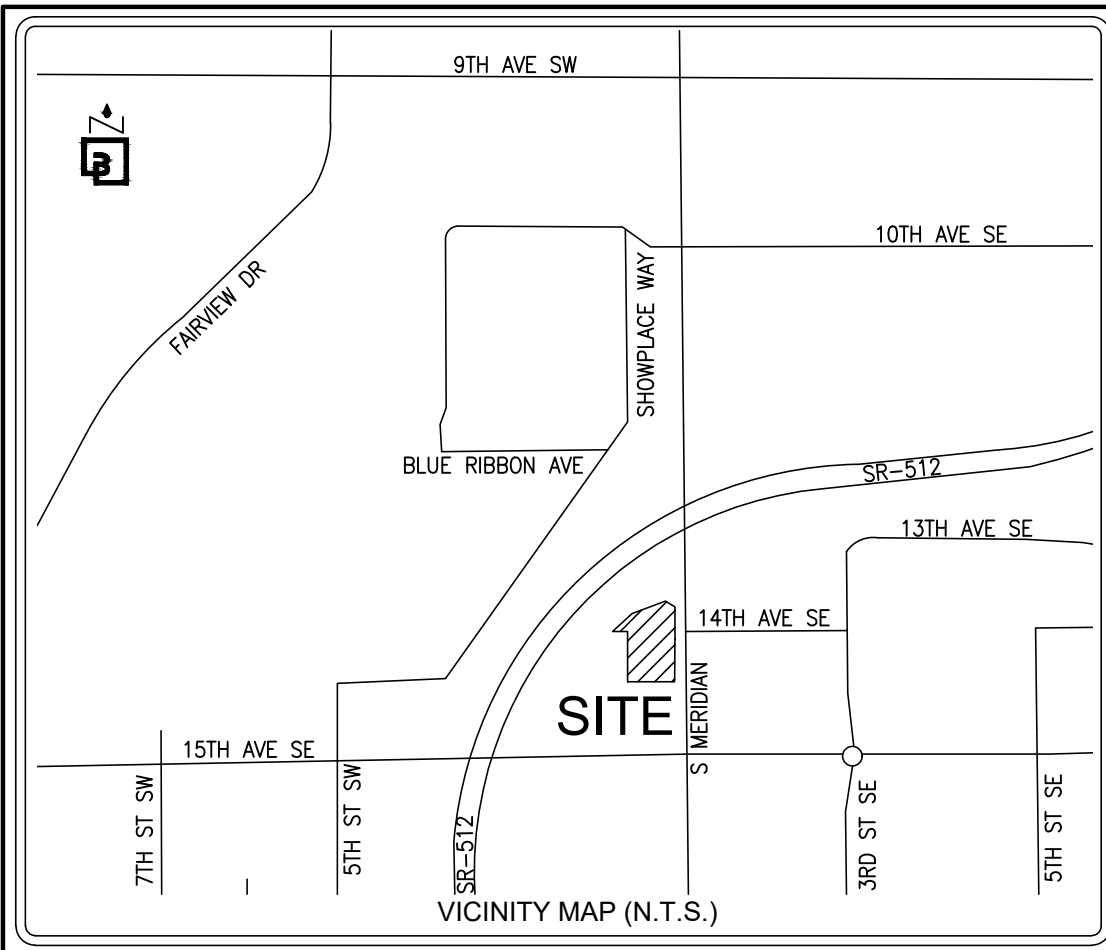
10/04/2023

**PERMIT ISSUE DATES**

Table with 2 columns: DATE and DESCRIPTION. Includes permit submittal and issue dates.

Client information: bp logo, ARCO logo, BARGHAUSEN CONSULTING ENGINEERS, INC. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com. Project info: ARCO NTI 3400 am/pm FUEL CANOPY w/ 6 MPD'S FACILITY #7184. Drawing title: COVER SHEET. Sheet No: G1.1.

# ALTA/NSPS LAND TITLE SURVEY



## SURVEY INFORMATION:

**HORIZONTAL DATUM – BASIS OF BEARINGS:**  
 NAD 83/2011 WASHINGTON STATE COORDINATE SYSTEM, SOUTH ZONE, ESTABLISHED BY GPS OBSERVATION UTILIZING THE WASHINGTON STATE REFERENCE NETWORK. THE BASIS OF BEARINGS IS N 00°33'46" E BETWEEN THE FOUND 2" BRASS DISK AT THE INTERSECTION OF S. MERIDIAN ST. & 15TH AVE SW AND THE FOUND 2" IRON PIPE W/TACK IN MONUMENT CASE AT THE INTERSECTION OS S. MERIDIAN ST. & THE ON/OFF RAMP TO SR 512.

**VERTICAL DATUM**  
 VERTICAL DATUM FOR THIS SURVEY IS NAVD88 ESTABLISHED FROM WSDOT MONUMENT ID NO. 247. ELEVATION = 80.449' (NAVD88)

**LOT AREA**  
 52,078± SF (1.20± AC)

**ADDRESS**  
 1402 S. MERIDIAN, PUYALLUP, WA 98371

**TAX PARCEL NUMBER**  
 773000-028-1 & 773000-028-8: TITLE PARCEL A  
 773000-003-1 & 773000-002-1: TITLE PARCEL B

### REFERENCE SURVEYS:

- PIERCE COUNTY SHORT PLAT OF MERIDIAN CENTER – AFN 77-315 (1977)
- PLAT OF SOURWINE'S ACRE LOTS – VOL 8 PLATS, PAGE 10 (1905)
- PIERCE COUNTY SHORT PLAT – AFN 8706010381 (1987)
- WSDOT SR 512 96TH ST TO JCT. SR 167, DATED MAY 23, 1968

### DATE OF SURVEY:

THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON MARCH 22, 2022 & JULY 14, 2023. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN MARCH OF 2022 & JULY OF 2023.

### FLOOD INFORMATION:

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) INFORMATION: FIRM (FLOOD INSURANCE RATE MAP) MAP NO. 5305300341E PANEL 341 OF 1375, DATED MARCH 7, 2017. THE SUBJECT PROPERTY IS IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

### ZONING INFORMATION:

(A ZONING REPORT WAS NOT FURNISHED FOR THIS SITE)

### SURVEYOR'S NOTES:

- ALL DISTANCES SHOWN HEREON ARE GROUND MEASUREMENTS IN U.S. SURVEY FEET.
- THE BOUNDARY CORNERS AND LINES DEPICTED ON THIS MAP REPRESENT DEED LINES ONLY, AND DON'T PURPORT TO SHOW OWNERSHIP LINES THAT MAY OTHERWISE BE DETERMINED BY A COURT OF LAW. NO GUARANTEE OF OWNERSHIP IS EXPRESSED OR IMPLIED.
- UNDERGROUND UTILITIES AND FEATURES DEPICTED HEREON ARE BASED ON FIELD OBSERVATION, MARKINGS, DEVELOPMENT PLANS, AND/OR AVAILABLE RECORD DOCUMENTS ONLY. THE TRUE LOCATION, NATURE AND/OR EXISTENCE OF BELOW GROUND FEATURES, DETECTED OR UNDETECTED, SHOULD BE VERIFIED.
- THE LEGAL DESCRIPTION AND SPECIAL EXCEPTIONS SHOWN HEREON ARE PER THE ABOVE REFERENCED TITLE REPORT UNLESS OTHERWISE NOTED.
- THIS SURVEY HAS DEPICTED ALL VISIBLE OCCUPATIONAL INDICATORS (I.E. FENCE LINES, BUILDINGS, WALLS, ETC. – SEE MAP FOR PARTICULARS) PER W.A.C. 332-130. LINES OF OCCUPATION, AS DEPICTED, MAY INDICATE AREAS OF POTENTIAL CLAIMS OF UNWRITTEN OWNERSHIP. THIS SURVEY HAS ONLY DEPICTED THE RELATIONSHIP BETWEEN LINES OF OCCUPATION AND DEEDED LINES OF RECORD. NO RESOLUTION OF OWNERSHIP BASED ON UNWRITTEN RIGHTS HAS BEEN MADE BY THIS SURVEY OR BY ANY PERSONNEL OF BARGHAUSEN CONSULTING ENGINEERS, INC.
- THIS IS A FIELD TRAVERSE SURVEY. TOPCON GT AND TOPCON HYPER HR GPS AND DELL TABLET DATA COLLECTOR WERE USED TO MEASURE THE ANGULAR AND DISTANCE RELATIONSHIPS BETWEEN THE CONTROLLING MONUMENTATION AS SHOWN. CLOSURE RATIOS OF THE TRAVERSE MET OR EXCEEDED THOSE SPECIFIED IN W.A.C. 332-130-090. ALL INSTRUMENTS AND EQUIPMENT HAVE BEEN MAINTAINED IN ADJUSTMENT ACCORDING TO MANUFACTURERS' SPECIFICATIONS AND USED BY APPROPRIATELY TRAINED PERSONNEL.
- THIS SURVEY MEETS OR EXCEEDS THE "RELATIVE POSITIONAL PRECISION" REQUIREMENTS SET FORTH IN THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS IN SECTION 3(E).
- THE RECORD DESCRIPTION FOR THE SUBJECT PROPERTY MATHEMATICALLY CLOSES.
- ELEMENTS AND FEATURES DEPICTED HEREON SATISFY THE REQUIREMENTS STATED WITHIN W.A.C. 332-130-145 FOR TOPOGRAPHIC MAPS, INCLUDING THE FOLLOWING: THE SOURCE OF THE CONTOURS SHOWN HEREON ARE BASED UPON DIRECT FIELD OBSERVATIONS. THE CONTOUR ACCURACY IS PER NATIONAL MAPPING STANDARDS, ONE HALF OF THE CONTOUR INTERVAL (1'). THE PURPOSE OF THIS SURVEY IS TO MAP THE CURRENT CONDITIONS FOR ENGINEERING DESIGN.
- BARGHAUSEN CONSULTING ENGINEERS, INC. SURVEY CREWS DETECTED NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS ON THE SUBJECT PROPERTY.
- BARGHAUSEN CONSULTING ENGINEERS, INC. SURVEY CREWS DETECTED NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
- THERE IS NO VISIBLE EVIDENCE OF ANY CEMETERIES OR BURIAL GROUNDS.
- THERE IS EVIDENCE OF PHYSICAL ACCESS TO PUBLIC RIGHT-OF-WAY.

## TITLE INFORMATION:

**TITLE COMMITMENT:**  
 ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM STEWART TITLE GUARANTY COMPANY COMMITMENT NO. 21000200719, DATED JULY 29, 2021 AT 8:00 AM. INCLUDED ARE APPURTENANT EASEMENTS AND ADJOINING DEEDS FOR UNPLATTED LOTS, IF ANY. IN PREPARING THIS MAP, BARGHAUSEN CONSULTING ENGINEERS, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS BARGHAUSEN CONSULTING ENGINEERS, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY SAID COMMITMENT. BARGHAUSEN CONSULTING ENGINEERS, INC. HAS RELIED WHOLLY ON SAID TITLE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND THEREFORE BARGHAUSEN CONSULTING ENGINEERS, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.

### LEGAL DESCRIPTION

(PER ABOVE REFERENCED TITLE REPORT)  
 PARCEL A: (773000-028-1 & 773000-028-8)  
 LOT 1 AND THE NORTH 15 FEET OF THE EAST 178.33 FEET OF "COMMON ACCESS TRACT A", OF PIERCE COUNTY SHORT PLAT RECORDED UNDER RECORDING NO. 77-315, RECORDS OF PIERCE COUNTY WASHINGTON, FORMERLY BEING DESCRIBED AS THE NORTH 161.5 FEET OF THE WEST 178.33 FEET OF THE EAST 188.33 FEET OF LOT 20, SOURWINE'S ACRE LOTS, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 10, RECORDS OF PIERCE COUNTY, WASHINGTON; TOGETHER WITH THAT PORTION OF 14TH AVENUE SW, VACATED BY ORDINANCE NO. 2304 ABUTTING THEREON AND ATTACHED THERETO, RECORDED UNDER RECORDING NO. 9206040385.  
 PARCEL A1:  
 RIGHTS TO USE THAT PORTION OF THE WITHIN DESCRIBED PROPERTY LYING WITHIN COMMON ACCESS TRACT "A" OF SIDE SHORT PLAT, FOR INGRESS, EGRESS, AND INSTALLATION AND MAINTENANCE OF UTILITIES, AS SET FORTH AND DELINEATED ON PIERCE COUNTY SHORT PLAT NO. 77-315;  
 EXCEPT ANY PORTION LYING WITHIN PARCEL A ABOVE.  
 PARCEL A2:  
 AN EASEMENT FOR INGRESS AND EGRESS AS SET FORTH IN DOCUMENTS ENTITLED "STATUTORY WARRANTY DEED" AS RECORDED UNDER RECORDING NUMBERS 2741876 AND 2792268.  
 PARCEL B: (773000-003-1 & 773000-002-1)  
 LOT 2, SOURWINE'S ACRE LOTS, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 8 OF PLATS, PAGE 10, RECORDS OF PIERCE COUNTY, WASHINGTON; EXCEPT THAT PORTION LYING WITHIN STATE HIGHWAY NO. SR-512, 96TH STREET TO JUNCTION SR-167;  
 TOGETHER WITH THAT PORTION OF 14TH AVENUE SW, VACATED BY ORDINANCE NO. 2304 ABUTTING THEREON AND ATTACHED THERETO, RECORDED UNDER RECORDING NO. 9206040385.  
 SITUATE IN THE COUNTY OF PIERCE, STATE OF WASHINGTON.

### SPECIAL EXCEPTIONS:

(PER ABOVE REFERENCED TITLE REPORT)  
 ITEMS 1 THROUGH 18 ARE NOT SURVEY RELATED.

- TEMPORARY RIGHT, PERMIT, LICENSE AND EASEMENT TO USE AND OCCUPY A PORTION OF SAID LOT 20 FOR THE PURPOSE OF CONSTRUCTING HIGHWAY SLOPES AND OPERATING ALL NECESSARY MACHINERY AND EQUIPMENT THEREON AT ANY AND ALL TIMES UNTIL COMPLETION OF CONSTRUCTION FOR STATE ROAD NO. 512 AS APPROPRIATED BY THE STATE OF WASHINGTON IN PIERCE COUNTY SUPERIOR COURT CAUSE NO. 198127. AFTER COMPLETION OF CONSTRUCTION, ALL RIGHTS OF EASEMENT SHALL BE EXTINGUISHED.  
 AFFECTS: PARCEL A  
**(BLANKET IN NATURE)(POTENTIALLY EXTINGUISHED)**
- RELINQUISHMENT OF ACCESS TO STATE HIGHWAY AND OF LIGHT, VIEW AND AIR BY DEED TO THE STATE OF WASHINGTON:  
 GRANTEE: NOVEMBER 19, 1966  
 RECORDED NO.: 2321816  
 AFFECTS: PARCEL A  
**(APPLIES TO OFFSITE ADJACENT PROPERTY)**
- RELINQUISHMENT OF ACCESS TO STATE HIGHWAY AND OF LIGHT, VIEW AND AIR BY DEED TO THE STATE OF WASHINGTON:  
 RECORDED: OCTOBER 20, 1975  
 RECORDING NO.: 2632004  
 AFFECTS: PARCEL B  
**(BLANKET IN NATURE)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: PUGET SOUND POWER AND LIGHT COMPANY  
 PURPOSE: ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM  
 AFFECTS: EAST 10 FEET OF PARCEL A AND INCLUDES OTHER PROPERTY  
 RECORDED: MAY 26, 1976  
 RECORDING NO.: 2667305  
**(PLOTTED HEREON)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: PUGET SOUND POWER AND LIGHT COMPANY  
 PURPOSE: ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM  
 AFFECTS: PORTION OF PARCEL A AND INCLUDES OTHER PROPERTY  
 RECORDED: MAY 26, 1976  
 RECORDING NO.: 2667306  
**(BLANKET IN NATURE)**
- COVENANTS, CONDITIONS AND RESTRICTIONS AND EASEMENTS CONTAINED IN SHORT PLAT:  
 RECORDED: MAY 25, 1977  
 RECORDING NO.: 77-315  
**(PLOTTED HEREON)(COMMON ACCESS TRACT "A")**

- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 PURPOSE: INGRESS, EGRESS AND UTILITIES  
 AFFECTS: PORTION OF TRACT A LYING WITHIN PARCEL A  
 RECORDED: JANUARY 16, 1958  
 RECORDING NO.: 2792268  
**(PLOTTED HEREON)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 PURPOSE: INGRESS AND EGRESS  
 AFFECTS: TRACT A OF SHORT PLAT 77-315  
 RECORDED: JUNE 8, 1977  
 RECORDING NO.: 2741876  
**(PLOTTED HEREON)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: CITY OF PUYALLUP  
 PURPOSE: GRANTEE: INSTALLING, REPAIRING AND MAINTAINING STREET IMPROVEMENTS ACCORDING TO THE PLAN ENTITLED "SOUTH MERIDIAN STREET IMPROVEMENTS"  
 AFFECTS: PARCEL A  
 RECORDED: JUNE 10, 1987  
 RECORDING NO.: 8706100397  
**(PLOTTED HEREON)**
- MUTUAL MAINTENANCE AGREEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 RECORDED: MAY 17, 1991  
 RECORDING NO.: 9105170239  
 AFFECTS: PARCEL A  
**(NOT SURVEY RELATED)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: WASHINGTON NATURAL GAS  
 PURPOSE: GAS PIPELINE OR PIPELINES  
 AFFECTS: NORTHERLY PORTION OF PARCEL A  
 RECORDED: MARCH 30, 1992  
 RECORDING NO.: 9203300111  
**(PLOTTED HEREON)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: CITY OF PUYALLUP  
 PURPOSE: STORMWATER, SANITARY AND WATERMAIN PIPE LINE AND APPURTENANCES  
 AFFECTS: SOUTH 30 FEET OF PARCEL B  
 RECORDED: JUNE 4, 1992  
 RECORDING NO.: 9206040382  
**(PLOTTED HEREON)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: CITY OF PUYALLUP  
 PURPOSE: STORMWATER, SANITARY AND WATERMAIN PIPE LINE AND APPURTENANCES  
 AFFECTS: NORTH 30 FEET OF PARCEL A  
 RECORDED: JUNE 4, 1992  
 RECORDING NO.: 9206040383  
**(PLOTTED HEREON)(OFFSITE ADJACENT EASEMENT)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: CITY OF PUYALLUP  
 PURPOSE: STORMWATER, SANITARY AND WATERMAIN PIPE LINE AND APPURTENANCES  
 AFFECTS: NORTH 30 FEET OF PARCEL A  
 RECORDED: JUNE 4, 1992  
 RECORDING NO.: 9206040384  
**(PLOTTED HEREON)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: PUGET SOUND POWER AND LIGHT COMPANY  
 PURPOSE: ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM  
 AFFECTS: PORTION OF PARCEL B  
 RECORDED: JULY 28, 1992  
 RECORDING NO.: 9207280563  
**(PLOTTED HEREON)(OFFSITE ADJACENT EASEMENT)**
- EASEMENT AND THE TERMS AND CONDITIONS THEREOF:  
 GRANTEE: PUGET SOUND POWER AND LIGHT COMPANY  
 PURPOSE: ELECTRIC TRANSMISSION AND/OR DISTRIBUTION SYSTEM  
 AFFECTS: PORTION OF PARCEL A  
 RECORDED: JULY 28, 1992  
 RECORDING NO.: 9207280564  
**(PLOTTED HEREON)**

PRCNC20240007

### SURVEYOR'S CERTIFICATION:

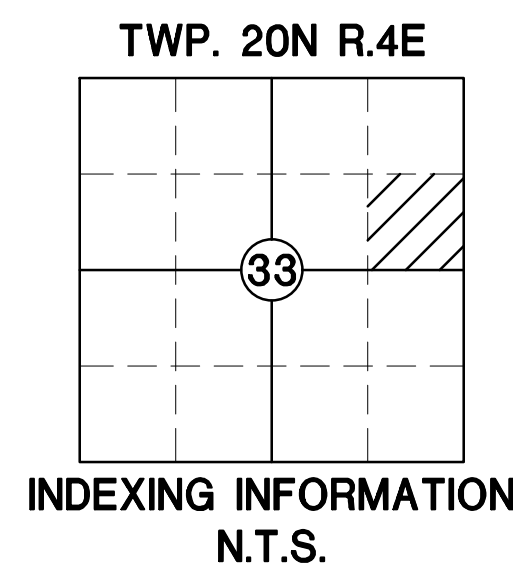
TO: BP PRODUCTS NORTH AMERICA INC., A MARYLAND CORPORATION AND STEWART TITLE GUARANTY COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS AND INCLUDES ITEMS 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 11, 13, 14, 16, 17, 18, AND 19 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON MARCH 22, 2022.

DATE OF PLAT OR MAP: JULY 19, 2023.

*Matthew K. Abbas*  
 MATTHEW K. ABBAS, PLS  
 WASHINGTON REGISTRATION NO. 20109892  
 MABBAS@BARGHAUSEN.COM

7/19/2023  
 DATE



No.	Date	By	Chd.	Appr.	Revision
1	7/18/23	KJR	MKA	MKA	ADDED TOPO AND UTILITIES TO THE ROAD SOUTH OF THE SITE TO 15TH AVE SE

Title: **ALTA/NSPS LAND TITLE SURVEY**  
 PTN OF THE SE1/4, OF THE NE1/4 OF SEC. 33,  
 TWP. 20 N., RGE 4 E., W. M.  
 CITY OF PUYALLUP, PIERCE COUNTY,  
 WASHINGTON STATE

For: **BP FUELS NA**

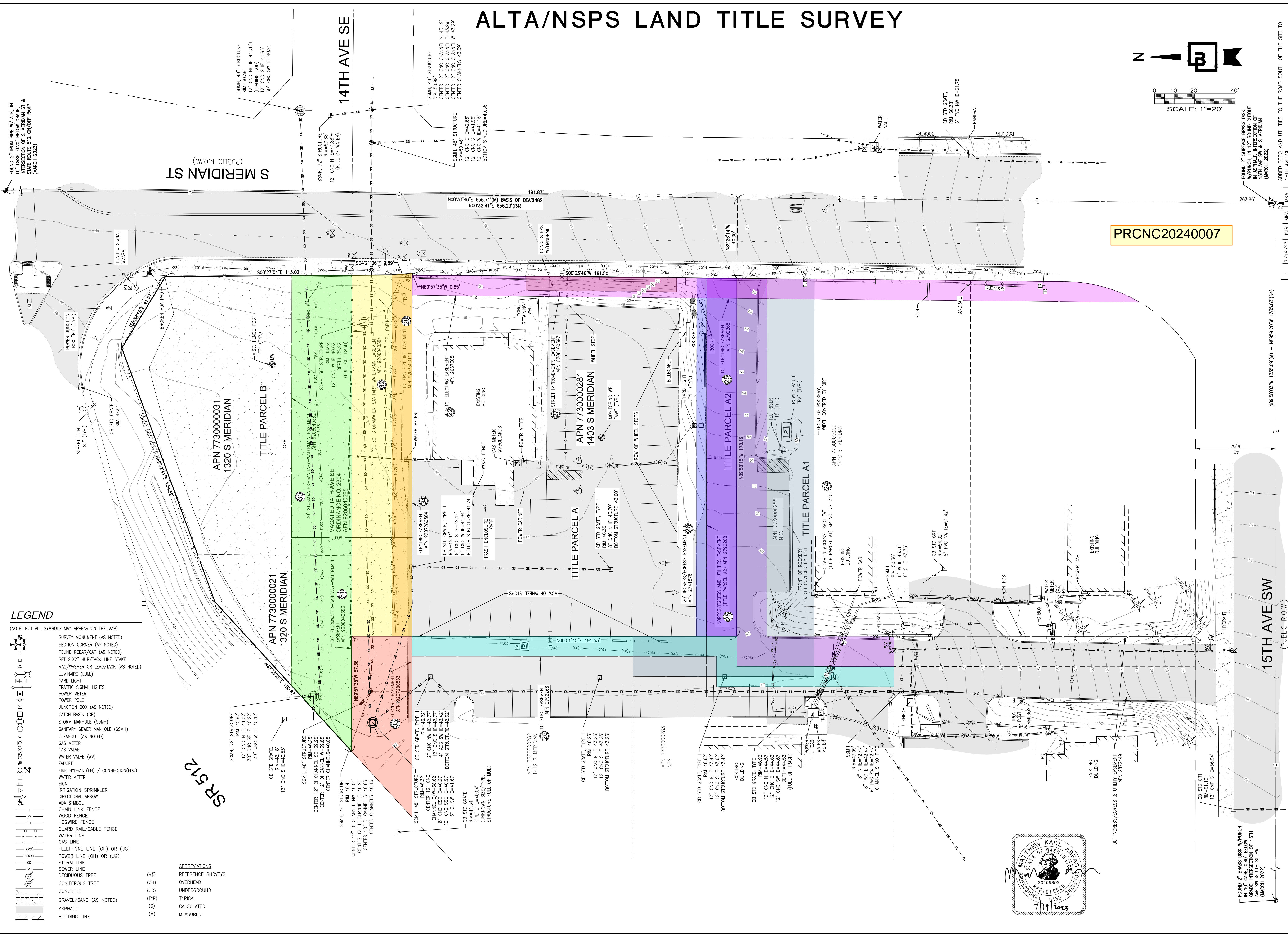
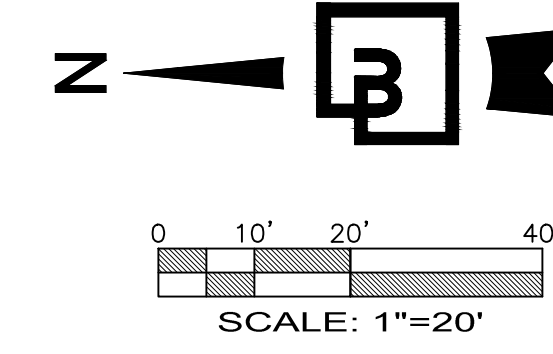
Scale:  
 Horizontal N/A  
 Vertical

Designed: \_\_\_\_\_  
 Drawn: AEF  
 Checked: MKA  
 Approved: MKA  
 Date: 7/19/23

**Barghausen Consulting Engineers, Inc.**  
 18215 72nd Avenue South  
 Kent, WA 98032  
 425.251.6222  
 barghausen.com

Job Number: **21730**  
 Sheet: **1** of **2**

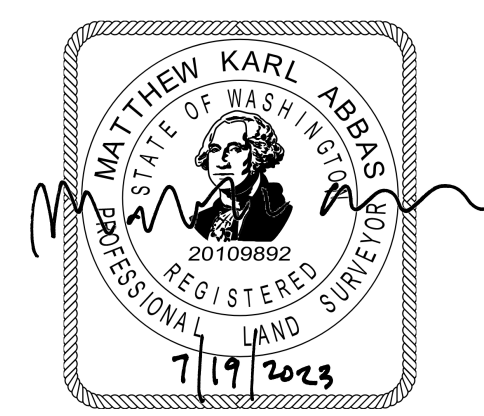
# ALTA/NSPS LAND TITLE SURVEY



PRCNC20240007

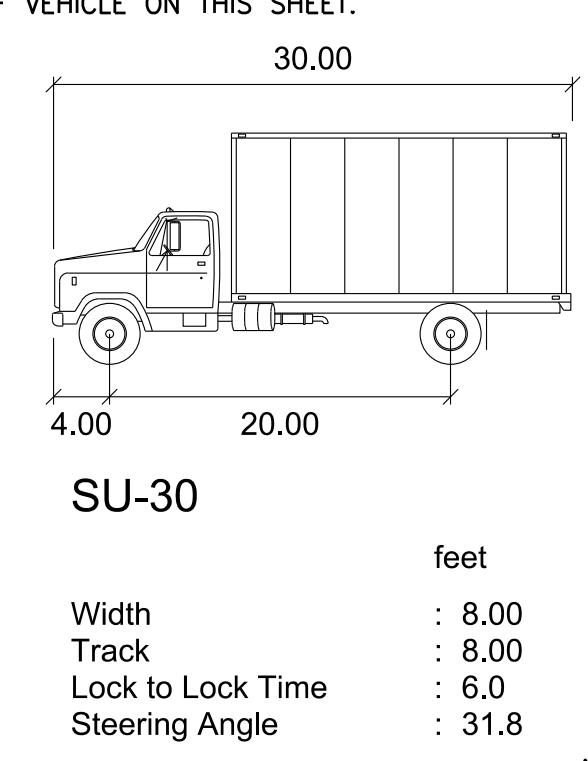
- LEGEND**  
(NOTE: NOT ALL SYMBOLS MAY APPEAR ON THE MAP)
- SURVEY MONUMENT (AS NOTED)
  - SECTION CORNER (AS NOTED)
  - FOUND REBAR/CAP (AS NOTED)
  - SET 2"x2" HUB/TACK LINE STAKE
  - MAG/WASHER OR LEAD/TACK (AS NOTED)
  - LUMINAIRE (LUM.)
  - YARD LIGHT
  - TRAFFIC SIGNAL LIGHTS
  - POWER METER
  - POWER POLE
  - JUNCTION BOX (AS NOTED)
  - CATCH BASIN (CB)
  - STORM MANHOLE (SDMH)
  - SANITARY SEWER MANHOLE (SSMH)
  - CLEANOUT (AS NOTED)
  - GAS METER
  - GAS VALVE
  - WATER VALVE (WV)
  - FAUCET
  - FIRE HYDRANT (FH) / CONNECTION (FDC)
  - WATER METER
  - SIGN
  - IRRIGATION SPRINKLER
  - DIRECTIONAL ARROW
  - ADA SYMBOL
  - CHAIN LINK FENCE
  - WOOD FENCE
  - HOSEWIRE FENCE
  - GUARD RAIL/CABLE FENCE
  - WATER LINE
  - GAS LINE
  - TELEPHONE LINE (OH) OR (UG)
  - POWER LINE (OH) OR (UG)
  - STORM LINE
  - SEWER LINE
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - CONCRETE
  - GRAVEL/SAND (AS NOTED)
  - ASPHALT
  - BUILDING LINE
- ABBREVIATIONS**
- (R#) REFERENCE SURVEYS
  - (OH) OVERHEAD
  - (UG) UNDERGROUND
  - (TYP) TYPICAL
  - (C) CALCULATED
  - (M) MEASURED

Job Number <b>21730</b>		Title: <b>ALTA/NSPS LAND TITLE SURVEY</b>	
Sheet <b>2</b> of <b>2</b>		For: <b>BP FUELS NA</b>	
Scale: Horizontal 1"=20' Vertical		Designated: Drawn: <input checked="" type="checkbox"/> MKA Checked: <input checked="" type="checkbox"/> MKA Approved: <input checked="" type="checkbox"/> MKA Date: 7/19/23	
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com		Title: <b>ALTA/NSPS LAND TITLE SURVEY</b> PTN OF THE SE1/4, OF THE NE1/4 OF SEC. 33, TWP. 20 N., RGE 4 E., W. M. CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON STATE	
No. 1		Revision	
Date 7/18/23		By: MKA	
Date 7/18/23		Appr.: MKA	
Date 7/18/23		Appr.: MKA	
Date 7/18/23		Appr.: MKA	



**CONSTRUCTION NOTES:**

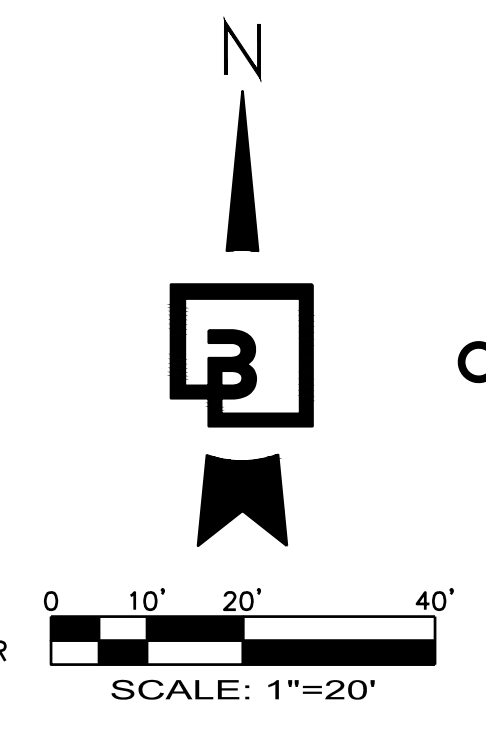
- PROPOSED CONVENIENCE STORE. CONFIRM ALL DIMENSIONS WITH ARCHITECTURAL PLANS. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED CAR WASH. CONFIRM ALL DIMENSIONS WITH ARCHITECTURAL PLANS. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED LOCATION OF FUEL CANOPY. CONFIRM ALL DIMENSIONS WITH THE ARCHITECTURAL AND FUEL PLANS. SEE ARCHITECTURAL PLANS AND FUEL PLANS FOR DETAILS.
- PROPOSED 25K AND 22K SPLIT UNDERGROUND STORAGE TANKS. SEE FUEL PLANS FOR DETAILS.
- PROPOSED TRASH ENCLOSURE AND CONCRETE TRASH ENCLOSURE SLAB. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED ON-SITE ASPHALT PAVEMENT. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED ON-SITE CONCRETE PAVEMENT. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED BARRIER CURB. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED CURB AND GUTTER. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED CONCRETE SIDEWALK, WIDTH VARIES. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED ACCESSIBLE PARKING STALL AND AISLE. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED BOLLARD MOUNTED ACCESSIBLE PARKING STALL SIGNAGE. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED PARKING STALL WITH 4" WIDE WHITE REFLECTIVE PAINT STRIPE (TYP.). REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED BOLLARD (TYP.). REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED LOT LIGHT. SEE DETAIL ON-SITE PHOTOMETRIC PLANS FOR MORE DETAILS. COORDINATE ALL CONDUIT RUNS, WIRING REQUIREMENTS, ETC. WITH ELECTRICAL PLANS. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED AIR/WATER UNIT. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED BICYCLE STORAGE. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED SEATING BENCH. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED LANDSCAPING. SEE LANDSCAPE PLANS.
- PROPOSED CONCRETE TANK FUEL SLAB. SEE FUEL PLANS FOR DESIGN.
- PROPOSED UNDER CANOPY CONCRETE SLAB. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED FUEL DISPENSERS WITH HOOP BOLLARDS (TYP.). SEE FUEL PLANS FOR DETAILS.
- PAVEMENT MARKINGS - 4" WIDE WHITE PAINTED STRIPES @ 2' O.C./45° ANGLE. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED VACUUM UNIT. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED FUTURE VAN ACCESSIBLE AND STANDARD EV CHARGING STATION. FREEWIRE EV CHARGING STATION TO BE INSTALLED. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED TRASH RECEPTACLE (TYP.).
- PROPOSED ACCESSIBLE PATH. REFER TO ACCESSIBLE PATH NOTE THIS SHEET.
- PROPOSED BLOCK RETAINING WALL. REFER TO STRUCTURAL ENGINEERING PLANS FOR DETAILS. REFER TO RETAINING WALL BUILDING PERMIT PRWF20231581.
- PROPOSED ON-SITE MONUMENT SIGN. REFER TO SEPARATE SIGNAGE PLANS.
- PROPOSED SITE FENCE. REFER TO ARCHITECTURAL PLANS FOR MORE DETAILS.
- PROPOSED DIRECTIONAL ARROWS. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED BUS STOP BENCH PER PIERCE TRANSIT STANDARD BENCH. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423. CONTRACTOR TO GIVE PIERCE TRANSIT TWO (2) WEEKS NOTICE PRIOR TO CONSTRUCTION TO ALLOW PIERCE TRANSIT TO REMOVE THE BUS STOP SIGN AND BENCH. UPON COMPLETION OF CONSTRUCTION CONTRACTOR TO COORDINATE REINSTALLATION OF BUS STOP WITH PIERCE TRANSIT.
- EXISTING FIRE HYDRANT TO REMAIN.
- EXISTING ASPHALT TO REMAIN.
- EXISTING DIRECTIONAL HOSPITAL ROAD SIGN TO BE RE-SET. FINAL LOCATION TO BE APPROVED WITH ROW INSPECTOR. THE PERMIT HOLDER SHALL NOTIFY MULTICARE GOOD SAMARITAN HOSPITAL BY CONTACTING AARON PICHE, MANAGER OF ENGINEERING SERVICES, AT AARON.PICHE@MULTICARE.ORG AND HEIDI ROCK AT HEIDI.ROCK@MULTICARE.ORG WITH THE PROPOSED IMPACTS AND SIGN DISPLACEMENT DURATION AT LEAST 48 HOURS IN ADVANCE OF JOB START. NO EMERGENCY SERVICE VEHICLE TRAVEL ROUTES SHALL BE BLOCKED OR REROUTED.
- EXISTING CURB TO REMAIN.
- RESTORE GRAVEL SURFACE.
- PROPOSED TRANSFORMER.
- PROPOSED MOUNTABLE CURB ISLAND. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.



feet

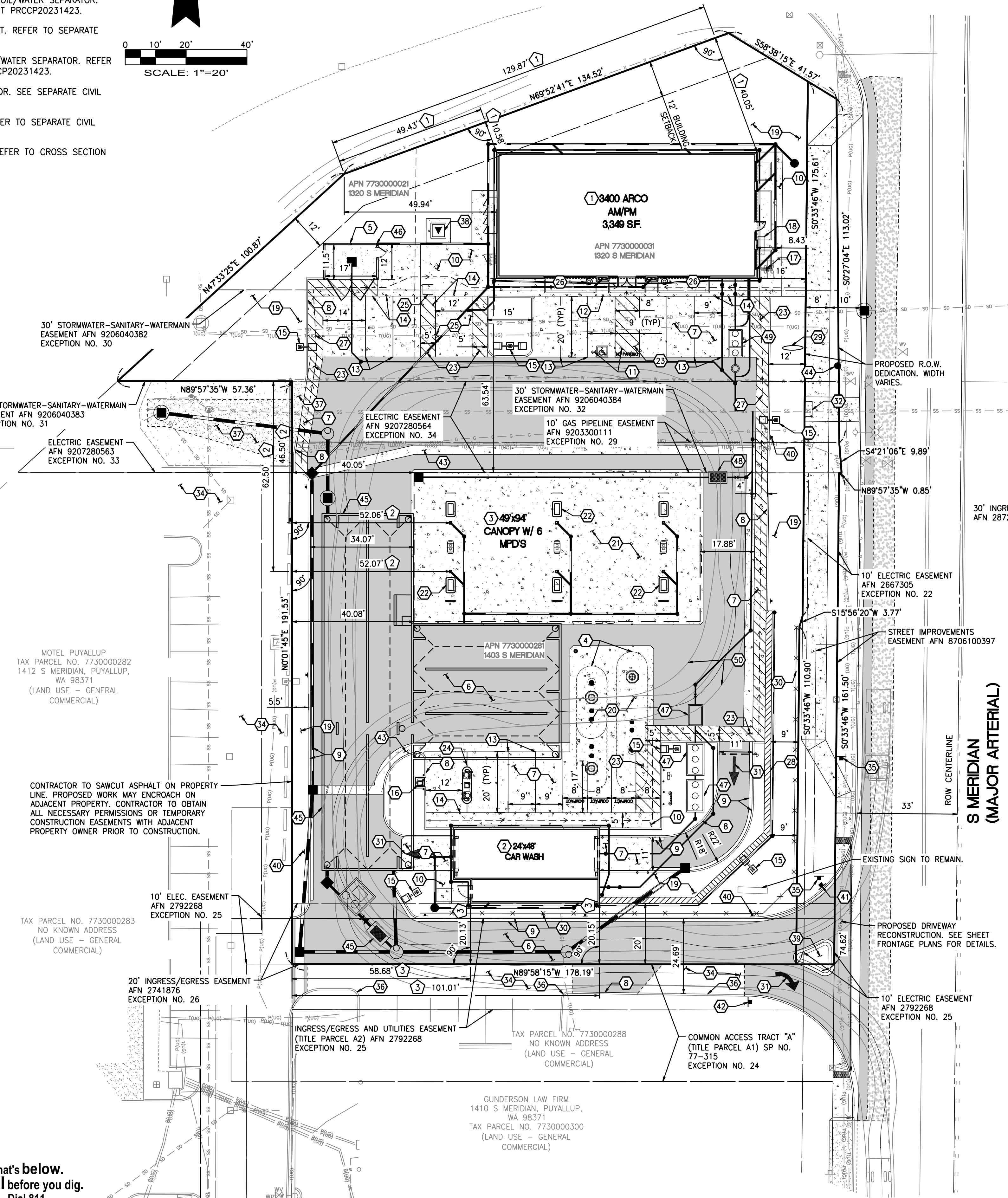
# SITE PLAN

## FOR ARCO ampm PUYALLUP SEC. 33, TWN. 20 N, RGE. 4 E, W.M. CITY OF PUYALLUP, PIERCE COUNTY

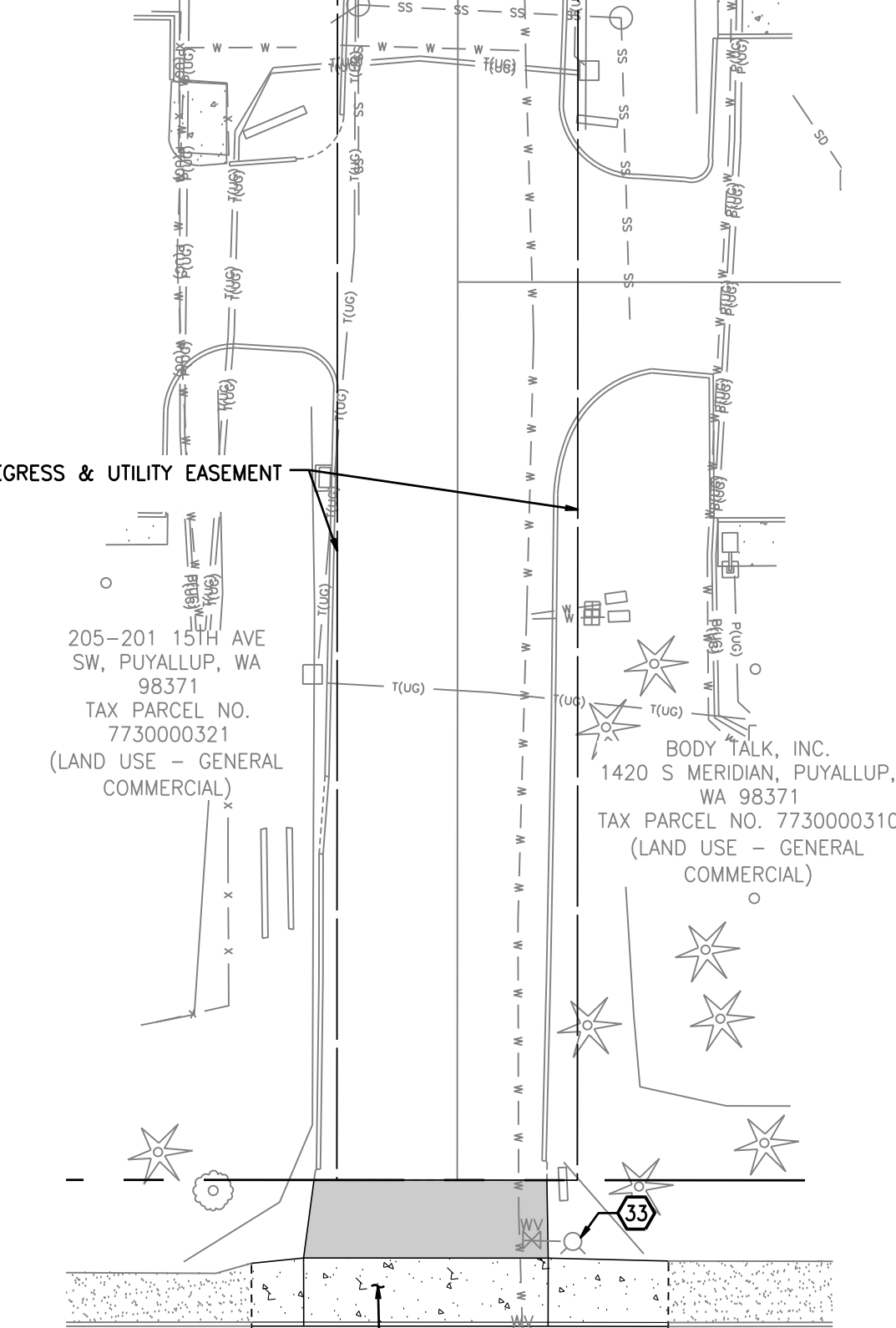


**ACCESSIBLE PATH OF TRAVEL NOTE:**  
WALKWAYS ALONG ACCESSIBLE ROUTES OF TRAVEL SHALL BE CONTINUOUSLY ACCESSIBLE. BE A MINIMUM OF 48" IN WIDTH (PER PAR REQUIREMENTS FOUND IN PROWAG), HAVE A MAXIMUM 2.0% CROSS SLOPE, AND SHALL HAVE RAMPS COMPLYING WITH ACCESSIBILITY STANDARDS (SECTION 405) WHERE NECESSARY TO CHANGE ELEVATION AT A LONGITUDINAL SLOPE EXCEEDING 5% (1:20).

- MEASUREMENT FROM NORTHWEST PROPERTY CORNER TO FINISH FACE OF BUILDING FOUNDATION (NOT FOOTING). C-STORE IS NOT PARALLEL TO NORTHWEST PROPERTY LINE. DIMENSIONS FROM NORTHWEST PROPERTY CORNER ARE ONLY ACCURATE TO BUILDING CORNERS AS SHOWN.
- MEASUREMENT FROM NORTHWEST PROPERTY CORNER TO CENTER OF CANOPY COLUMNS. CANOPY IS NOT PARALLEL TO WEST PROPERTY LINE. DIMENSIONS FROM NORTHWEST PROPERTY CORNER ARE ONLY ACCURATE TO CENTER OF CANOPY COLUMNS AS SHOWN.
- MEASUREMENT FROM SOUTHWEST PROPERTY CORNER TO FINISH FACE OF BUILDING FOUNDATION (NOT FOOTING). CAR WASH IS NOT PARALLEL TO SOUTH PROPERTY LINE. DIMENSIONS FROM SOUTHWEST PROPERTY CORNER ARE ONLY ACCURATE TO CAR WASH AS SHOWN.



MATCHLINE - SEE LEFT FOR CONTINUATION



15TH AVE SW  
ROW CENTERLINE

S MERIDIAN  
(MAJOR ARTERIAL)

**UTILITY CONFLICT NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 48 HOURS IN ADVANCE AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.



MATCHLINE - SEE RIGHT FOR CONTINUATION

CLIENT:

BP WEST COAST PRODUCTS, LLC

**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION DESCRIPTION

SEAL:

2/9/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPDS

SITE ADDRESS:  
**1402 S. MERIDIAN**  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

FACILITY #TBD

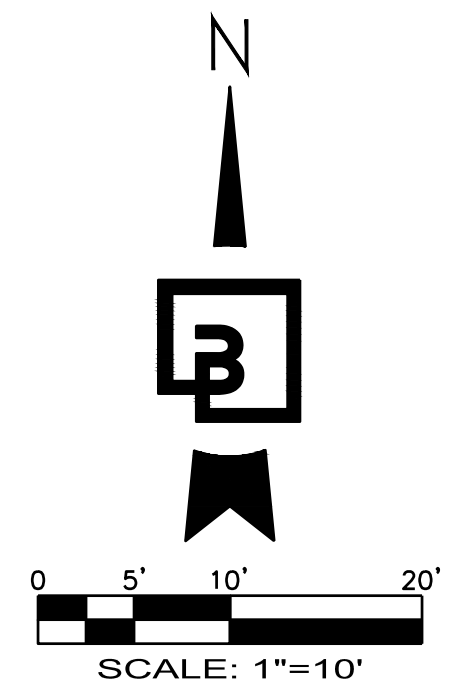
DESIGNED BY: JDF ALLIANCE ZBDW  
CHECKED BY: AW BP REPM  
DRAWN BY: JDF ALLIANCE PM  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**SITE PLAN**

SHEET NO:  
**1 OF 1**

PROJECT: 21730-ENGINEERING\21730-BUILDINGS.dwg 2/9/2024 2:08 PM JLEHARTY

UTILITY CROSSING TABLE				
TOP UTILITY	TOP EL.	BOTTOM UTILITY	BOTTOM EL.	SEPARATION
1 STORM DRAIN	44.65'	SEWER	41.44'	3.20'
2 SEWER	47.07'	STORM DRAIN	42.80'	4.27'
3 SEWER	46.75'	STORM DRAIN	45.46'	1.30'
4 SEWER	45.94'	STORM DRAIN	42.80'	3.15'
5 SEWER	40.83'	STORM DRAIN	40.65'	0.18'
6 SEWER	45.92'	STORM DRAIN	42.80'	3.12'
7 STORM DRAIN	44.44'	STORM DRAIN	41.10'	3.34'
8 STORM DRAIN	45.04'	STORM DRAIN	42.80'	2.24'



**PIPE MATERIALS AND COVER:**

CONTRACTOR SHALL USE PIPE/FITTING MATERIALS IN ACCORDANCE WITH CITY OF PUYALLUP REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.

PVC PIPE SHALL BE SDR-35 WITH 3.0' MIN COVER WHERE SUBJECT TO VEHICULAR LOADING SHALL.

ALL DUCTILE IRON PIPE WITH 1.0' MIN COVER SHALL BE CLASS 52.

**UTILITY PLAN - NORTH**

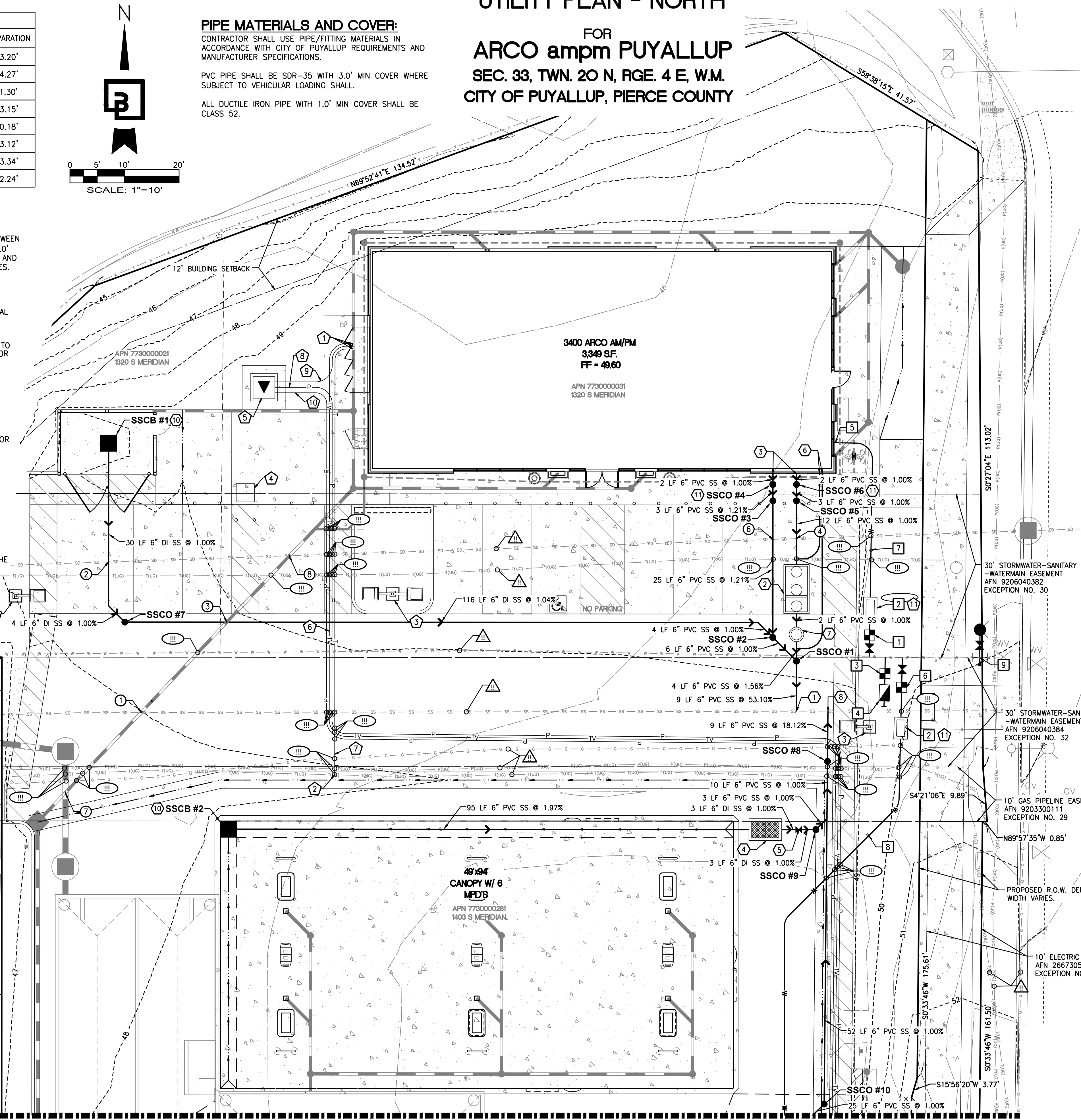
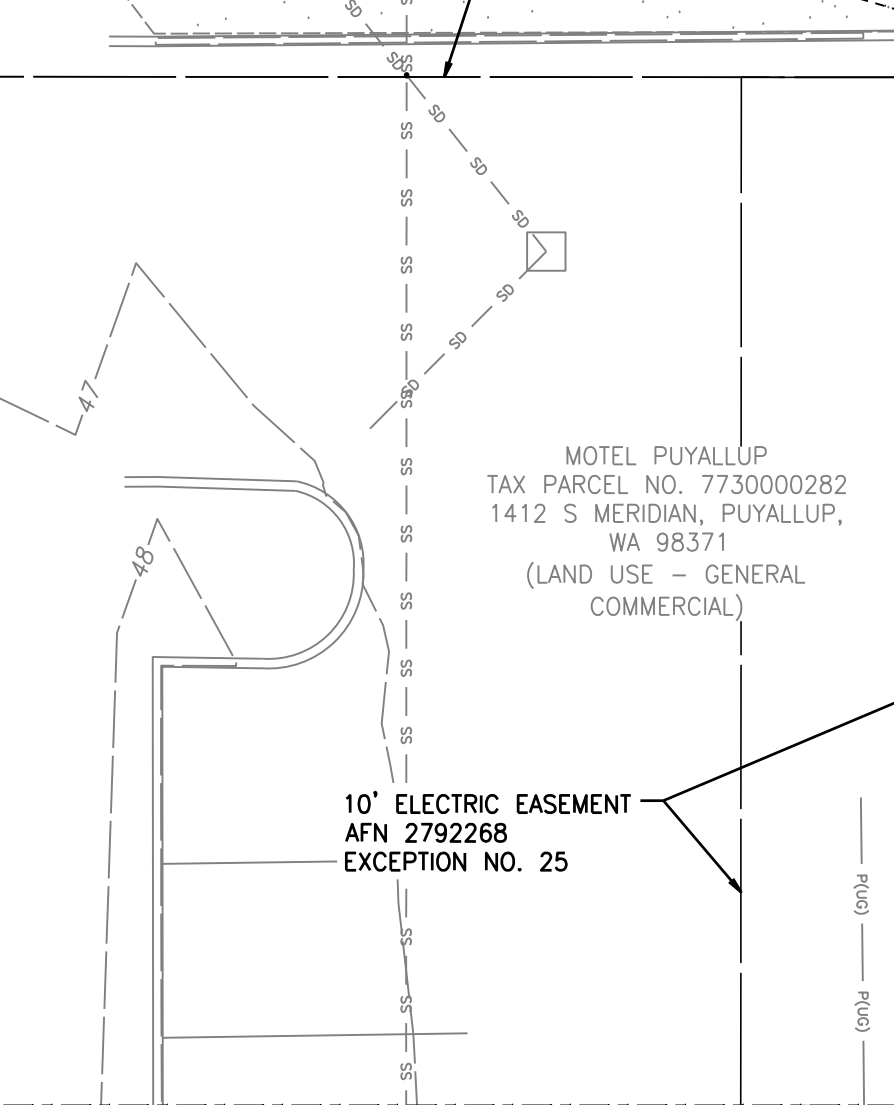
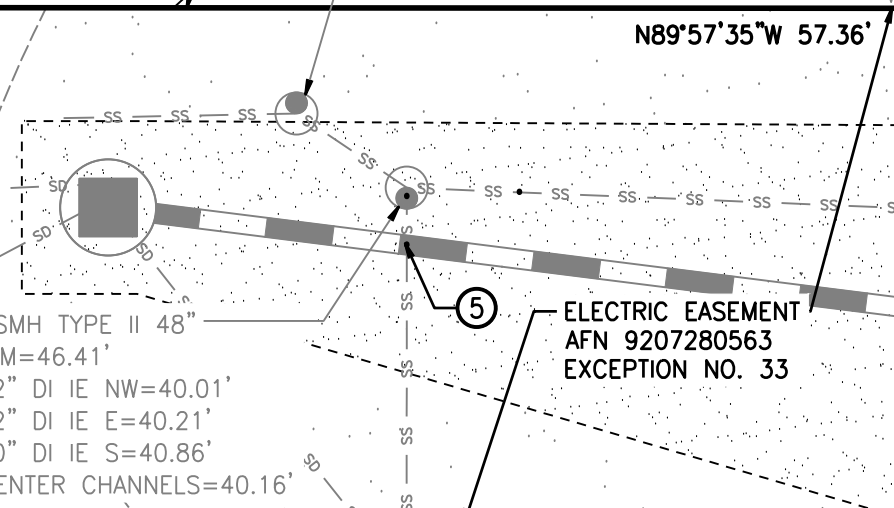
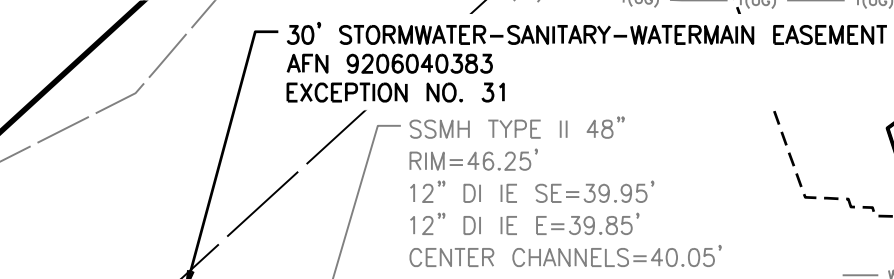
FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY

**UTILITY CROSSING NOTE:**

CONTRACTOR TO MAINTAIN MINIMUM 1.5' VERTICAL SEPARATION BETWEEN WATER SERVICE LINES AND ALL OTHER UTILITIES. A MINIMUM OF 1.0' VERTICAL SEPARATION MUST BE MAINTAINED BETWEEN SIDE SEWER AND ALL OTHER UTILITIES WITH THE EXCEPTION OF WATER SERVICE LINES.

**DRY UTILITY NOTES:**

- APPROXIMATE LOCATION OF POWER, TELEPHONE, AND TELECOMMUNICATION CONNECTION TO BUILDING. SEE ELECTRICAL PLANS FOR FINAL LOCATION ON MAIN SWITCH BOARD. CONTRACTOR TO COORDINATE INSTALLATION WITH PURVEYOR.
- APPROXIMATE LOCATION OF TELECOMMUNICATION CONNECTION TO EXISTING UNDERGROUND TELECOMMUNICATION LINE. CONTRACTOR TO COORDINATE INSTALLATION WITH PURVEYOR.
- PROPOSED LOT LIGHT. CONTRACTOR TO COORDINATE CONDUIT REQUIREMENTS WITH ELECTRICAL PLANS. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- PROPOSED EV STATION (TYP. OF 1). CONTRACTOR TO COORDINATE CONDUIT REQUIREMENTS WITH ELECTRICAL PLANS.
- PROPOSED TRANSFORMER. REFER TO SEPARATE PSE PLANS FOR CONTRACTOR SCOPE AND SPECS.
- PROPOSED CABLE LINE.
- PROPOSED TELEPHONE LINE.
- PROPOSED POWER LINE TO PROPOSED TRANSFORMER.
- PROPOSED POWER LINE TO BUILDING.
- PROPOSED POWER LINE TO CAR WASH.
- PROVIDE CONDUIT FOR ELECTRICAL HEATING OF RPBA. CONTRACTOR TO COORDINATE CONDUIT REQUIREMENTS WITH THE ELECTRICAL PLANS.



SANITARY SEWER STRUCTURES	
TABLE	
SSCB #1, TYPE 1 W/STANDARD GRATE RIM=48.93 IE=47.33 (6" OUT S)	
SSCB #2, TYPE 1 W/STANDARD GRATE RIM=48.08 IE=44.58 (6" OUT E)	
SSCO #1, W/SOLID LOCKING TRAFFIC RATED LID RIM=49.11 IE=45.68 (6" IN N) IE=45.68 (6" IN NW) IE=45.68 (6" OUT S)	
SSCO #2, W/SOLID LOCKING TRAFFIC RATED LID RIM=49.24 IE=45.74 (6" IN N) IE=45.74 (6" IN NW) IE=45.74 (6" OUT SE)	
SSCO #3, W/SOLID LOCKING ADA COMPLIANT LID RIM=49.56 IE=46.04 (6" IN N) IE=46.04 (6" OUT S)	
SSCO #4, W/SOLID LOCKING ADA COMPLIANT LID RIM=49.58 IE=46.08 (6" IN N) IE=46.08 (6" OUT S)	
SSCO #5, W/SOLID LOCKING ADA COMPLIANT LID RIM=49.56 IE=46.05 (6" IN N) IE=46.05 (6" OUT S)	
SSCO #6, W/SOLID LOCKING ADA COMPLIANT LID RIM=49.59 IE=46.08 (6" IN N) IE=46.08 (6" OUT S)	
SSCO #7, W/SOLID LOCKING TRAFFIC RATED LID RIM=48.49 IE=46.99 (6" IN NW) IE=46.99 (6" OUT E)	
SSCO #8, W/SOLID LOCKING TRAFFIC RATED LID RIM=48.46 IE=42.50 (6" IN S) IE=42.50 (6" OUT N)	
SSCO #9, W/SOLID LOCKING TRAFFIC RATED LID RIM=48.41 IE=42.64 (6" IN W) IE=42.64 (6" OUT NE)	
SSCO #10, W/SOLID LOCKING TRAFFIC RATED LID RIM=48.60 IE=43.13 (6" IN SW) IE=43.13 (6" OUT N)	

**SEWER NOTES:**

- APPROXIMATE LOCATION OF SEWER CONNECTION TO EXISTING SEWER LINE PER CITY OF PUYALLUP STANDARD DETAIL 04.02.01 - SEWER MAIN TAP. SEE DETAIL 4/U2.2. IE = 40.81
- PROPOSED 1,000 GALLON GREASE INTERCEPTOR. SEE CITY OF PUYALLUP STANDARD DETAIL 4.06.01. DETAIL 3/U2.3. RIM = ±49.46 IE = 45.93 (6" N) IE = 45.76 (6" S)
- APPROXIMATE LOCATION OF SEWER CONNECTION TO BUILDING. SEE PLUMBING PLANS FOR CONTINUATION. CONFIRM EXACT LOCATION WITH PLUMBING PLANS. IE = 46.10 (6" S)
- PROPOSED OIL/WATER SEPARATOR PER OLDCASTLE 660-CPS. SEE DETAIL 1/U2.0. RIM = ±48.60 IE = 42.70 (6" W) IE = 42.70 (6" E)
- PROPOSED 6" GATE VALVE (MJ) IN TRAFFIC RATED VALVE BOX.
- 2 - 3" GREASE INTERCEPTOR VENT LINES. REFER TO MEP PLANS FOR MORE DETAIL.
- PROPOSED SAMPLING BOX. SEE DETAIL 4/U2.3 RIM = ±49.36 IE = 45.74 (6" N) IE = 45.74 (6" S)
- APPROXIMATE LOCATION OF SEWER CONNECTION TO EXISTING SEWER LINE PER CITY OF PUYALLUP STANDARD DETAIL 04.02.01 - SEWER MAIN TAP. SEE DETAIL 4/U2.2. IE = 40.83
- SANITARY SEWER CATCH BASIN TYPE I PER CITY OF PUYALLUP STANDARD DETAIL 02.01.03. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
- SAMPLING TEE PER CITY OF PUYALLUP STANDARD DETAIL 04.03.04. SEE DETAIL 5/U2.3.

**WATER NOTES:**

- PROPOSED DOMESTIC 1-1/2" WATER METER PER CITY OF PUYALLUP STANDARD DETAILS 03.03.02. SEE DETAIL 2/U2.2.
- PROPOSED 1-1/2" RPBA PER CITY OF PUYALLUP STANDARD DETAIL 03.04.02. SEE DETAIL 3/U2.2. RPBA IS TO BE ELECTRICALLY HEATED FOR FREEZE PROTECTION.
- PROPOSED IRRIGATION 1" WATER METER PER CITY OF PUYALLUP STANDARD DETAILS 03.03.01-2. SEE DETAIL 1/U2.3.
- PROPOSED 1" DCVA PER CITY OF PUYALLUP STANDARD DETAIL 03.04.01. SEE DETAIL 2/U2.3.
- WATER SUPPLY CONNECTION TO PROPOSED BUILDING. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY EXACT POINT OF CONNECTION WITH PLUMBING PLANS.
- PROPOSED CAR WASH 1-1/2" WATER METER PER CITY OF PUYALLUP STANDARD DETAIL 03.03.02. SEE DETAIL 2/U2.2.
- 34 LF - 1-1/2" AMERICAN, TYPE K COPPER, RIGID, SEAMLESS PIPE, CONFORMING TO ASTM B88.
- 183 LF - 1-1/2" AMERICAN, TYPE K COPPER, RIGID, SEAMLESS PIPE, CONFORMING TO ASTM B88.
- PROPOSED FIRE HYDRANT ASSEMBLY PER CITY OF PUYALLUP STANDARD DETAIL 03.05.02. SEE DETAIL 2/U2.0. 1 - 8"x6" TEE (FLxMG) 1 - 6" AUXILIARY GATE VALVE (FLxMJ) 5 LF - 6" CL 52 DUCTILE IRON PIPE (MJ) CONCRETE TEE THRUST BLOCK PER CITY OF PUYALLUP STANDARD DETAIL 03.02.01. SEE DETAIL 3/U2.0

MATCHLINE - SEE SHEET U1.1 FOR CONTINUATION

**UTILITY CONFLICT NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLES THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 HOURS IN ADVANCE AND THEN POTHOLES ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.



**UTILITY POTHOLES NOTE:**  
THE CIRCLED LOCATIONS ARE REQUIRED TO BE POTHOLED TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITY AND/OR POTENTIAL CONFLICTS WITH EXISTING UTILITIES. POTHOLES SHALL BE PERFORMED PRIOR TO INSTALLING ANY PROPOSED UTILITIES. CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. OF ANY CONFLICTS.

**UTILITY PROTECTION NOTE:**  
APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN ON THESE PLANS. CONTRACTOR TO COORDINATE WITH PURVEYORS AND USE EXTREME CAUTION WHEN EXCAVATING ON-SITE. UNTIL EXISTING GAS AND POWER SERVICE LOCATIONS ARE CONFIRMED, CONTRACTOR TO ORDER INDEPENDENT UTILITY LOCATES (INCLUDING GAS AND POWER) FOR THE FULL SCOPE OF WORK PRIOR TO CONSTRUCTION OR ANY GROUND DISTURBING ACTIVITIES.

CLIENT:

BP WEST COAST PRODUCTS, LLC

Barghausen Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION DESCRIPTION

SEAL:

2/9/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S. MERIDIAN  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

**FACTORY #TBD**

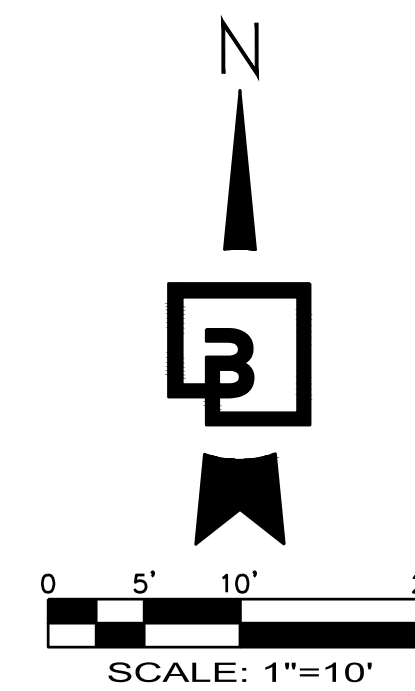
DESIGNED BY: JDF ALLIANCE Z800:  
CHECKED BY: AW BP REP:  
DRAWN BY: JDF ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

DRAWING TITLE:  
**UTILITY PLAN - NORTH**

SHEET NO:  
**U1.0**

# UTILITY PLAN - SOUTH

FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY

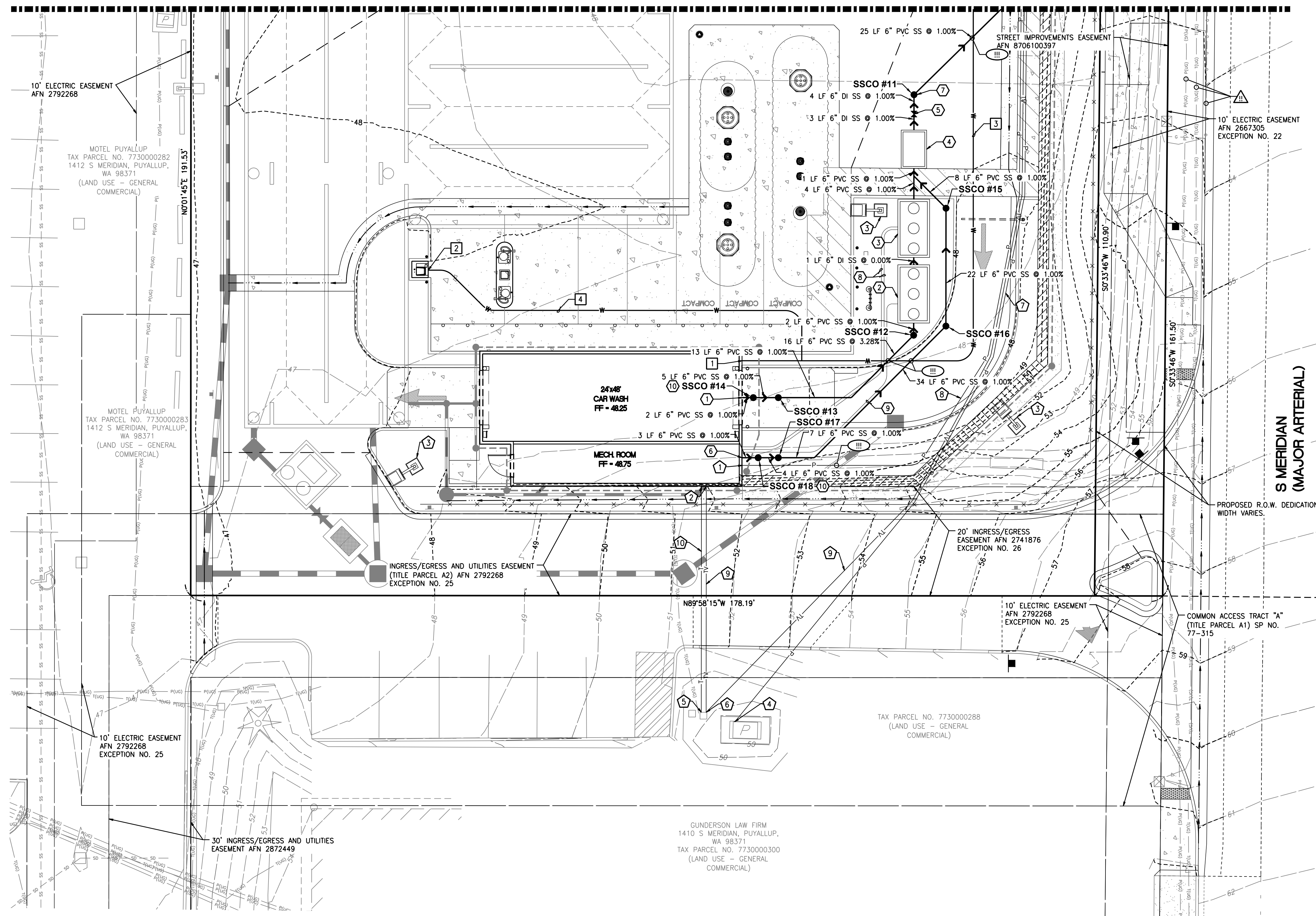


**UTILITY POTHOLING NOTE:**  
THE CIRCLED LOCATIONS ARE REQUIRED TO BE POTHOLED TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITY AND/OR POTENTIAL CONFLICTS WITH EXISTING UTILITIES. POTHOLING SHALL BE PERFORMED PRIOR TO INSTALLING ANY PROPOSED UTILITIES. CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. OF ANY CONFLICTS.

**UTILITY PROTECTION NOTE:**  
APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN ON THESE PLANS. CONTRACTOR TO COORDINATE WITH PURVEYORS AND USE EXTREME CAUTION WHEN EXCAVATING ON-SITE. UNTIL EXISTING GAS AND POWER SERVICE LOCATIONS ARE CONFIRMED, CONTRACTOR TO ORDER INDEPENDENT UTILITY LOCATES (INCLUDING GAS AND POWER) FOR THE FULL SCOPE OF WORK PRIOR TO CONSTRUCTION OR ANY GROUND DISTURBING ACTIVITIES.

**UTILITY CROSSING NOTE:**  
CONTRACTOR TO MAINTAIN MINIMUM 1.5' VERTICAL SEPARATION BETWEEN WATER SERVICE LINES AND ALL OTHER UTILITIES. A MINIMUM OF 1.0' VERTICAL SEPARATION MUST BE MAINTAINED BETWEEN SIDE SEWER AND ALL OTHER UTILITIES WITH THE EXCEPTION OF WATER SERVICE LINES.

MATCHLINE - SEE SHEET U1.0 FOR CONTINUATION



SANITARY SEWER STRUCTURES	
TABLE	
SSCO #11, W/SOLID LOCKING TRAFFIC RATED LID RIM=48.41 IE=43.39 (6" IN S) IE=43.39 (6" OUT NE)	
SSCO #12, W/SOLID LOCKING LID RIM=48.47 IE=44.02 (6" IN SW) IE=44.02 (6" OUT N)	
SSCO #13, W/TRAFFIC RATED SOLID LOCKING LID RIM=48.12 IE=44.68 (6" IN W) IE=44.68 (6" OUT E)	
SSCO #14, W/SOLID LOCKING TRAFFIC RATED LID RIM=48.21 IE=44.73 (6" IN W) IE=44.73 (6" OUT E)	
SSCO #15, W/SOLID LOCKING LID RIM=48.52 IE=44.06 (6" IN S) IE=44.06 (6" OUT NW)	
SSCO #16, W/SOLID LOCKING TRAFFIC RATED LID RIM=47.91 IE=44.28 (6" IN SW) IE=44.28 (6" OUT N)	
SSCO #17, W/SOLID LOCKING LID RIM=48.76 IE=44.68 (6" IN W) IE=44.68 (6" OUT E)	
SSCO #18, W/SOLID LOCKING LID RIM=48.67 IE=44.72 (6" IN W) IE=44.72 (6" OUT E)	

- SEWER NOTES:**
- APPROXIMATE LOCATION OF SANITARY SEWER TO CAR WASH. SEE PLUMBING PLANS FOR CONTINUATION. CONFIRM EXACT LOCATION WITH PLUMBING PLANS.  
IE = 44.75 (6" E)
  - RECLAIM TANK #1. SEE DETAIL 1/U2.1 FOR RECLAIM TANK OLD CASTLE PRECAST 1,500 GAL RECLAIM TANK  
RIM = 48.04  
INLET IE = 44.00 (6" S)  
OUTLET IE = 44.00 (6" N)
  - RECLAIM TANK #2. SEE DETAIL 2/U2.1 FOR RECLAIM TANK OLD CASTLE PRECAST 1,500 GAL RECLAIM TANK  
RIM = 48.11  
INLET IE = 44.00 (6" S)  
OUTLET IE = 44.00 (6" N)
  - OLD CASTLE OIL/WATER 577-SA SEPARATOR  
SEE DETAIL 1/U2.2.  
RIM = 48.25  
INLET IE = 43.96 (6" S)  
OUTLET IE = 43.46 (6" N)
  - PROPOSED 6" GATE VALVE (MJ) (TYP.) IN TRAFFIC RATED VALVE BOX.
  - APPROXIMATE LOCATION OF SANITARY SEWER TO CAR WASH. SEE PLUMBING PLANS FOR CONTINUATION. CONFIRM EXACT LOCATION WITH PLUMBING PLANS.  
IE = 44.75 (6" E)
  - PROVIDE ADAPTOR FOR PIPE MATERIAL CHANGE.
  - 2-2" SCHD-80 PVC RECLAIM LINES FROM RECLAIM TANK #2 BACK TO PROPOSED CAR WASH.
  - 1-1" SCHD-80 PVC OZONE SENSOR CONDUIT LINE FROM RECLAIM TANK #1 BACK TO PROPOSED CAR WASH.
  - SAMPLING TEE PER CITY OF PUYALLUP STANDARD DETAIL 04.03.04. SEE DETAIL 5/U2.3

- WATER NOTES:**
- WATER SUPPLY CONNECTION TO PROPOSED CAR WASH. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY EXACT POINT OF CONNECTION WITH PLUMBING PLANS.
  - WATER SUPPLY CONNECTION TO PROPOSED AIR/WATER UNIT. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY EXACT POINT OF CONNECTION WITH PLUMBING PLANS.
  - 183 LF - 1-1/2" AMERICAN, TYPE K COPPER, RIGID, SEAMLESS PIPE, CONFORMING TO ASTM B88.
  - 80 LF - 1/2" AMERICAN, TYPE K COPPER, RIGID, SEAMLESS PIPE, CONFORMING TO ASTM B88.

- DRY UTILITY NOTES:**
- APPROXIMATE LOCATION OF POWER CONNECTION TO CAR WASH. SEE ELECTRICAL PLANS FOR FINAL LOCATION ON MAIN SWITCH BOARD. CONTRACTOR TO COORDINATE INSTALLATION WITH PURVEYOR.
  - APPROXIMATE LOCATION OF TELEPHONE AND CABLE CONNECTION TO CAR WASH. CONTRACTOR TO COORDINATE INSTALLATION WITH PURVEYOR.
  - PROPOSED LOT LIGHT (TYP. OF 6). CONTRACTOR TO COORDINATE CONDUIT REQUIREMENTS WITH ELECTRICAL PLANS. REFER TO SEPARATE CIVIL CONSTRUCTION PERMIT PRCCP20231423.
  - PROPOSED POWER LINE CONNECTION TO EXISTING POWER VAULT. CONTRACTOR TO COORDINATE CONNECTION WITH PURVEYOR.
  - PROPOSED TELEPHONE LINE CONNECTION TO EXISTING TELEPHONE RISER. CONTRACTOR TO COORDINATE CONNECTION WITH PURVEYOR.
  - PROPOSED CABLE LINE CONNECTION TO EXISTING TELEPHONE RISER. CONTRACTOR TO COORDINATE CONNECTION WITH PURVEYOR.
  - PROPOSED POWER LINE TO PROPOSED TRANSFORMER.
  - PROPOSED POWER LINE TO CAR WASH.
  - PROPOSED CABLE LINE.
  - PROPOSED TELEPHONE LINE.

**PIPE MATERIALS AND COVER:**  
CONTRACTOR SHALL USE PIPE/FITTING MATERIALS IN ACCORDANCE WITH CITY OF PUYALLUP REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.

PVC PIPE SHALL BE SDR-35 WITH 3.0' MIN COVER WHERE SUBJECT TO VEHICULAR LOADING SHALL.

ALL DUCTILE IRON PIPE WITH 1.0' MIN COVER SHALL BE CLASS 52.

CLIENT:

BP WEST COAST PRODUCTS, LLC

**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION DESCRIPTION
1		
2		
3		
4		
5		
6		
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8		
9		
10		

SEAL:

2/9/24

DEVELOPMENT INFORMATION:

**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S. MERIDIAN  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

**FACILITY #TBD**

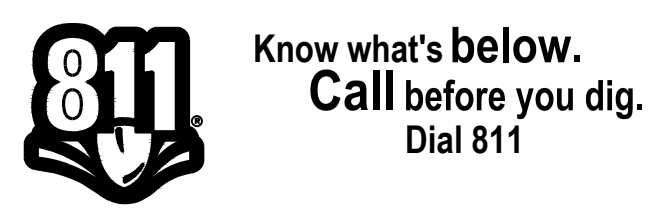
DESIGNED BY: JDF ALLIANCE 280K  
CHECKED BY: AW BP REPM  
DRAWN BY: JDF ALLIANCE PM  
VERSION: PROJECT NO.: 21730

DRAWING TITLE:  
UTILITY PLAN - SOUTH

SHEET NO.:

**U1.1**

**UTILITY CONFLICT NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POTHOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 48 HOURS IN ADVANCE AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.



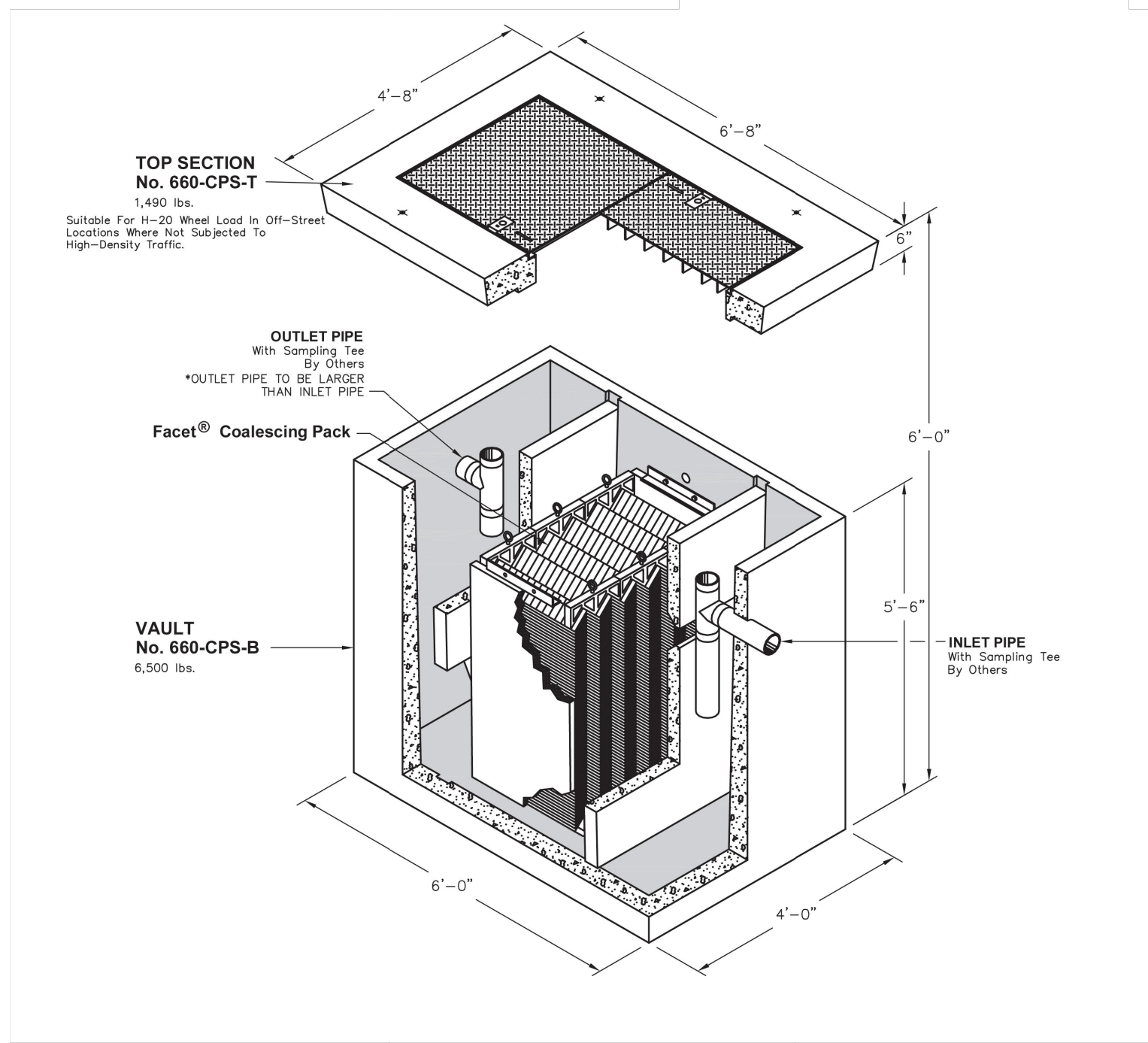
GUNDERSON LAW FIRM  
1410 S MERIDIAN, PUYALLUP,  
WA 98371  
TAX PARCEL NO. 7730000300  
(LAND USE - GENERAL COMMERCIAL)

# UTILITY NOTES AND DETAILS

FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY



**660-CPS OIL WATER SEPARATOR**  
Project Plate Area = 444 Sq/ft  
Maximum Process Flow = 415 GPM

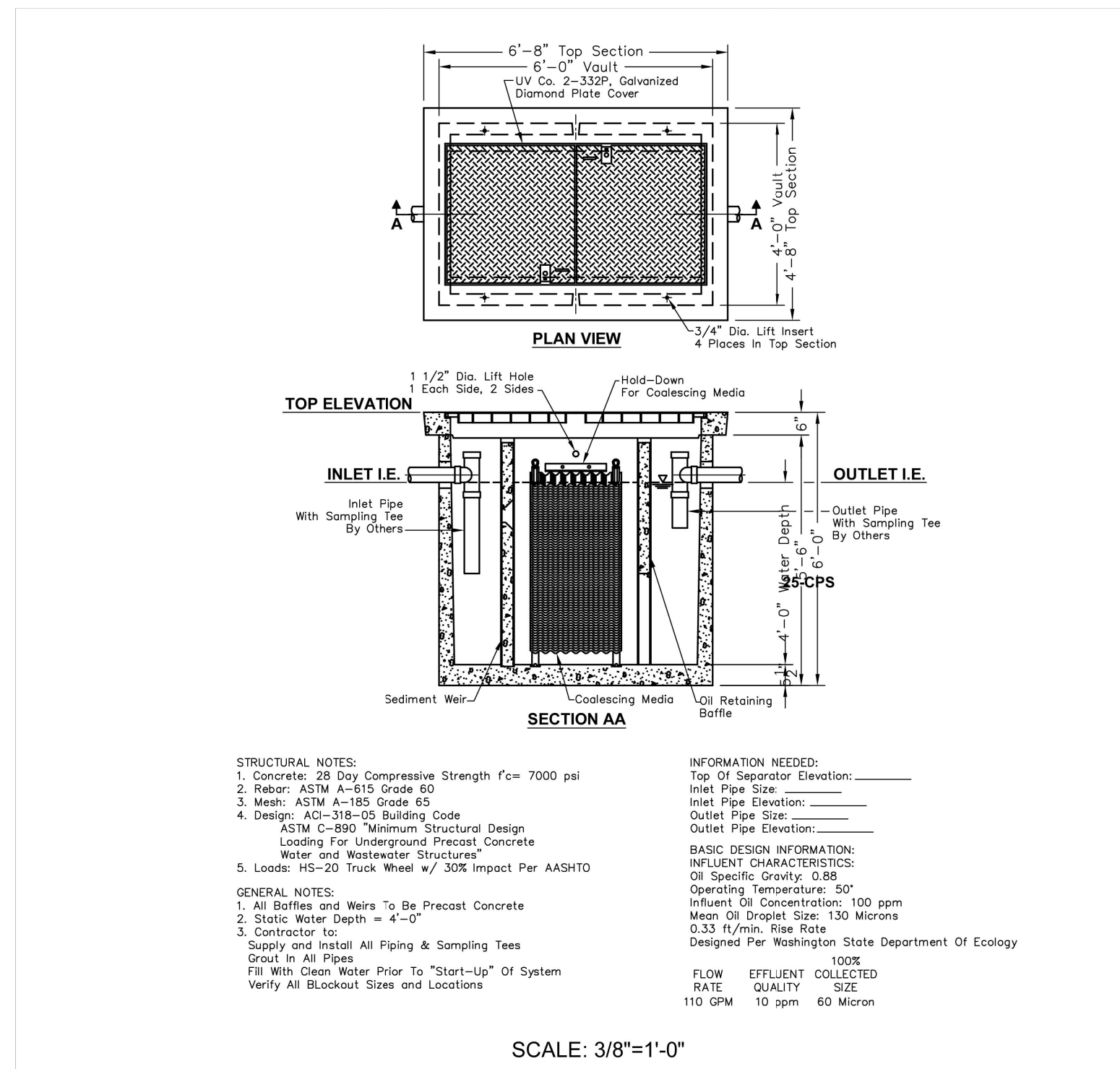


FOR DETAILS, SEE REVERSE<>>  
Items Shown Are Subject To Change Without Notice  
Issue Date: April 2018

Mailing Address: PO Box 588, Auburn, WA 98001  
Phone: 800-892-1538  
Fax: 253-735-4201  
Email: opa@burn.com  
opaurn.com

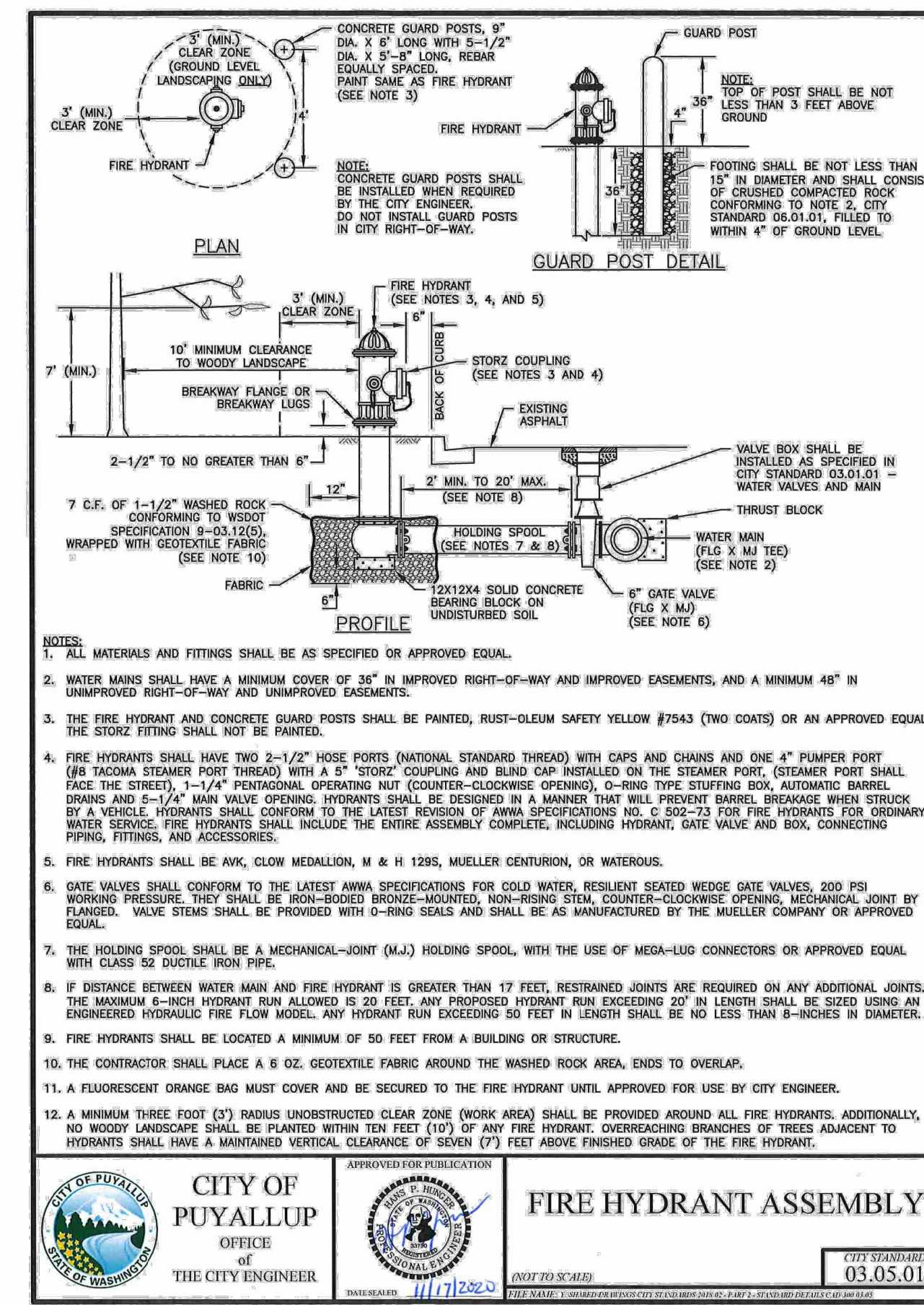


**660-CPS**  
Project Plate Area = 444 Sq/ft  
Maximum Process Flow = 415 GPM

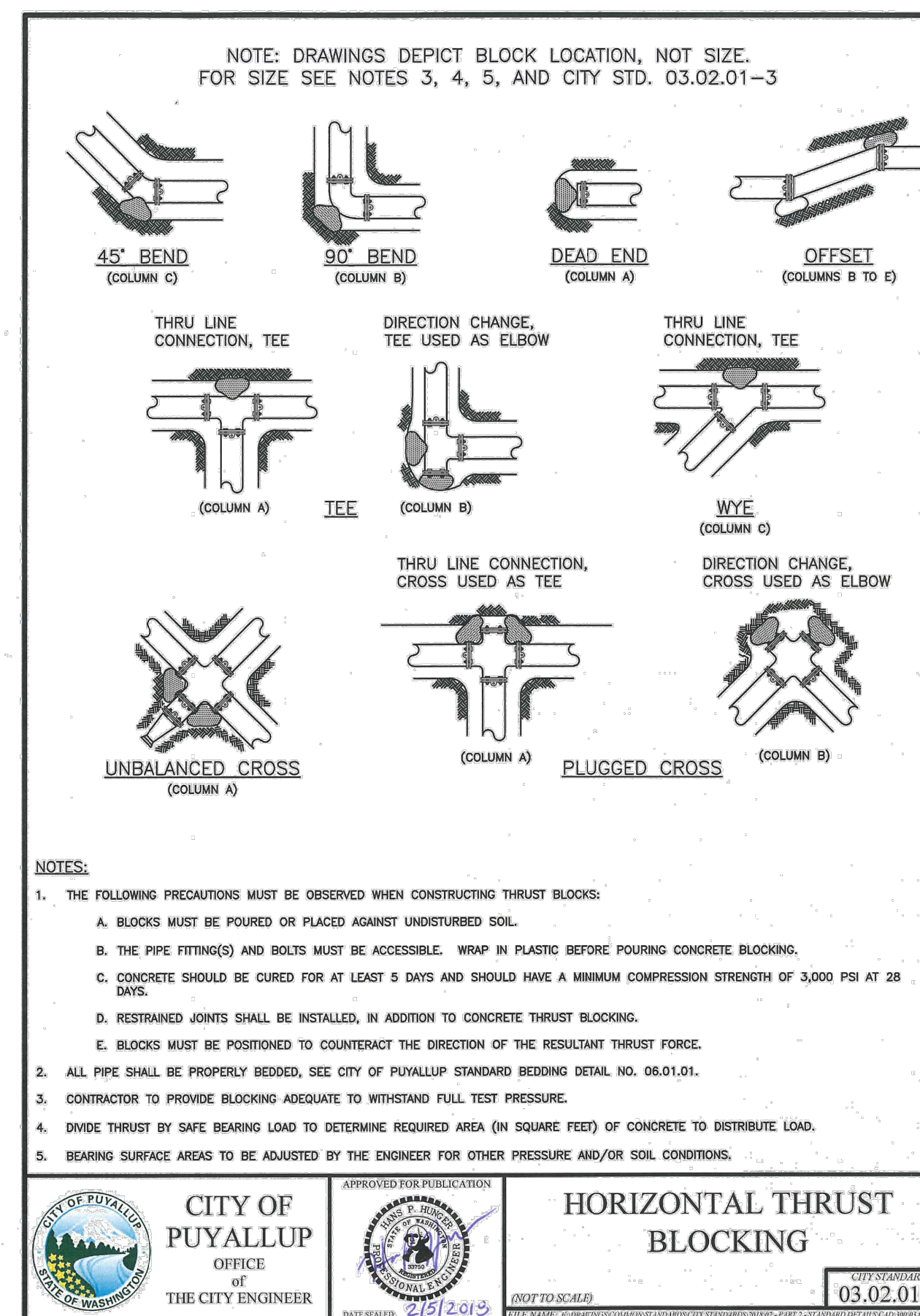


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2 FIRE HYDRANT ASSEMBLY  
U2.0 SCALE: NTS



3 THRUST BLOCKING  
U2.0 SCALE: NTS

1 UNDER CANOPY OLDCASTLE 660-CPS OIL/WATER SEPARATOR  
U2.0 SCALE: NTS

**UNDER CANOPY OIL/WATER SEPARATOR SIZING CALCULATIONS**

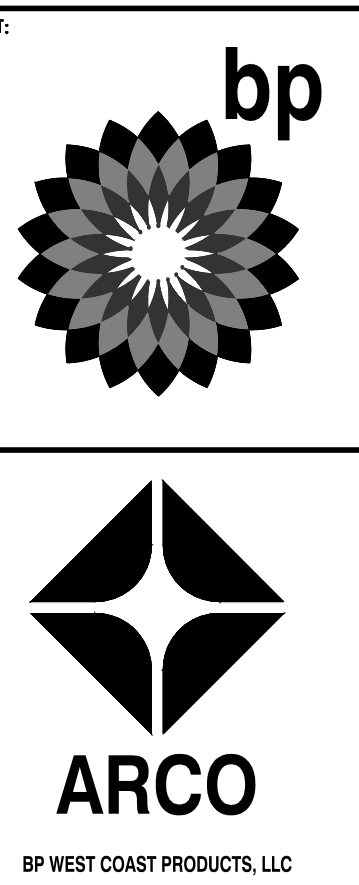
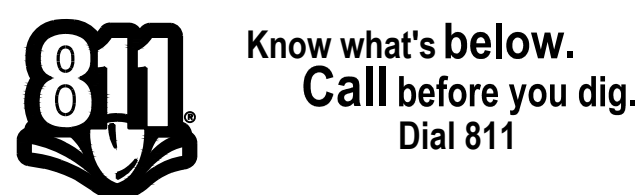
Project Name: Arco Puyallup Date: 01/12/24  
Site Location: 1402 S Meridian Our Job No.: 21730  
Municipality: City of Puyallup  
Engineer: James Fleharty

Sizing per 2019 DOE Stormwater Management Manual for Western Washington  
Section 6.6.2.1, page 6-144

Specific Gravity of Water,  $S_w = 1.0$   
Specific Gravity of Oil,  $S_o = 0.85$   
Absolute Viscosity of Water,  $\mu = 0.015674$   
Water Quality Design Flow Rate,  $Q = 0.01$  CFS  
 $k = 4.35$   
Adjusted Water Quality Flow Rate ( $Q_w$ ) = 2.61 CFM  
Required Effective Plate Area of Surface Media,  $A_p = 70.65$  SF

Use Oldcastle Precast Oil Water Separator 660-CPS (Plate Area = 444 SF)

**UTILITY CONFLICT NOTE:**  
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**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION	DESCRIPTION



2/9/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

SITE ADDRESS:  
**1402 S. MERIDIAN**  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

**FACILITY #TBD**

DESIGNED BY: JDF ALLIANCE Z&M  
CHECKED BY: AW BP REPM  
DRAWN BY: JDF ALLIANCE PM  
PERSON: PROJECT NO.: 21730

DRAWING TITLE:  
**UTILITY NOTES AND DETAILS**

SHEET NO.:

**U2.0**

P:\21000s\21730\engineering\21730-U.dwg 2/9/2024 2:23 PM JFLEHARTY

**CAR WASH RECLAIM SYSTEM NOTE:**

THE CAR WASH PROPOSES IMPLEMENTATION OF A RECLAIM SYSTEM TO FACILITATE RECYCLING EFFORTS OF DISCHARGE RINSE WATER FROM CAR WASH OPERATIONS. DISCHARGE WOULD BE ROUTED THROUGH TWO 1500 GAL RECLAIM TANKS, ROUTING DRAINAGE THROUGH A SYSTEM OF BAFFLE SECTIONS, WHICH ALLOW DRAINAGE TO COLLECT PRIOR BEING CONVEYED TO THE NEXT BAFFLE AREA. THIS PROCESS ALLOWS DISCHARGE TO SEPARATE CONTRIBUTING DEBRIS AND SOLID PARTICLES TO SETTLE TO THE BOTTOM OF THE TANK, AND OILS FLOAT TO THE TOP WHERE THEY ARE TRAPPED WITHIN THE SYSTEM. THE FINAL BAFFLE SECTION CONTAINS TWO-2" SUCTION LINES WHICH PUMP TREATED WATER BACK TO THE RECLAIM SYSTEM FOR REUSE. EXCESS DISCHARGE WILL BE RELEASED FROM THE SYSTEM TO THE PUBLIC SEWER. SETTLED SOLIDS AND FLOATING OILS ARE PERIODICALLY REMOVED (TYPICALLY 3-6 MONTHS) FROM THE SYSTEM VIA MANUAL PUMPING AND MAINTENANCE EFFORTS.

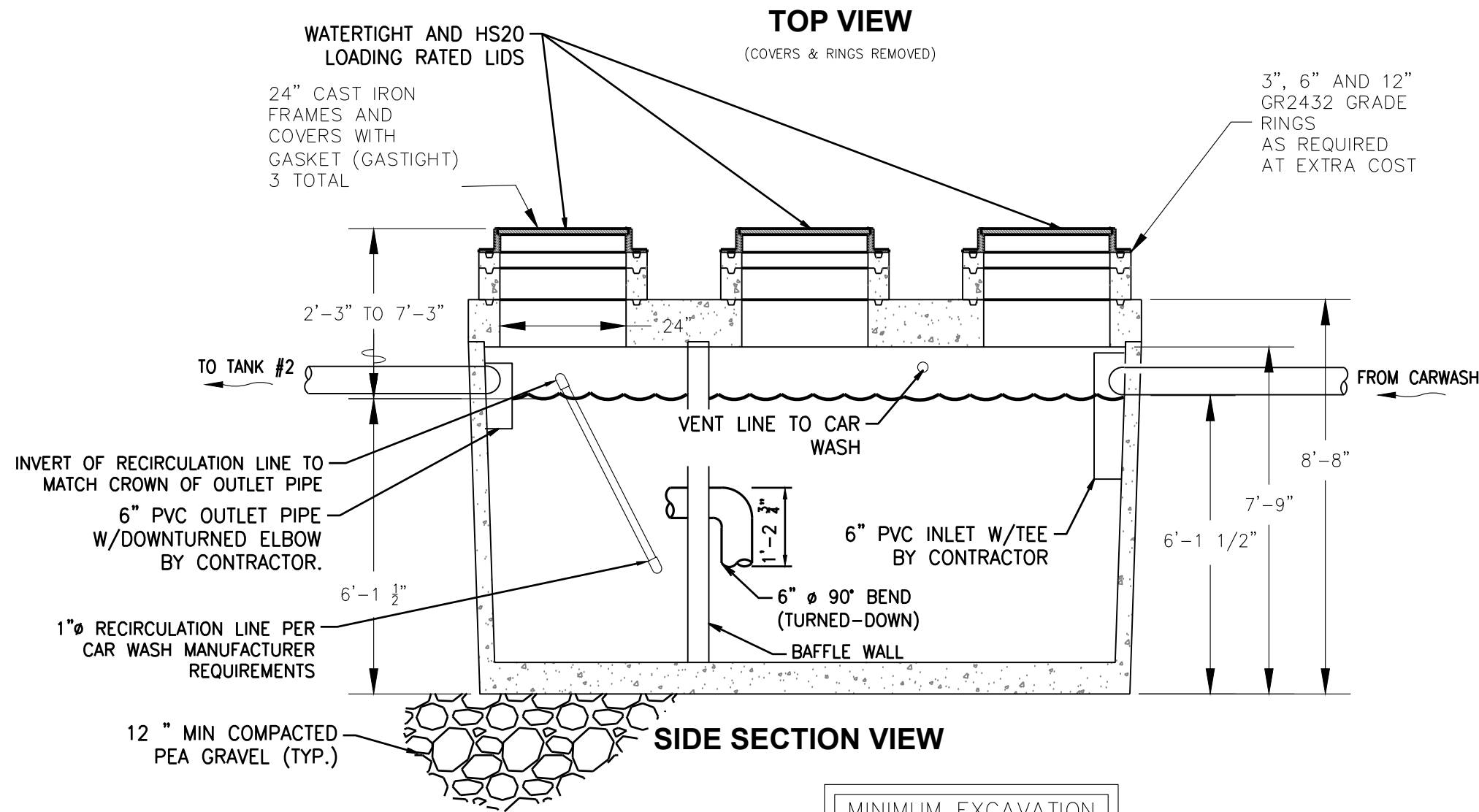
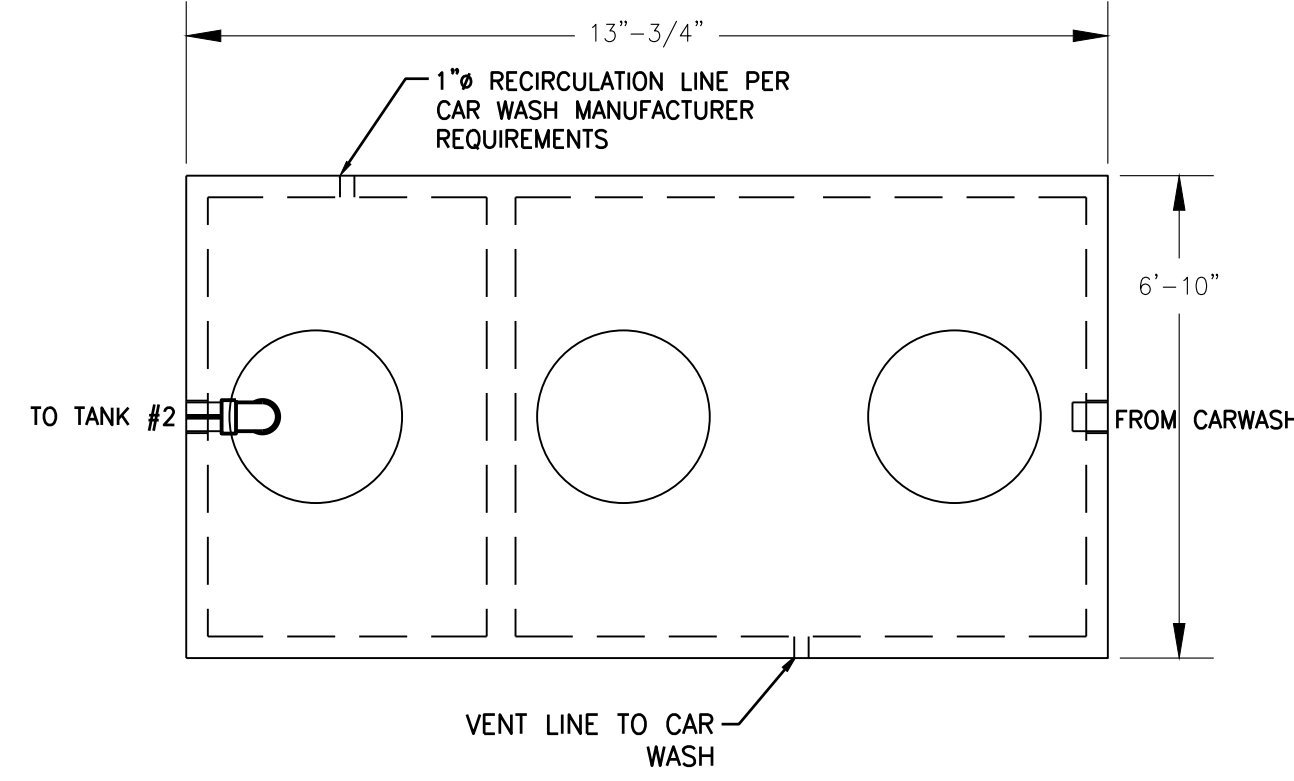
**CAR WASH RECLAIM SIZING:**

PER MANUFACTURER'S RECOMMENDATIONS:

TYPICAL IN-BAY AUTOMATICS:  
PW100-PW200 (30-60 GPM) RECLAIM SERIES  
MINIMUM STORAGE REQUIREMENTS  
(2) 1,500 GALLON TANKS = 3,000 GALLONS MINIMUM

**SPECIFICATIONS:**

1. CONCRETE: DESIGN STRENGTH OF 5500 PSI AT 28 DAYS.
2. STEEL REINFORCEMENT: ASTM A-615 GRADE 60.
3. LOADING: DESIGNED FOR HS-20 LOADING.
4. C.I. CASTINGS: ASTM A-48 CLASS 30/35.



OPERATING CAPACITY: 1,500 GALLONS.

DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK) AND 1'-6" EARTH COVER.

SUITABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT OLDCASTLE PRECAST.

**MODIFIED OLDCASTLE PRECAST 1500 GALLON**

NOT TO SCALE  
MODEL NO. GT-1500

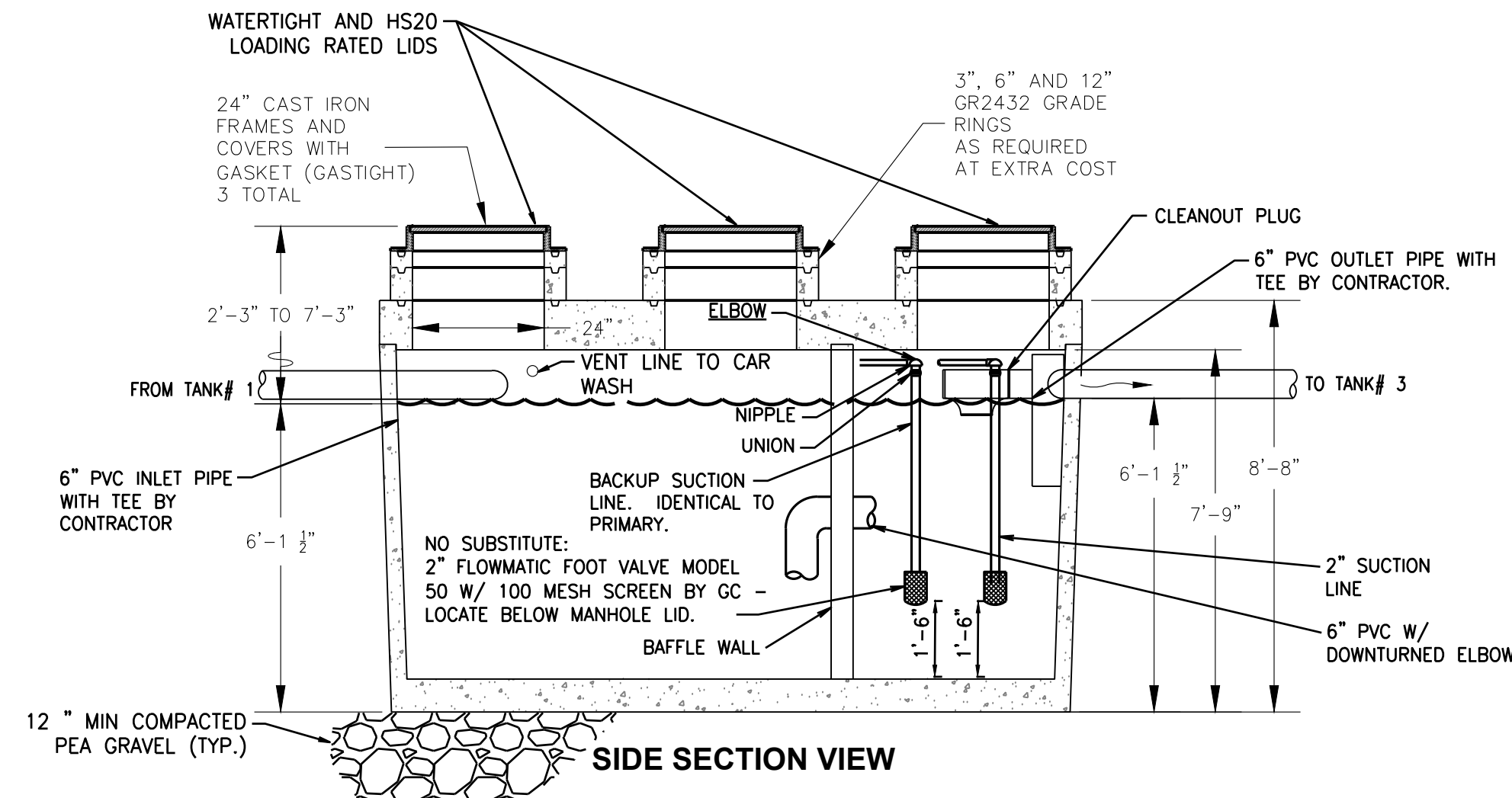
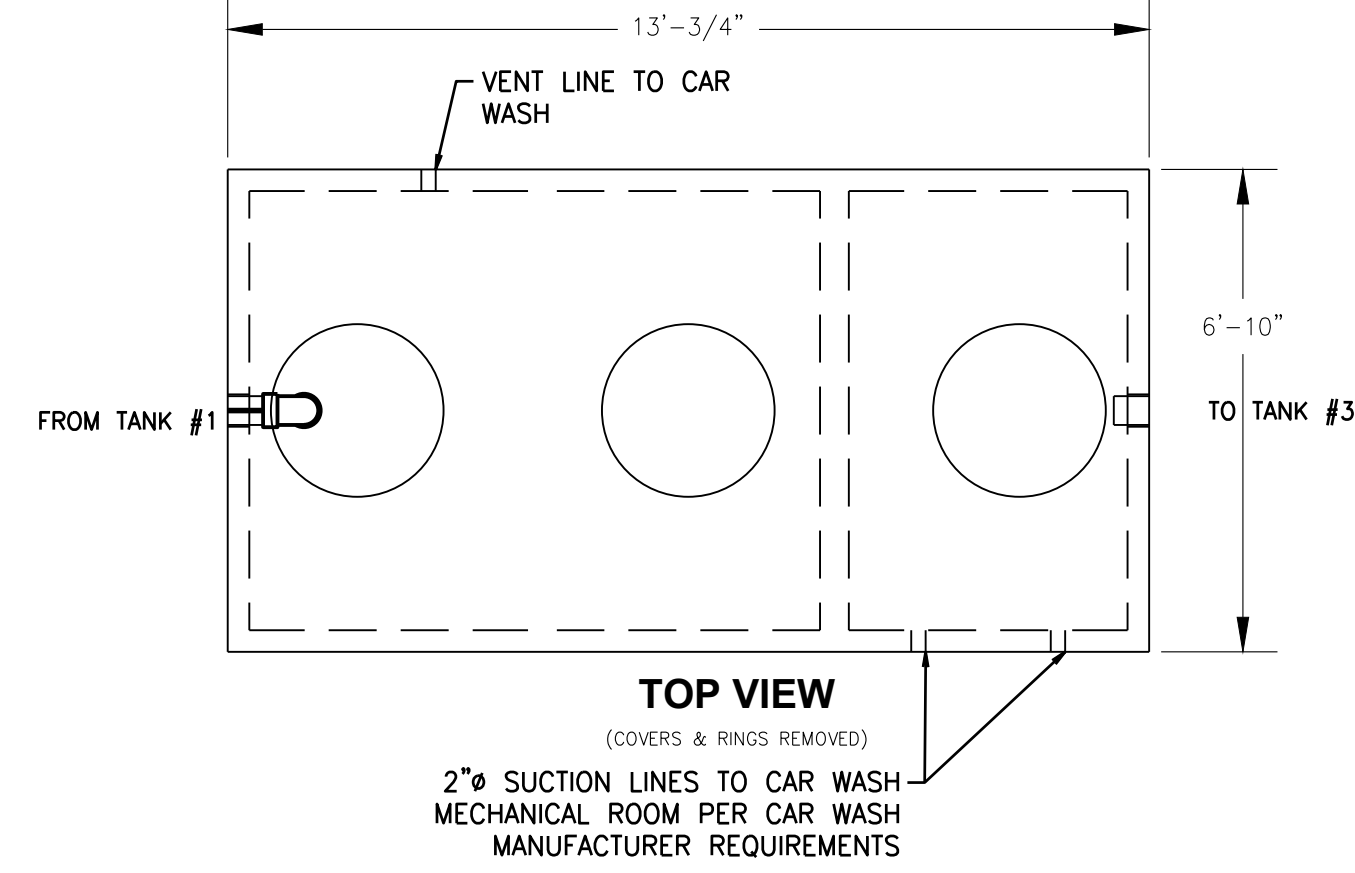
**1 RECLAIM TANK #1**  
U2.1 SCALE: NTS

**UTILITY DETAILS**

FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY

**SPECIFICATIONS:**

1. CONCRETE: DESIGN STRENGTH OF 5500 PSI AT 28 DAYS.
2. STEEL REINFORCEMENT: ASTM A-615 GRADE 60.
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OPERATING CAPACITY: 1,500 GALLONS.

DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK) AND 1'-6" EARTH COVER.

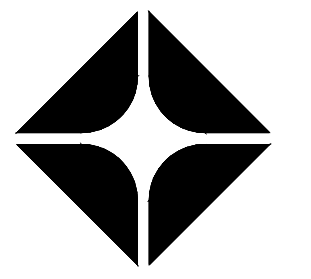
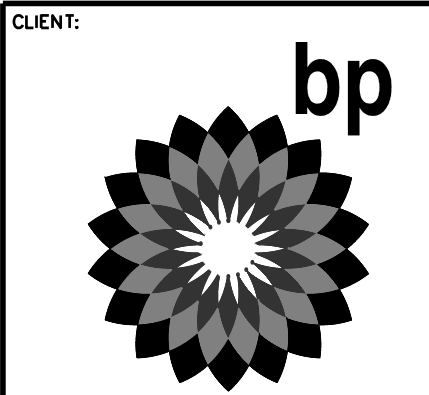
SUITABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT OLDCASTLE PRECAST.

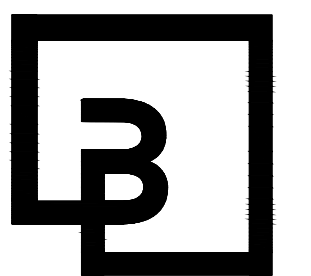
**MODIFIED OLDCASTLE PRECAST 1500 GALLON**

NOT TO SCALE  
MODEL NO. GT-1500

**2 RECLAIM TANK #2**  
U2.1 SCALE: NTS

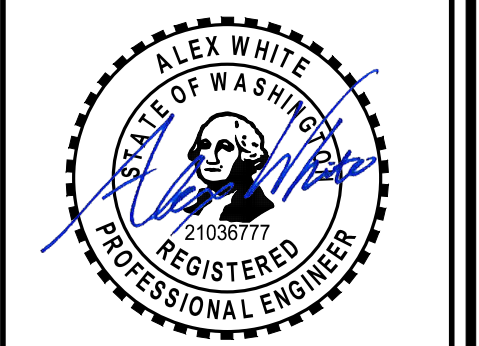


ARCO  
BP WEST COAST PRODUCTS, LLC



**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
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NO.	DATE	REVISION DESCRIPTION



2/9/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S. MERIDIAN  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

**FACILITY #TBD**  
DESIGNED BY: JDF ALLIANCE ZBDW  
CHECKED BY: AW BP REP:  
DRAWN BY: JDF ALLIANCE PM:  
VERSION: - PROJECT NO:  
21730

DRAWING TITLE:  
**UTILITY DETAILS**

SHEET NO:

**U2.1**

**UTILITY CONFLICT NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 48 HOURS IN ADVANCE AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.



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**OIL WATER SEPARATOR SIZING CALCULATIONS**  
THE FOLLOWING ARE CALCULATIONS DEMONSTRATING ADEQUATE SIZE OF THE OIL/WATER SEPARATORS FOR THE CAR WASH.

CAR WASH OIL/WATER SEPARATOR  
GALLONS OF FRESH WATER USED PER CAR = 18 GALLONS  
TOTAL CARS WASHED IN 30 MINUTES = 5  
TOTAL GALLONS OF FRESH WATER USED PER 30 MINUTES = 90 GALLONS

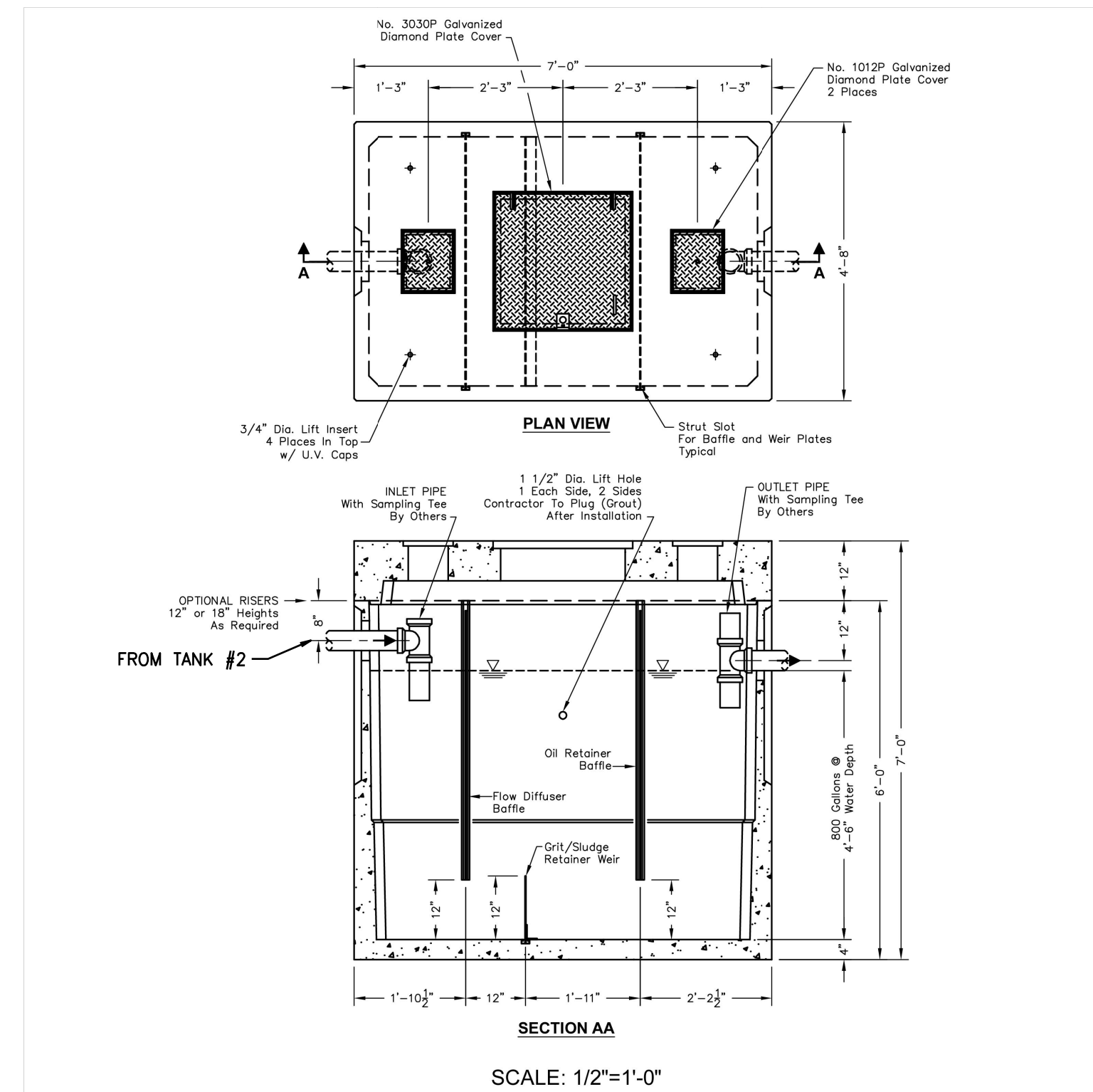
PER TABLE 1014.3.6 OF THE UNIFORM PLUMBING CODE GREASE INTERCEPTOR VOLUME SHALL BE EQUAL TO THE KNOWN FLOW RATE MULTIPLIED BY 30 MINUTES.

VOLUME PROVIDED BY 577-SA SEPARATOR = 800 GALLONS.



Delivering Reliability

577-SA



135.1

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**OIL/WATER SEPARATOR TANK #3**  
**MODIFIED OLDCASTLE PRECAST 800 GALLON**

MODEL NO. 577-SA-800  
NOT TO SCALE

1 RECLAIM TANK #3  
U2.2 SCALE: NTS

**UTILITY CONFLICT NOTE:**

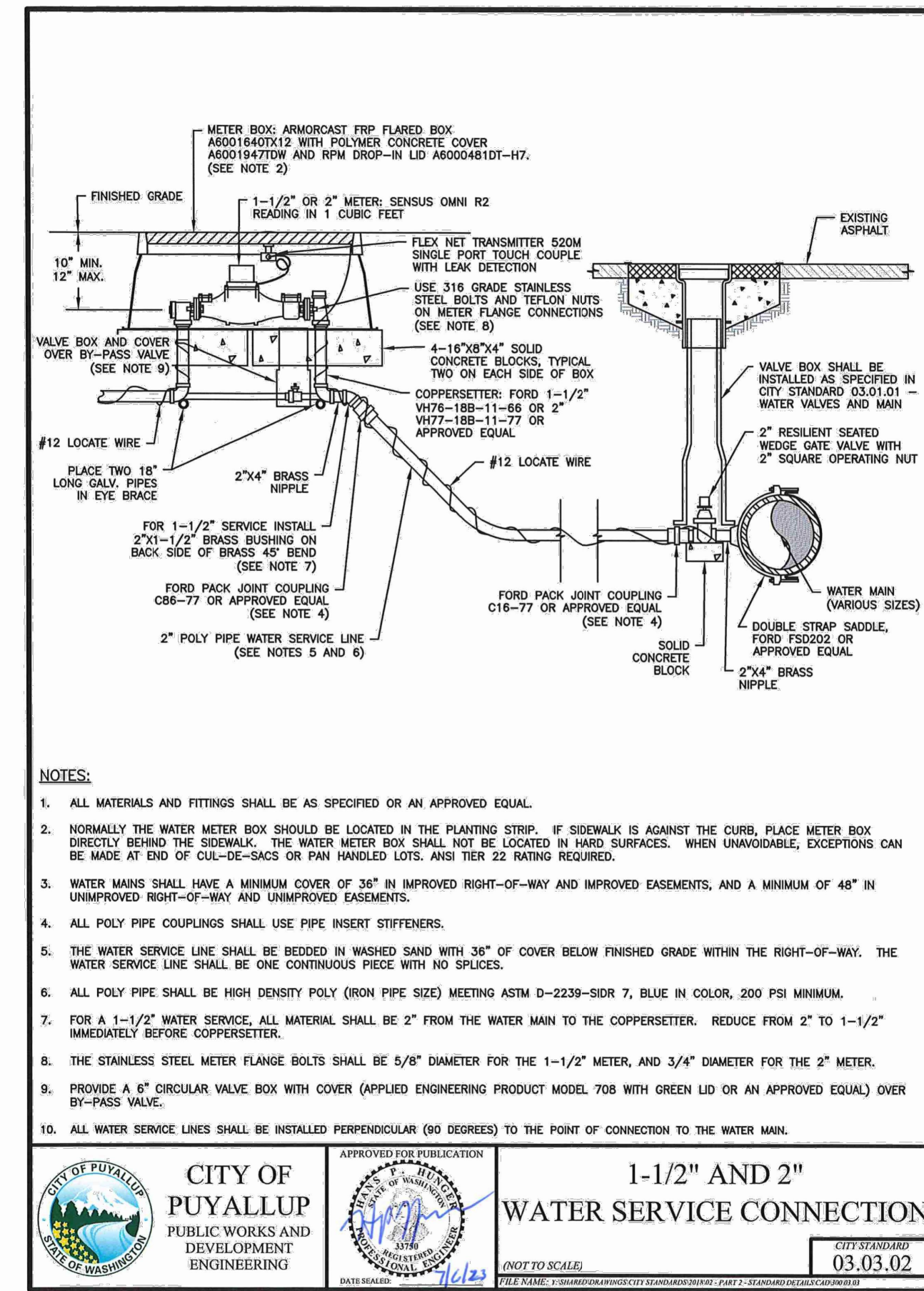
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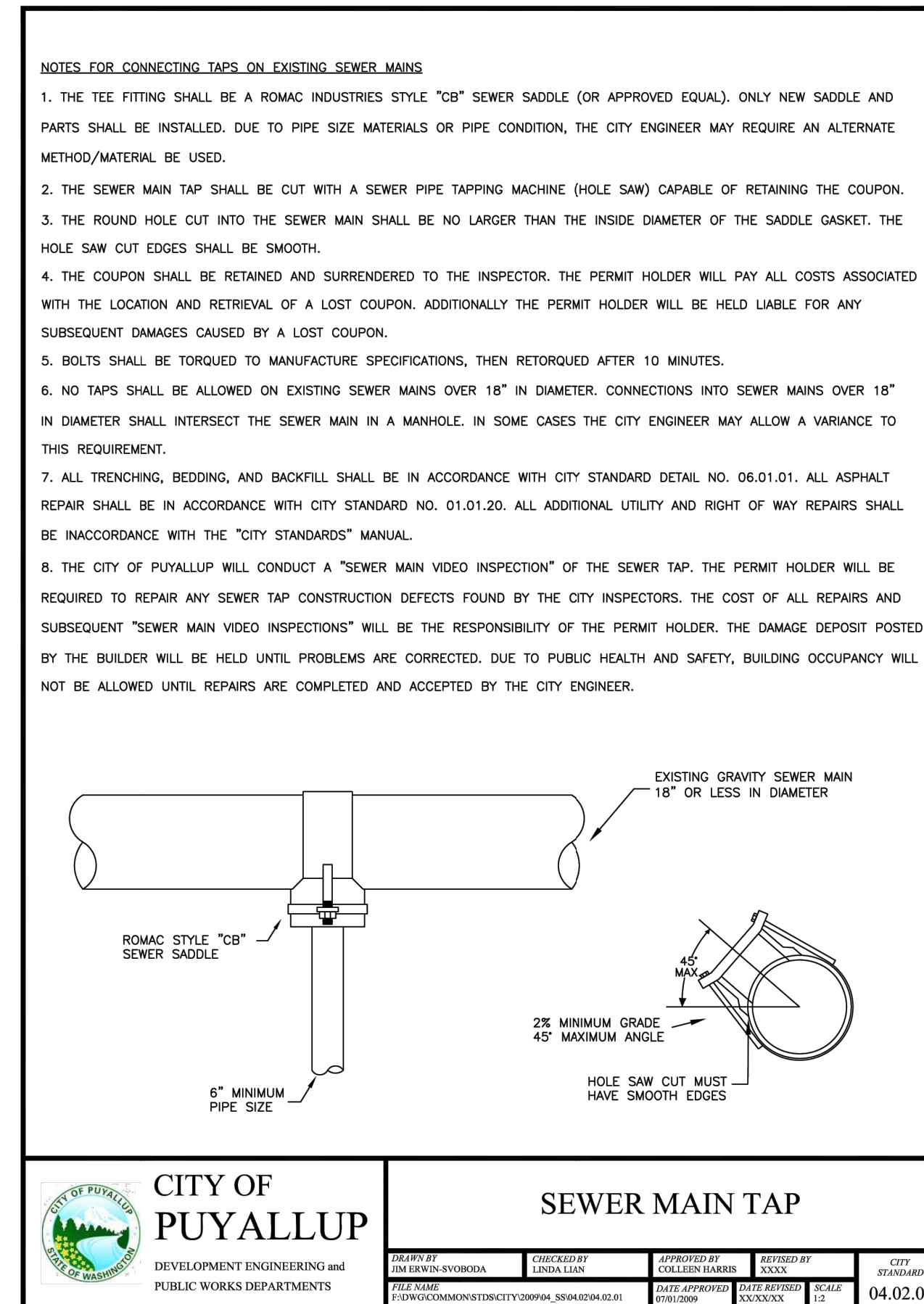
Know what's below.  
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Dial 811

4 CITY OF PUYALLUP SEWER MAIN TAP  
U2.2 SCALE: NTS

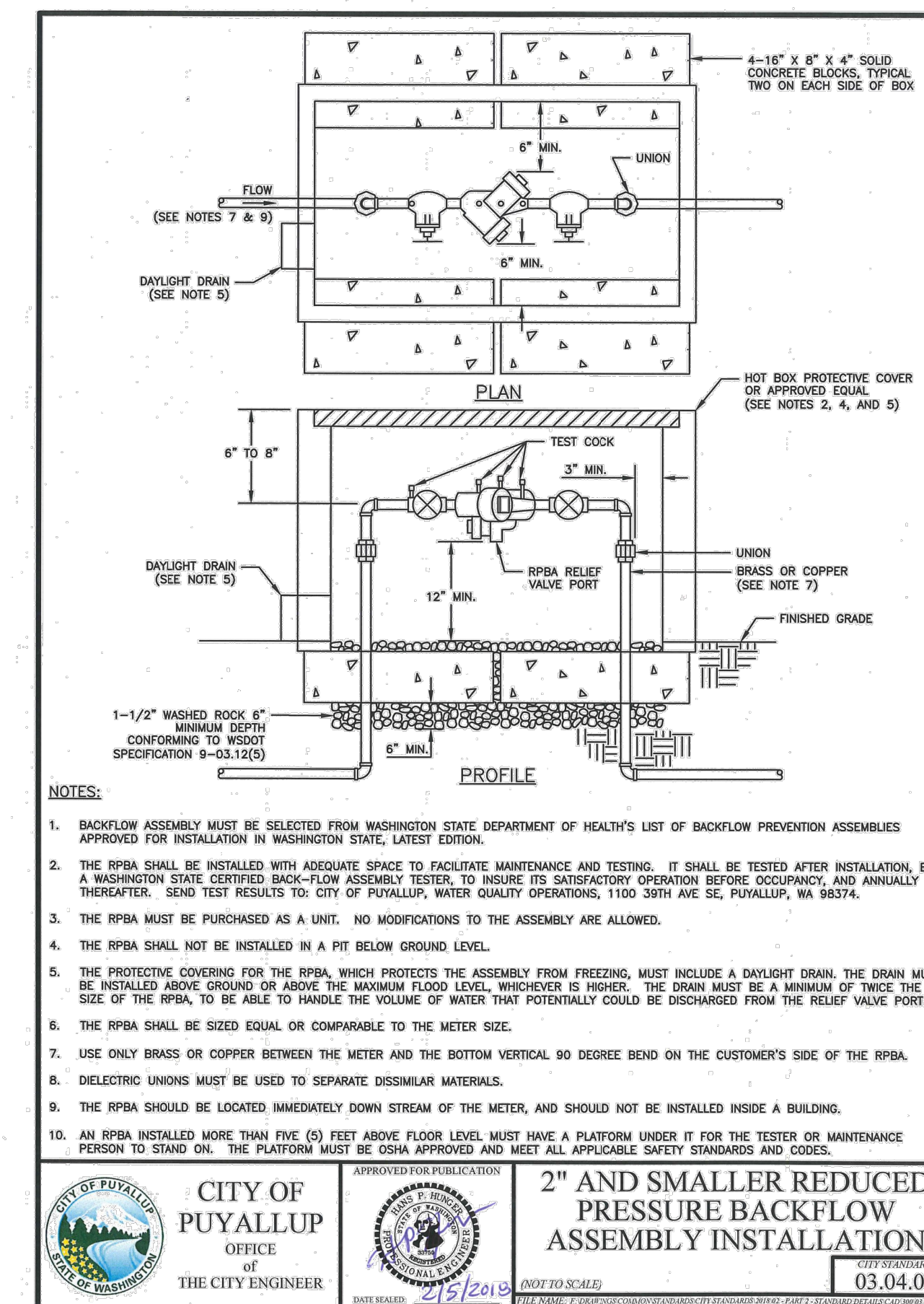
**UTILITY DETAILS**  
FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY



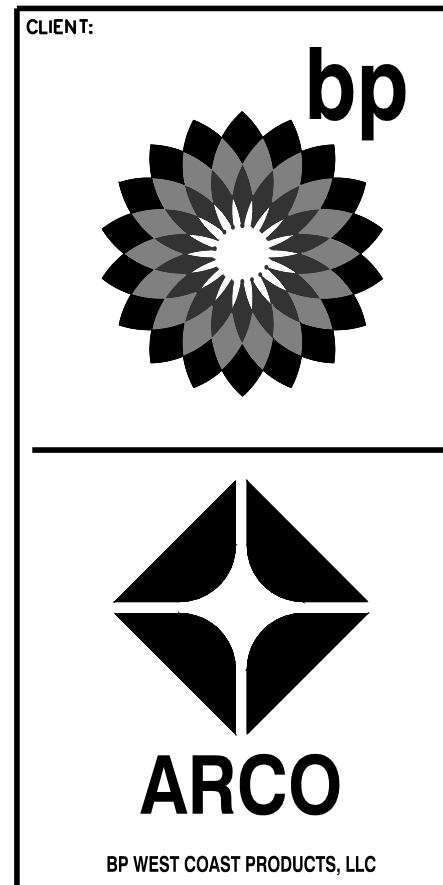
2 CITY OF PUYALLUP 1-1/2\"/>



4 CITY OF PUYALLUP SEWER MAIN TAP  
U2.2 SCALE: NTS



3 CITY OF PUYALLUP 2\"/>



**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION DESCRIPTION



2/9/24

**DEVELOPMENT INFORMATION:**  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

**SITE ADDRESS:**  
**1402 S. MERIDIAN**  
**@ HIGHWAY 512**  
**PUYALLUP, WASHINGTON**

**FACILITY #TBD**  
DESIGNED BY: JDF ALLIANCE Z800  
CHECKED BY: AW BP REP:  
DRAWN BY: JDF ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

**DRAWING TITLE:**  
**UTILITY DETAILS**

**SHEET NO:**  
**U2.2**

UTILITY DETAILS  
FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY

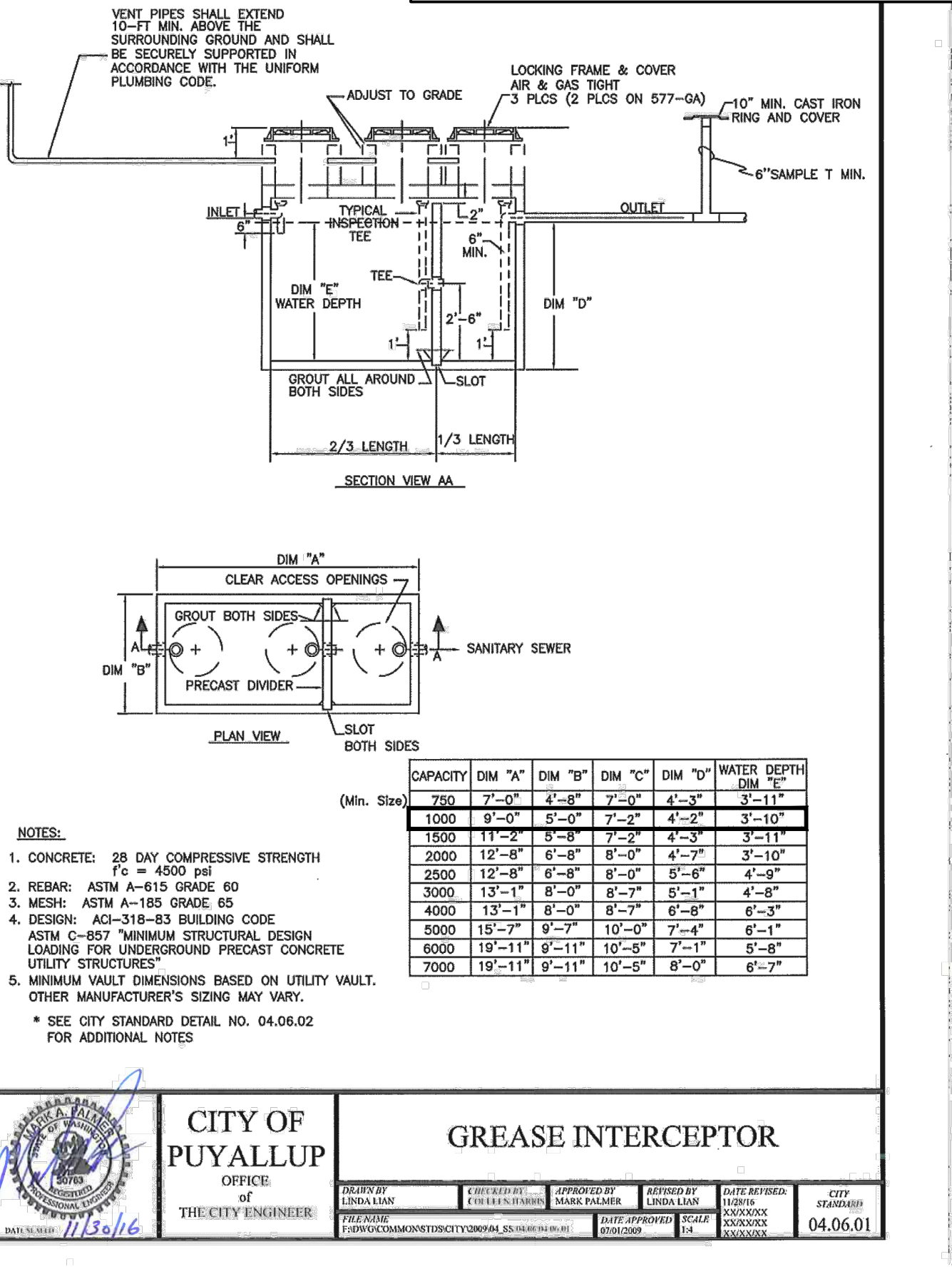
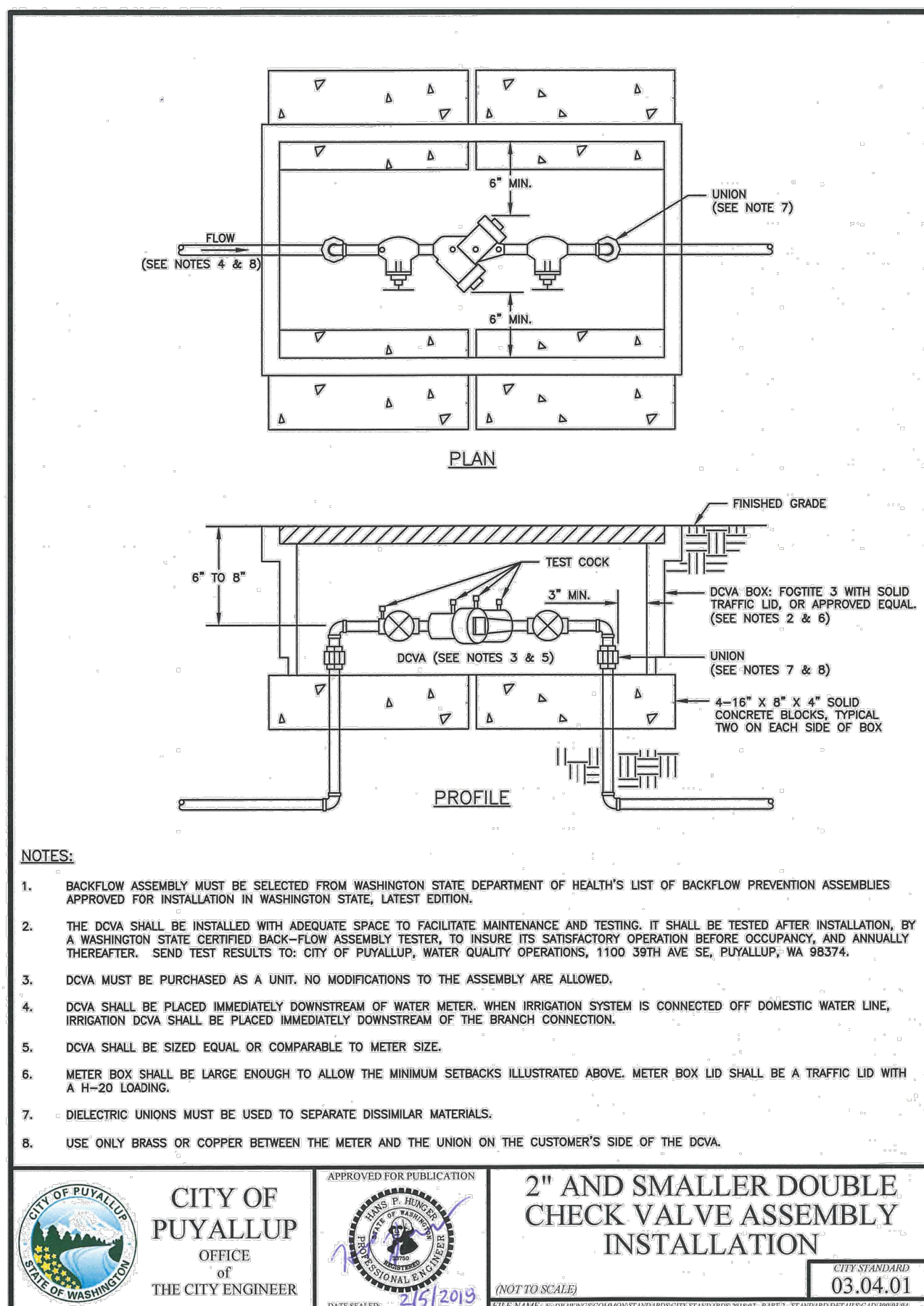
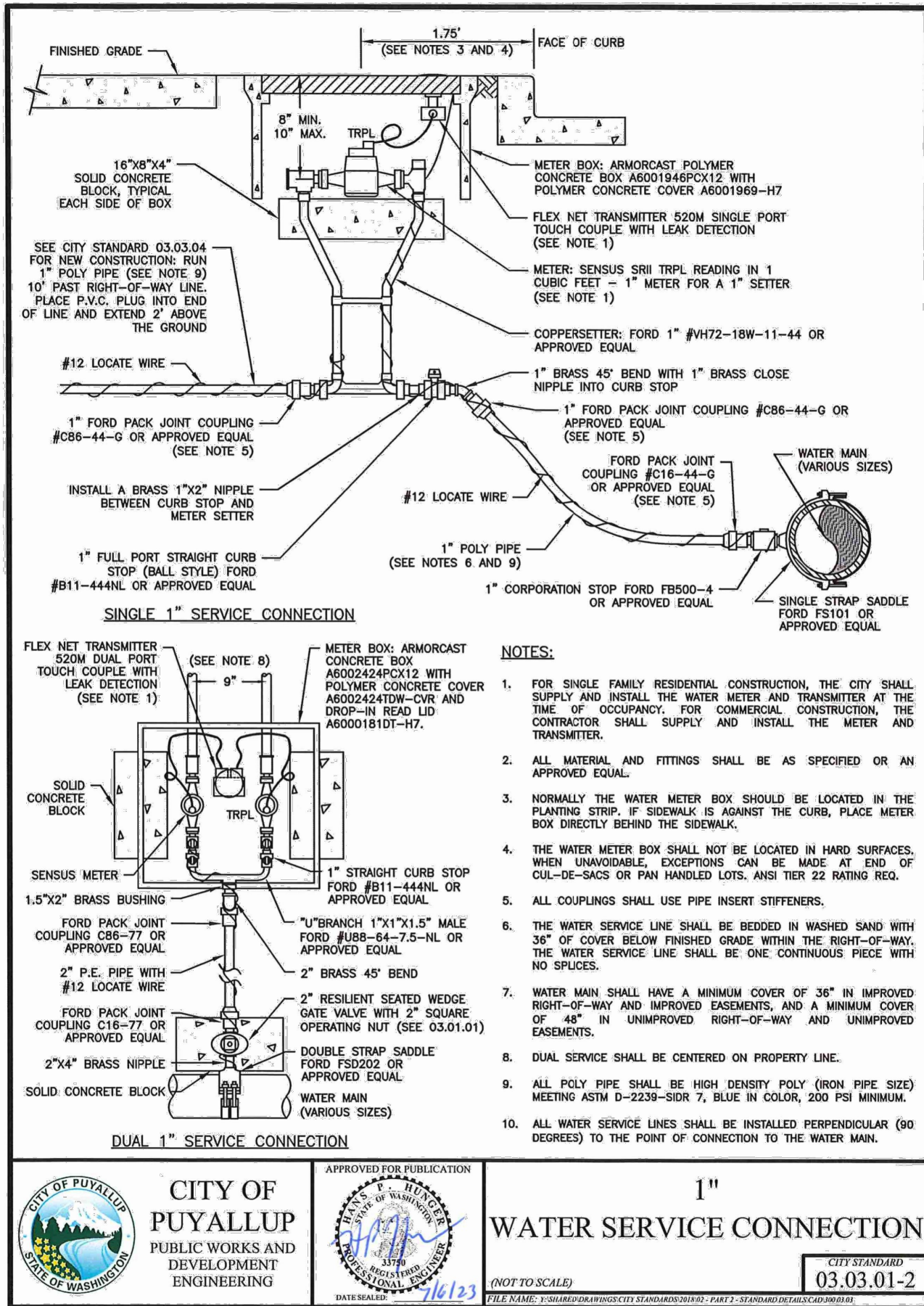
MINIMUM INTERCEPTOR SIZE = 1,000 GAL.

PLUMBING FIXTURES SERVED.

TOTAL DFU	25
REFER TO SHEET P2.0 OF THE PLUMBING PLANS FOR MORE DETAIL.	

UPC TABLE 10-3  
GRAVITY GREASE INTERCEPTOR SIZING

DFU CONNECTED TO INTERCEPTOR	INTERCEPTOR SIZE
8	500 GALLONS
21	750 GALLONS
35	1,000 GALLONS
90	1,250 GALLONS



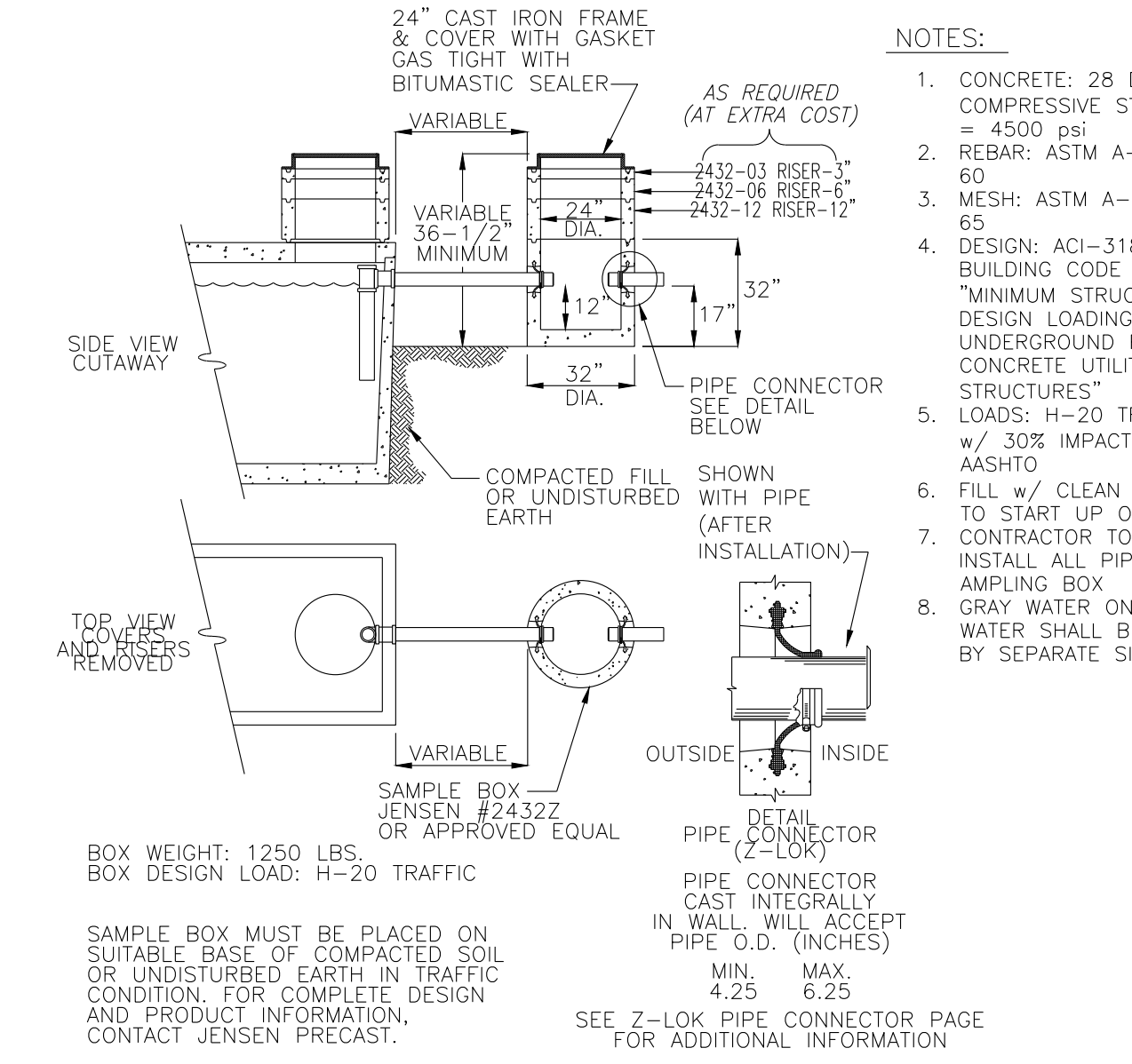
NOTES FOR GREASE INTERCEPTORS:

- THE PLANS & SPECIFICATIONS SHALL ILLUSTRATE PROPERTY BOUNDARIES, PIPING/DRAINAGE DETAILS AND CONNECTIONS TO THE SANITARY SEWER. DETAIL AND ELEVATION DRAWINGS OF THE GREASE INTERCEPTOR SHALL INCLUDE SIZING CALCULATIONS IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE CURRENTLY ADOPTED BY THE CITY OF PUYALLUP.
- VENTING OF THE INTERCEPTOR SHALL BE IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE CURRENTLY ADOPTED BY THE CITY OF PUYALLUP.
- EFFLUENT FROM GREASE INTERCEPTORS SHALL NOT EXCEED 100 mg/L FAT, OIL, AND/OR GREASE DISCHARGED TO THE DOWNSTREAM SANITARY SEWER SYSTEM.
- GREASE INTERCEPTORS INSTALLED IN PAVED AREAS SHALL COMPLY WITH H-20 LOADING CRITERIA.
- THE GREASE INTERCEPTOR SHALL BE INSTALLED AND CONNECTED SUCH THAT IT SHALL BE EASILY ACCESSIBLE FOR INSPECTION, CLEANING, AND REMOVAL AT ALL TIMES. MANHOLE COVERS SHALL BE GAS TIGHT AND HAVE A MINIMUM OPENING OF 24-INCHES IN DIAMETER.
- NO SANITARY WASTEWATER SHALL BE CONVEYED TO THE SEPARATOR. A SEPARATE SIDE SEWER SHALL BE REQUIRED TO CARRY SANITARY WASTEWATER TO THE SEWER MAIN AND SHALL BE PLACED AS CLOSE TO THE SERVICE AREA AS PRACTICAL.
- PLUMBING/PIPING SHALL BE CONSTRUCTED TO ESTABLISH "PARALLEL FLOW" (90-DEGREES TO THE TANK BAFFLE) THROUGH THE GREASE INTERCEPTOR. NO RADII, BEND, OR ELBOW SHALL BE ALLOWED IN THE INLET PIPE UPSTREAM OF THE INTERCEPTOR FOR A MINIMUM OF 10-FEET, OR 20-PIPE DIAMETERS, WHICHEVER IS GREATER.
- ANY PUMP MECHANISM SHALL BE INSTALLED DOWNSTREAM OF THE INTERCEPTOR TO PREVENT FAT, OIL AND GREASE EMULSIFICATION. A "TEE" CONNECTION SHALL BE INSTALLED IN THE DISCHARGE PIPING TO PROVIDE FOR SAMPLE COLLECTION
- ALL GREASE INTERCEPTORS SHALL BE FILLED WITH CLEAN WATER BEFORE USE.
- THE DESIGN ENGINEER SHALL PROVIDE ENGINEERING SERVICES STAFF WITH A LETTER OF INSPECTION CERTIFYING THAT THE INSTALLATION WAS PERFORMED IN ACCORDANCE WITH ALL REGULATIONS AND THE APPROVED PLAN.
- FINAL INSPECTION IS REQUIRED BY ENGINEERING SERVICES STAFF PRIOR TO CONNECTING TO THE SANITARY SEWER.
- THE PROPERTY OWNER SHALL RETAIN OWNERSHIP OF THE GREASE INTERCEPTOR AND SIDE SEWER LINES AND SHALL BE RESPONSIBLE FOR THEIR OPERATION AND MAINTENANCE. A SERVICE/MAINTENANCE RECORD SHALL BE KEPT ON THE PREMISES AT ALL TIMES AND SHALL BE IMMEDIATELY AVAILABLE TO CITY OF PUYALLUP STAFF UPON REQUEST.
- THE PROPERTY OWNER SHALL REPORT IMMEDIATELY TO THE CITY'S INDUSTRIAL PRETREATMENT SPECIALIST ANY SPILL, SURCHARGE, BYPASS, OR MECHANICAL FAULT AND/OR FAILURE WHICH INTERRUPTS, OR OTHERWISE REDUCES THE CAPACITY OR REMOVAL EFFICIENCY OF THE GREASE INTERCEPTOR BY CALLING (253) 841-5523.

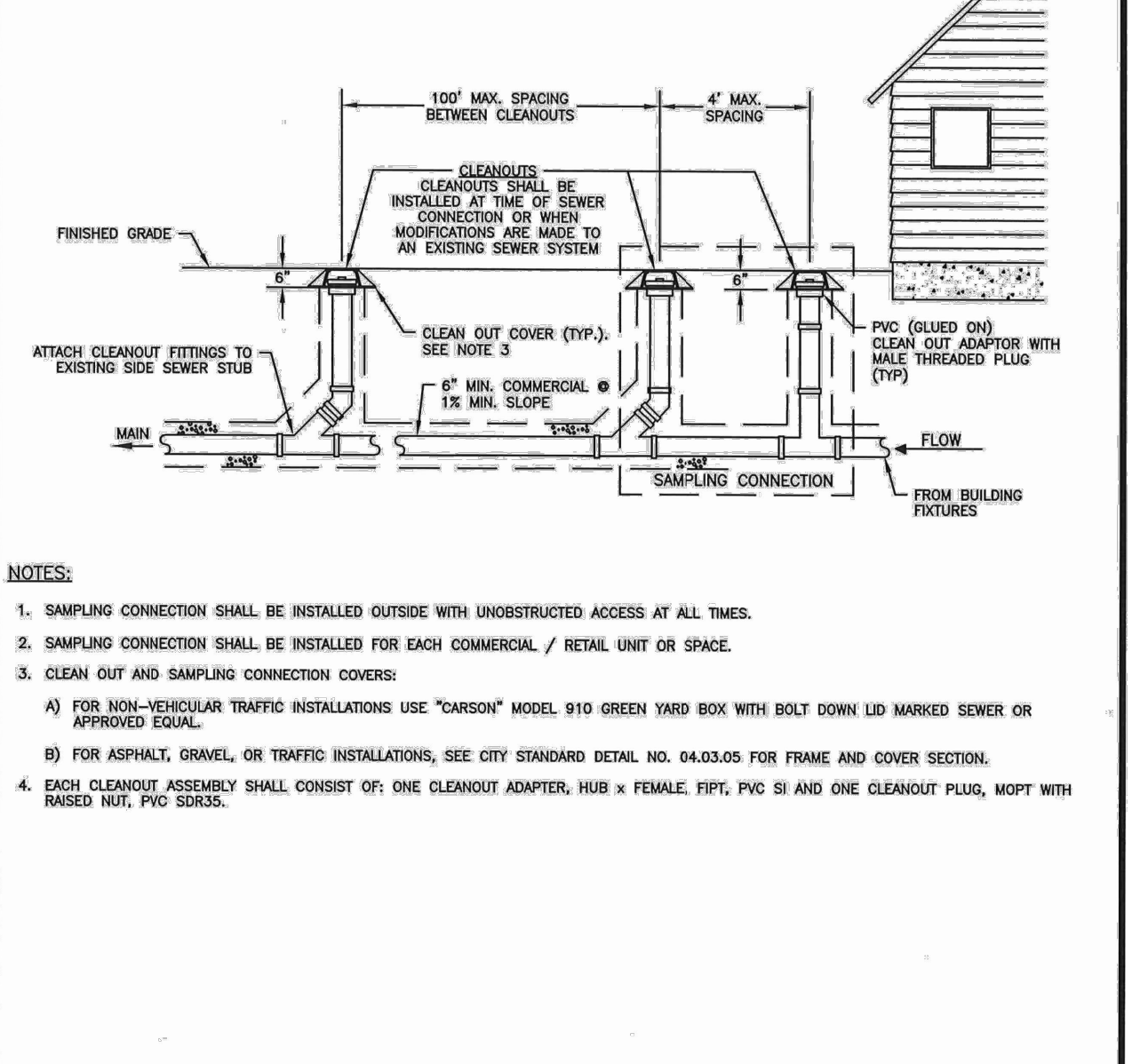
1 CITY OF PUYALLUP 1" WATER SERVICE CONNECTION  
U2.3 SCALE: NTS

2 CITY OF PUYALLUP 2" AND SMALLER DCVA  
U2.3 SCALE: NTS

3 GREASE INTERCEPTOR  
U2.3 SCALE: NTS



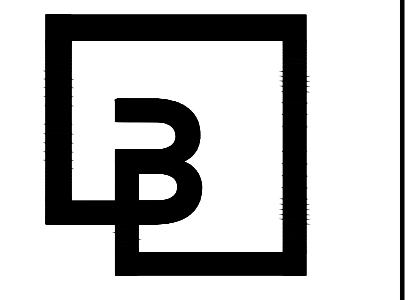
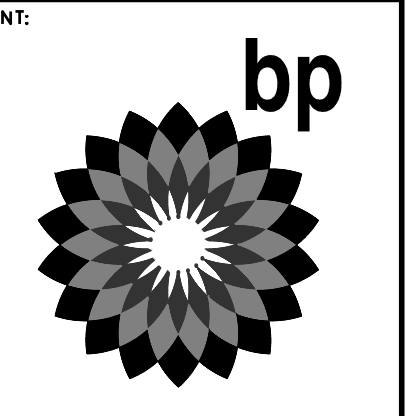
4 GREASE INTERCEPTOR SAMPLING BOX  
U2.3 SCALE: NTS



5 SAMPLING TEE CONNECTION  
U2.3 SCALE: NTS

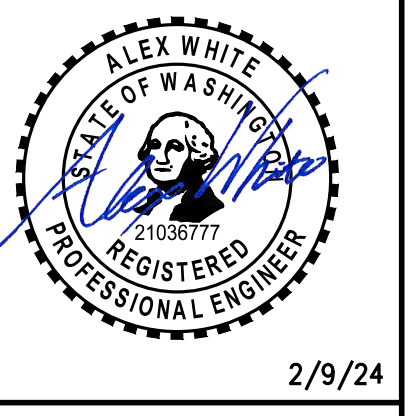
**UTILITY CONFLICT NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 48 HOURS IN ADVANCE AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

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



**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION	DESCRIPTION
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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD'S

SITE ADDRESS:  
1402 S. MERIDIAN  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

**FACILITY #TBD**

DESIGNED BY: JDF ALLIANCE TBD  
CHECKED BY: AW BP REP:  
DRAWN BY: JDF ALLIANCE PM  
VERSION: PROJECT NO.: 21730

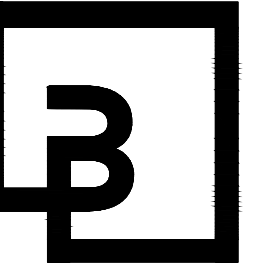
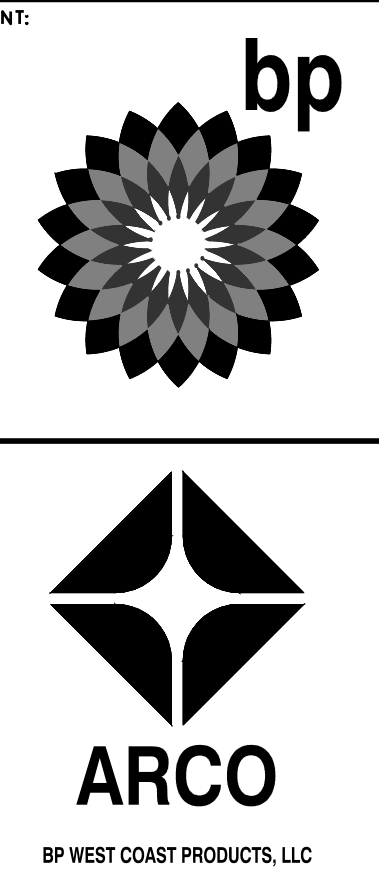
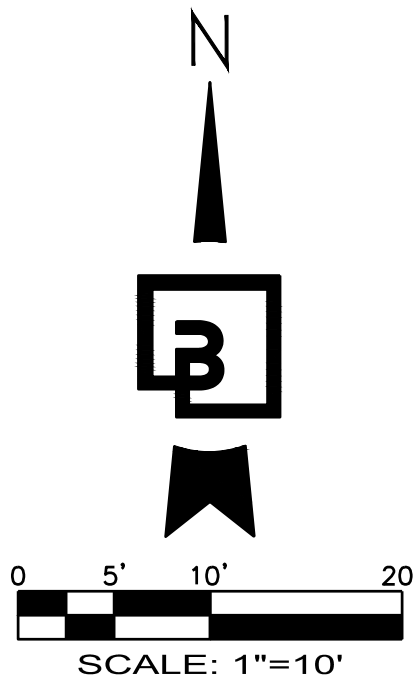
DRAWING TITLE:  
**UTILITY DETAILS**

SHEET NO.:  
**U2.3**

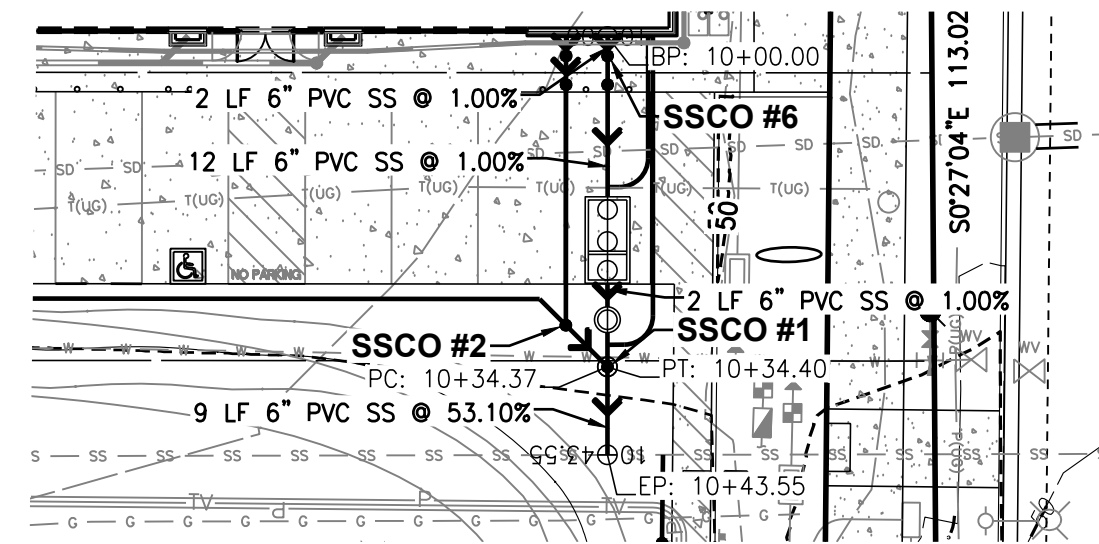
P:\21000s\21730\engineering\21730-U.dwg 2/19/2024 2:23 PM JLEHARTY

# SEWER PROFILE - BUILDING + TRASH ENCLOSURE

FOR  
**ARCO ampm PUYALLUP**  
SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY

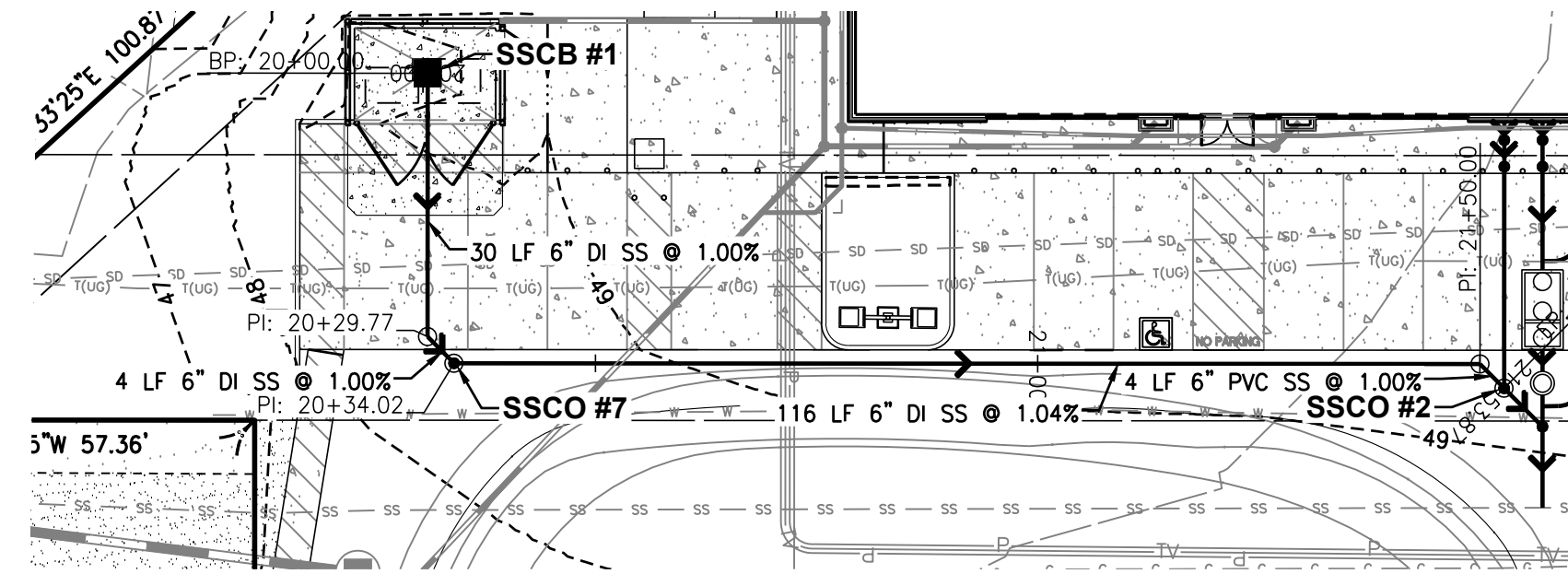


**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



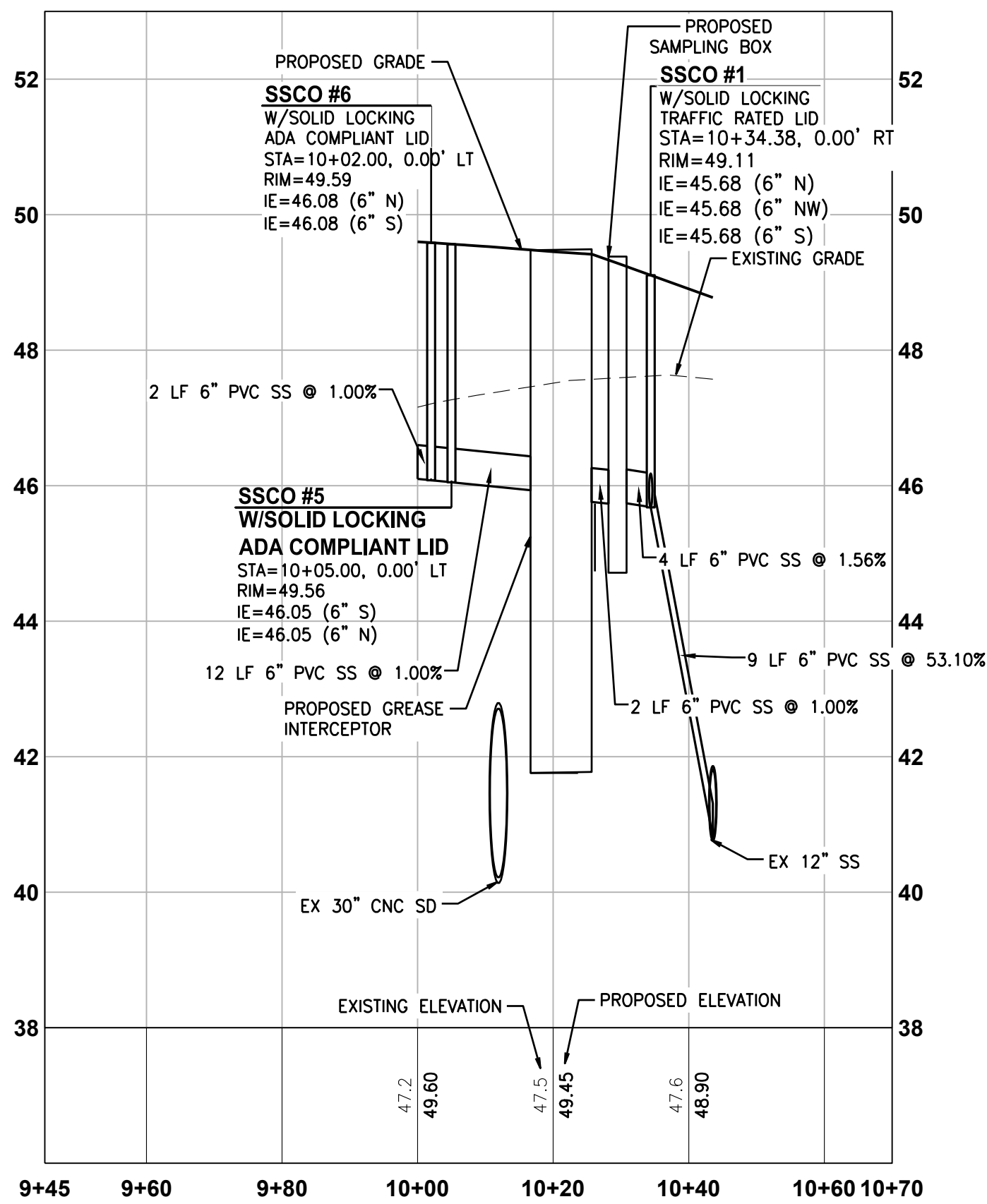
**SANITARY SEWER BUILDING  
ALIGNMENT EXHIBIT - C-STORE TO SEWER TAP**

HORIZONTAL SCALE: 1"=20'



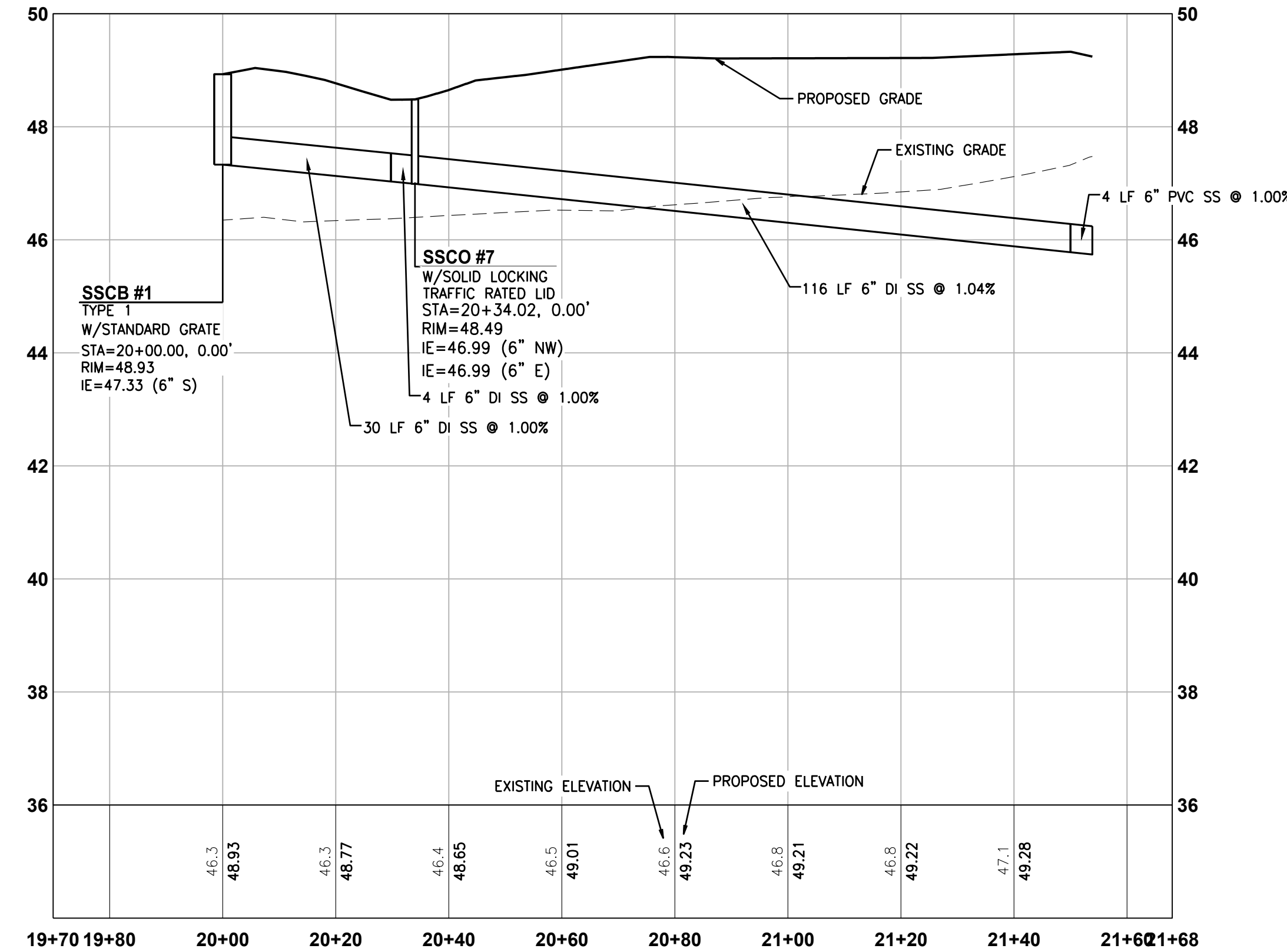
**SANITARY SEWER TRASH ENCLOSURE  
ALIGNMENT EXHIBIT - SSSCB #1 TO SSCO #2**

HORIZONTAL SCALE: 1"=20'



**SANITARY SEWER  
BUILDING PROFILE - C-STORE TO SEWER TAP**

HORIZONTAL SCALE: 1"=20', VERTICAL SCALE: 1" = 2'



**SANITARY SEWER  
TRASH ENCLOSURE PROFILE - SSSCB #1 TO SSCO #2**

HORIZONTAL SCALE: 1"=20', VERTICAL SCALE: 1" = 2'

NO.	DATE	REVISION DESCRIPTION
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2/9/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

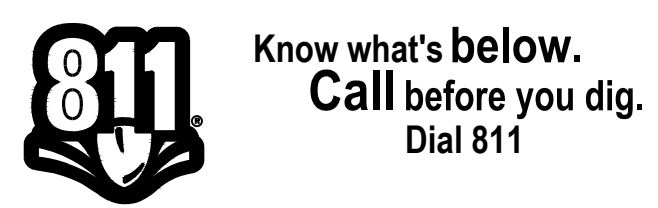
SITE ADDRESS:  
**1402 S. MERIDIAN**  
@ HIGHWAY 512  
PUYALLUP, WASHINGTON

FACILITY #TBD  
DESIGNED BY: JDF ALLIANCE ZBDW  
CHECKED BY: AW BP REP:  
DRAWN BY: JDF ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

DRAWING TITLE:  
**SEWER PROFILE - BUILDING &  
TRASH ENCLOSURE**

SHEET NO:

**UTILITY CONFLICT NOTE:**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE AT 811 48 HOURS IN ADVANCE AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.



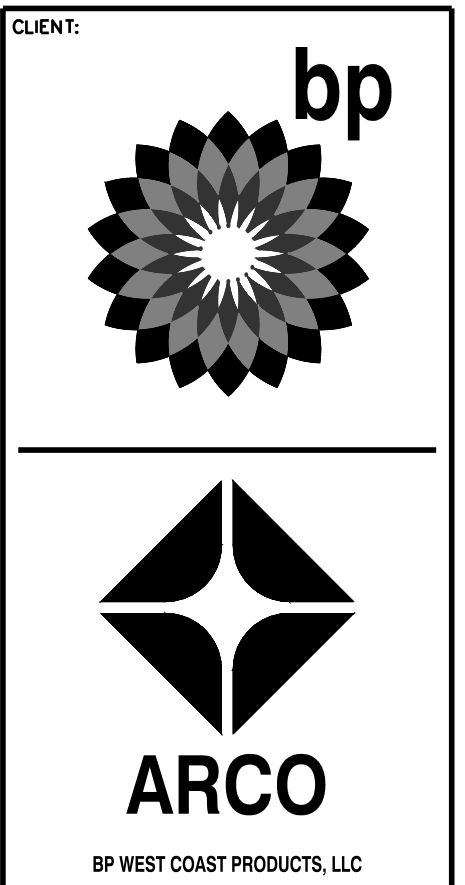
**PRCNC20240007**

**U2.4**

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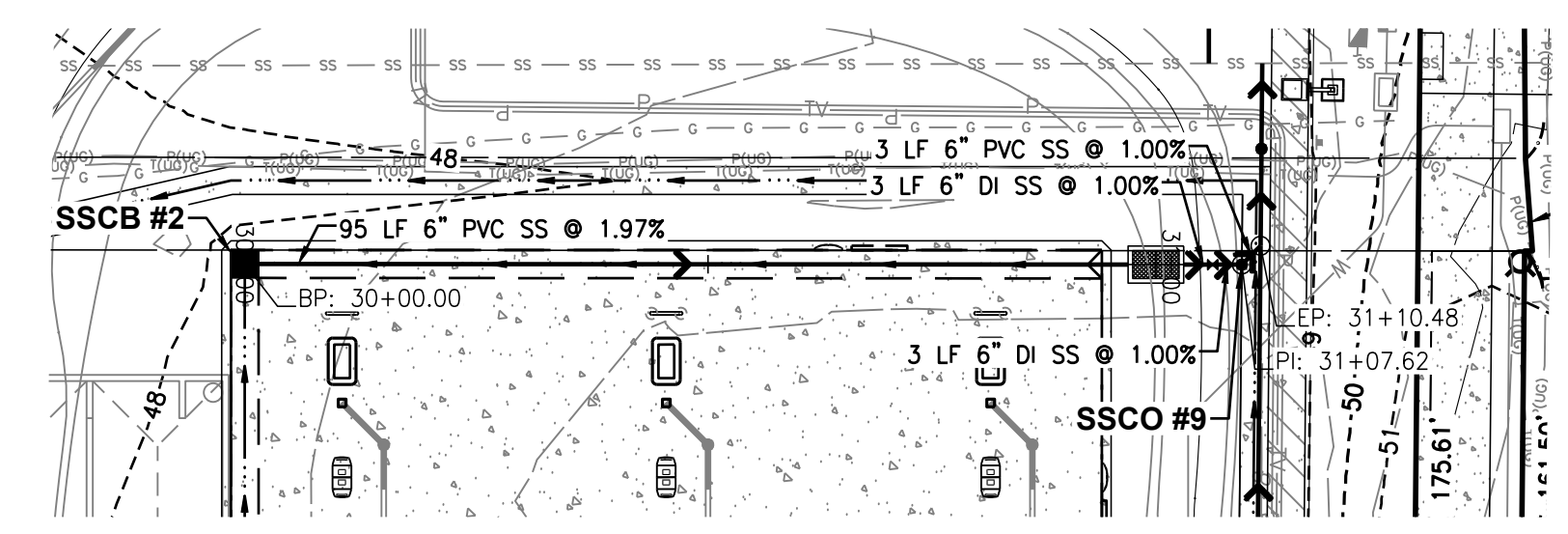
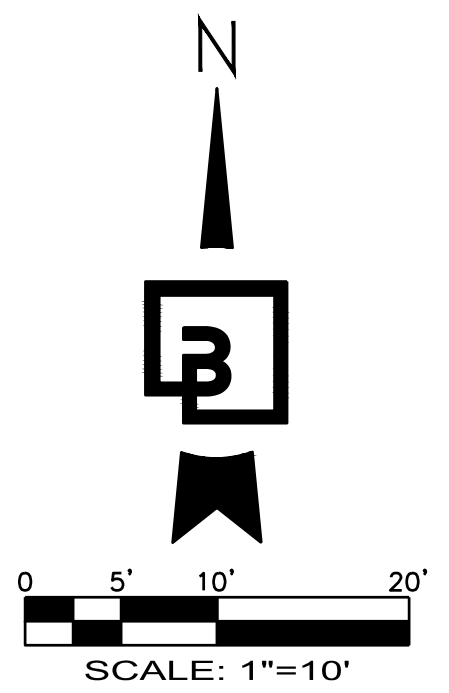
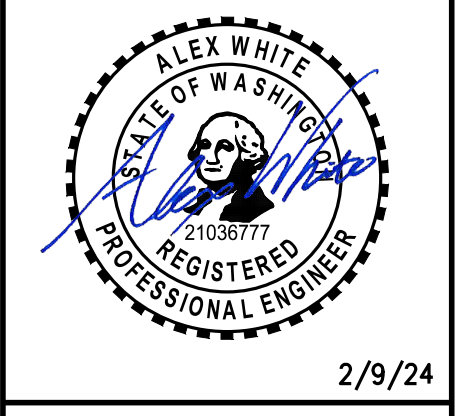
# SEWER PROFILE - CANOPY + CAR WASH

FOR  
**ARCO ampm PUYALLUP**  
 SEC. 33, TWN. 20 N, RGE. 4 E, W.M.  
 CITY OF PUYALLUP, PIERCE COUNTY



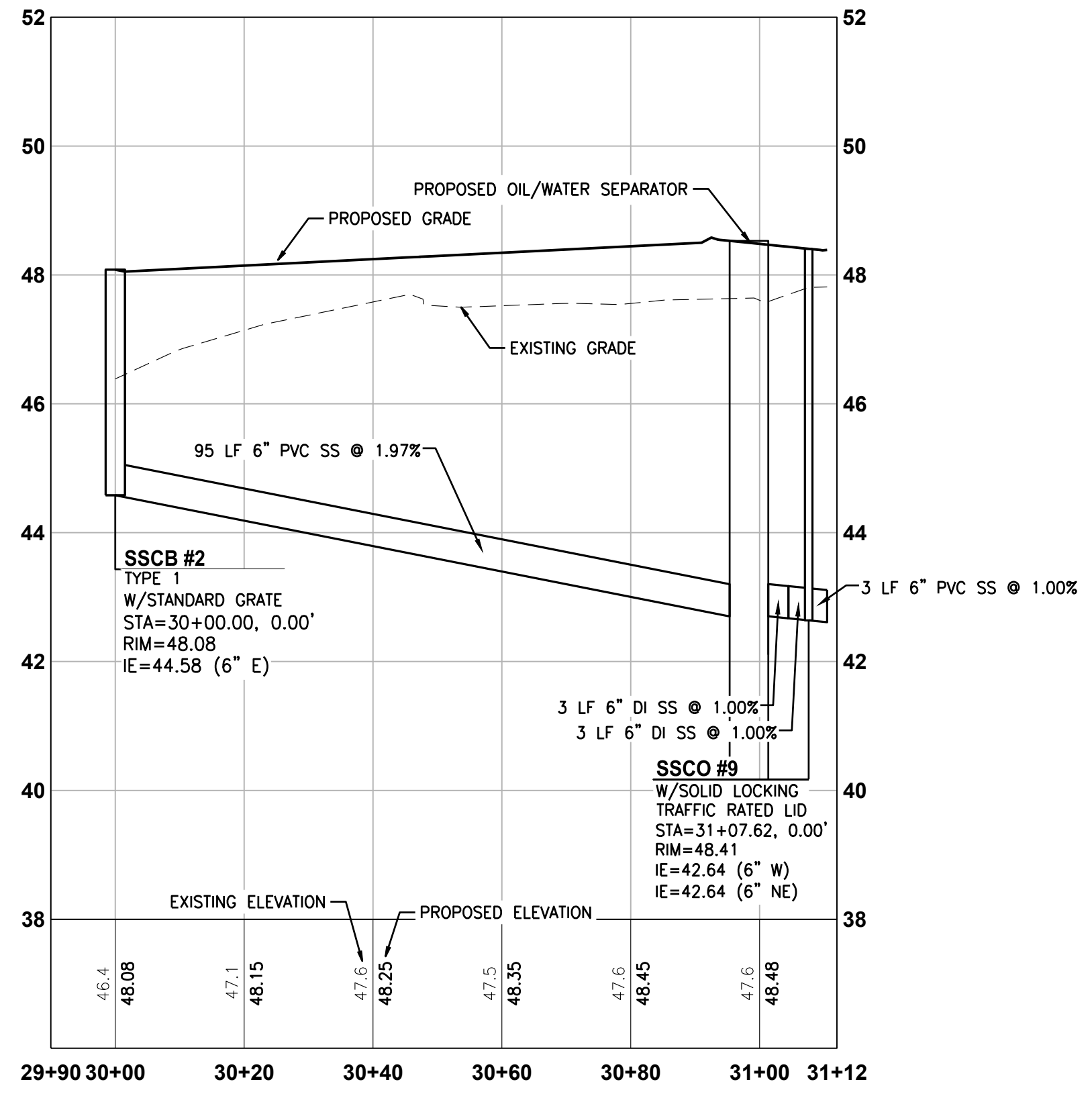
**Barchausen Consulting Engineers, Inc.**  
 18215 72nd Avenue South  
 Kent, WA 98032  
 425.251.6222  
 barghausen.com

NO.	DATE	REVISION DESCRIPTION



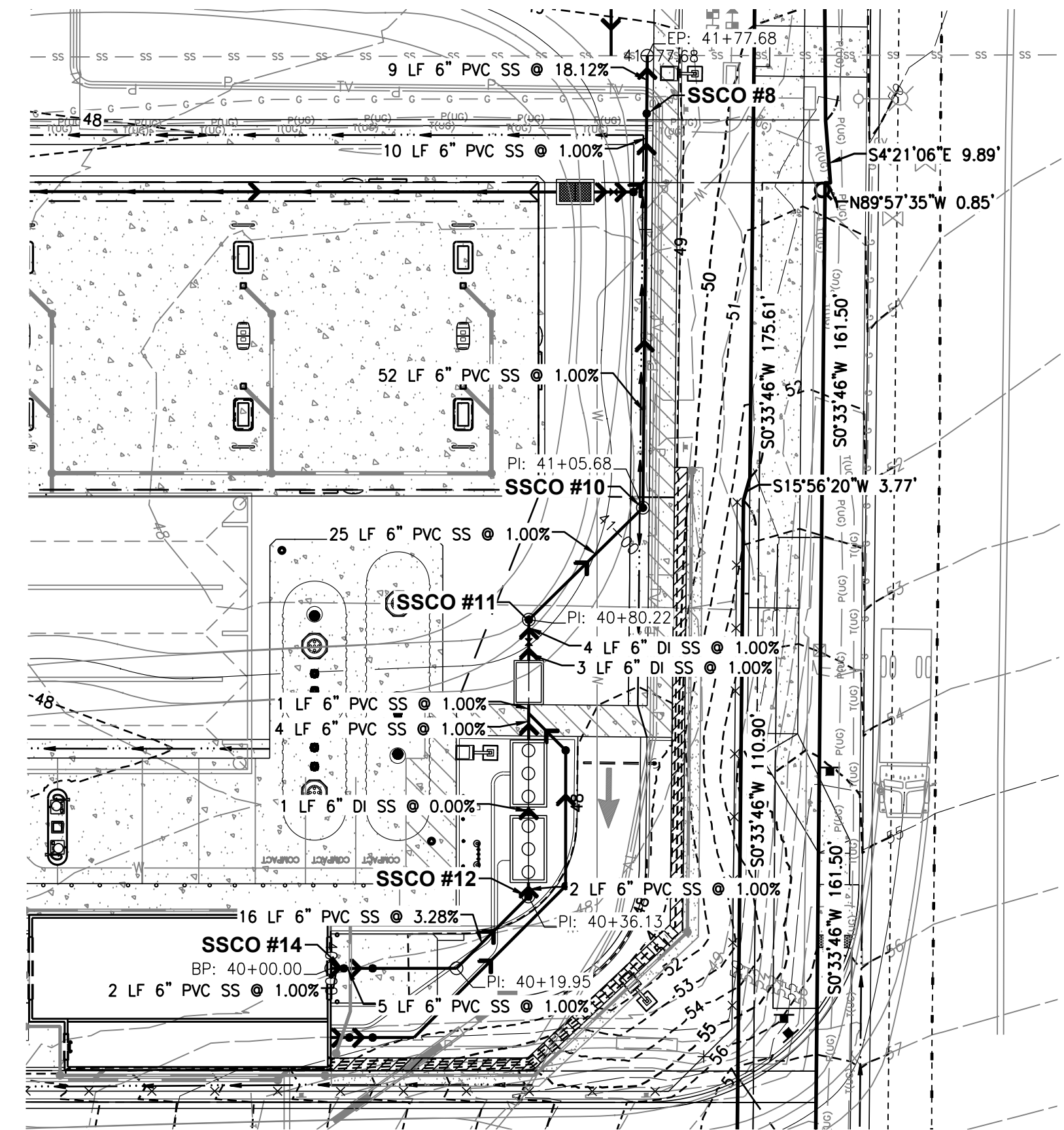
**SANITARY SEWER CANOPY ALIGNMENT EXHIBIT - SSCB #2 TO SSCO #9**

HORIZONTAL SCALE: 1"=20'



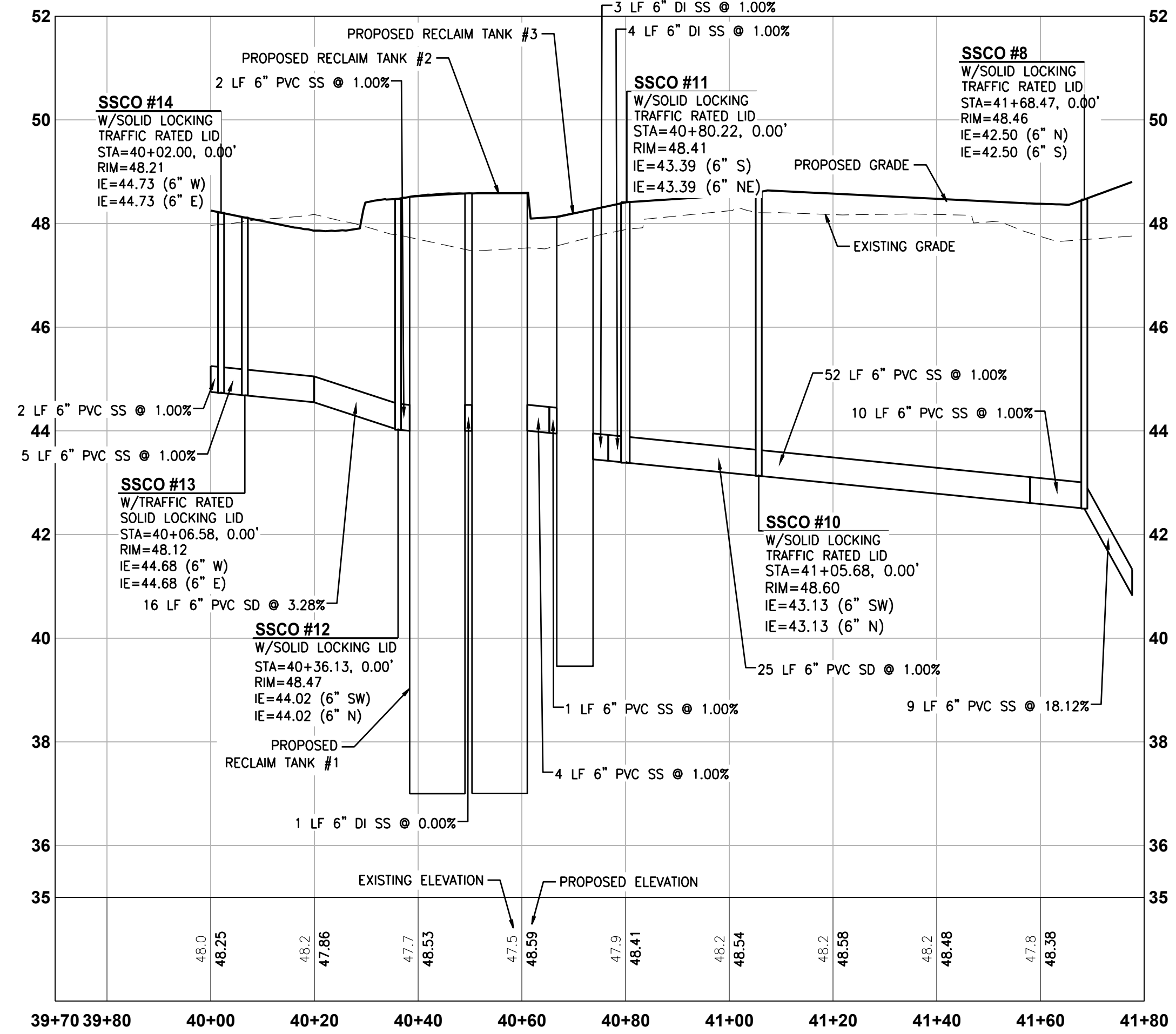
**SANITARY SEWER CANOPY PROFILE - SSCB #2 TO SSCO #9**

HORIZONTAL SCALE: 1"=20', VERTICAL SCALE: 1" = 2'



**SANITARY SEWER CAR WASH ALIGNMENT EXHIBIT - CAR WASH TO SEWER TAP**

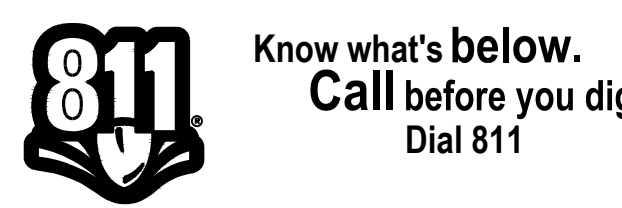
HORIZONTAL SCALE: 1"=20'



**SANITARY SEWER CAR WASH PROFILE - CAR WASH TO SEWER TAP**

HORIZONTAL SCALE: 1"=20', VERTICAL SCALE: 1" = 2'

**UTILITY CONFLICT NOTE:**  
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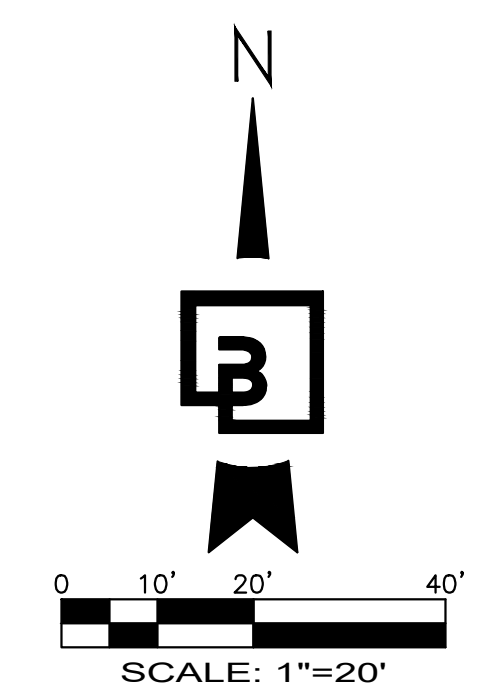
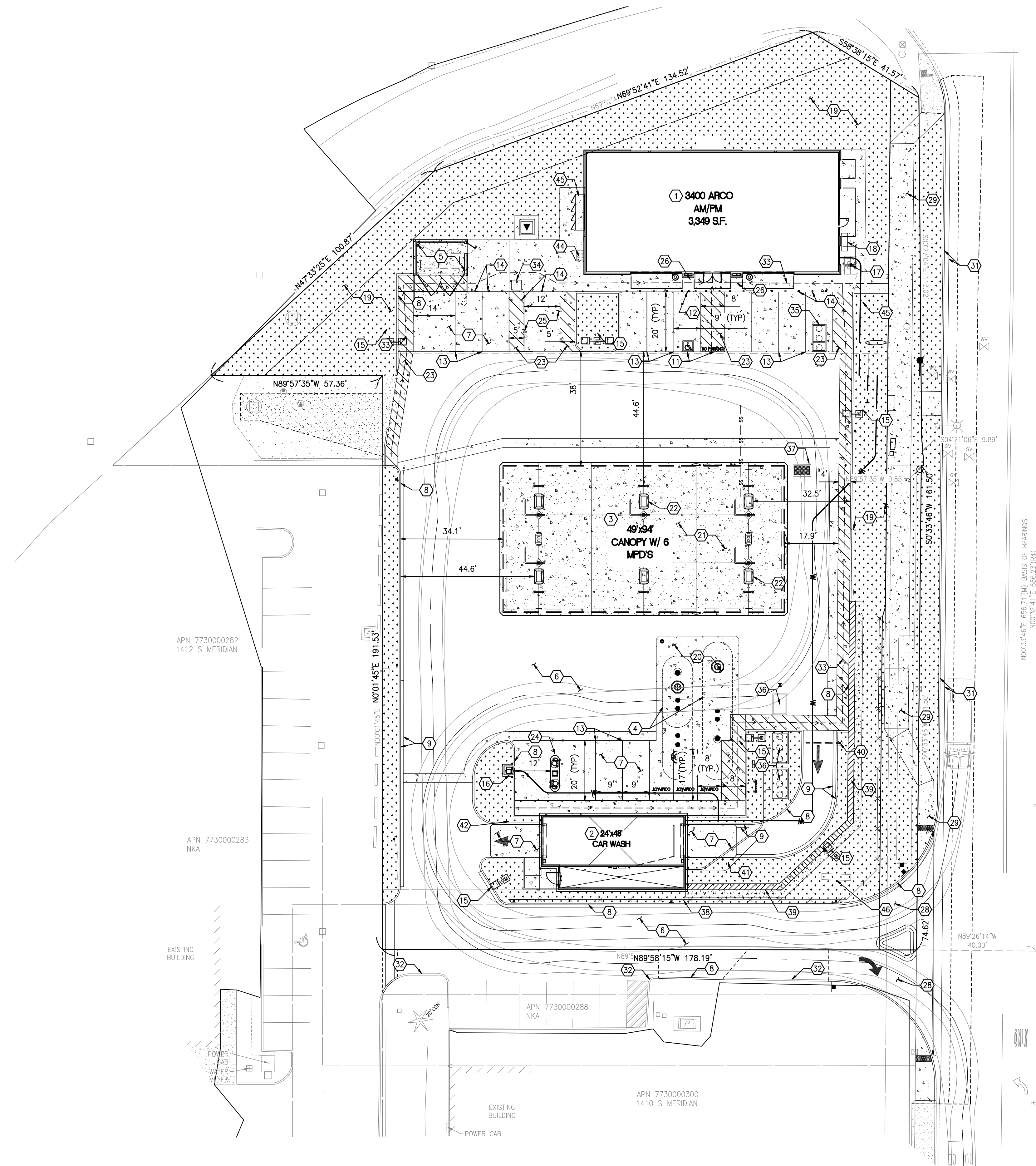
PRCNC20240007

U2.5

**CONSTRUCTION NOTES:**

1. CONVENIENCE STORE.
2. CAR WASH.
3. FUEL CANOPY.
4. UNDERGROUND STORAGE TANKS. SEE FUEL PLANS FOR DETAILS.
5. TRASH ENCLOSURE AND CONCRETE TRASH ENCLOSURE SLAB. TRASH ENCLOSURE UNDER SEPARATE PERMIT.
6. ON-SITE ASPHALT PAVEMENT. SEE CIVIL DRAWINGS.
7. ON-SITE CONCRETE PAVEMENT. SEE CIVIL DRAWINGS. PROVIDE EXPANSION AND CONTROL JOINTS PER CIVIL DRAWINGS.
8. BARRIER CURB. SEE CIVIL DRAWINGS.
9. CURB AND GUTTER. SEE CIVIL DRAWINGS.
10. CONCRETE SIDEWALK, WIDTH VARIES. SEE CIVIL DRAWINGS.
11. ACCESSIBLE PARKING STALL AND AISLE. SEE CIVIL DRAWINGS.
12. BOLLARD MOUNTED ACCESSIBLE PARKING STALL SIGNAGE. SEE CIVIL DRAWINGS.
13. PARKING STALL WITH 4" WIDE WHITE REFLECTIVE PAINT STRIPE (TYP.). SEE CIVIL DRAWINGS.
14. BOLLARD (TYP.). SEE CIVIL DRAWINGS.
15. LOT LIGHT. SEE DETAIL ON-SITE PHOTOMETRIC PLANS FOR MORE DETAILS. COORDINATE ALL CONDUIT RUNS, WIRING REQUIREMENTS, LOT LIGHT BASE, ETC. WITH ELECTRICAL PLANS. SEE CIVIL DRAWINGS.
16. AIR/WATER UNIT. ARCHITECTURAL PLANS FOR MORE DETAILS.
17. BICYCLE STORAGE. SEE CIVIL DRAWINGS.
18. SEATING BENCH.
19. LANDSCAPING. SEE LANDSCAPE PLANS.
20. CONCRETE TANK FUEL SLAB. SEE FUEL PLANS FOR DESIGN.
21. UNDER CANOPY CONCRETE SLAB. SEE ARCHITECTURAL PLANS FOR DETAILS.
22. FUEL DISPENSERS WITH HOOP BOLLARDS (TYP.). SEE FUEL PLANS FOR DETAILS.
23. PAVEMENT MARKINGS - 4" WIDE WHITE PAINTED STRIPES @ 2' O.C./45° ANGLE. SEE CIVIL DRAWINGS.
24. VACUUM UNIT. REFER TO ARCHITECTURAL CAR WASH DRAWINGS, 01/CWA4.2.
25. VAN ACCESSIBLE AND STANDARD EV CHARGING STATION, SEE CIVIL DRAWINGS.
26. TRASH RECEPTACLE (TYP.).
27. CONCRETE DRIVEWAY PER CITY OF PUYALLUP STANDARD DRAWING NO. 01.02.17. CIVIL DRAWINGS.
28. CONCRETE DRIVEWAY PER CITY OF PUYALLUP STANDARD DRAWING NO. 01.02.16. CIVIL DRAWINGS.
29. CONCRETE SIDEWALK PER CITY OF PUYALLUP STANDARD DRAWING NO. 01.02.01. SEE CIVIL DRAWINGS.
30. TYPE I CURB RAMP PER CITY OF PUYALLUP STANDARD DRAWING NO. 01.02.19. SEE CIVIL DRAWINGS.
31. OFF-SITE CURB AND GUTTER PER CITY OF PUYALLUP STANDARD DRAWING NO. 01.02.09. SEE CIVIL DRAWINGS.
32. PROTECT EXISTING CURB/CURB AND GUTTER TO REMAIN.
33. ACCESSIBLE PATH. REFER TO CIVIL GRADING PLAN FOR SLOPE REQUIREMENTS.
34. FREEWIRE EV CHARGING STATION TO BE INSTALLED
35. GREASE INTERCEPTOR. REFER TO CIVIL AND PLUMBING DRAWINGS.
36. WATER RECLAIM TANKS AND SEPARATOR. REFER TO CAR WASH, PLUMBING AND CIVIL DRAWINGS FOR CONTINUATION
37. SAND-OIL-WATER SEPARATOR. REFER TO CIVIL DRAWINGS.
38. VEHICLE GUARD RAIL. REFER TO CIVIL AND STRUCTURAL DRAWINGS.
39. RETAINING WALL. REFER TO CIVIL AND STRUCTURAL DRAWINGS.
40. CAR WASH OVERHEAD HEIGHT WARNING BAR. REFER TO ARCHITECTURAL CAR WASH DRAWINGS AND STRUCTURAL DETAILS.
41. CAR WASH PAY STATION. REFER TO ARCHITECTURAL CAR WASH DRAWINGS.
42. DRYER COUNT DOWN DISPLAY. REFER TO CAR WASH DRAWINGS.
43. PROPANE EXCHANGE CAGE
44. ELECTRICAL SWITCHGEAR. REFER TO ELECTRICAL DRAWINGS.
45. PROPOSED NEW MONUMENT SIGN. PERMITTED SEPARATELY.
46. EXISTING POLE SIGN TO BE RESURFACED WITH ARCO/AMPM SIGNAGE. PERMITTED SEPARATELY.

**ARCHITECTURAL SITE PLAN**



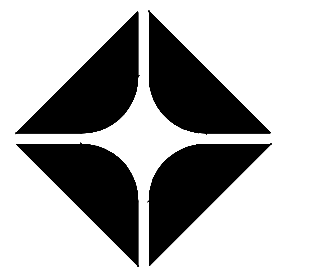
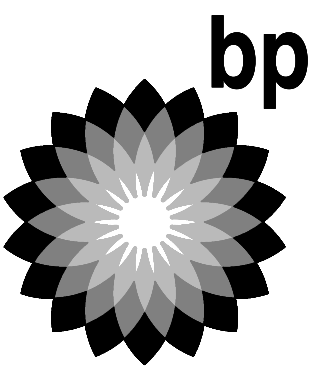
**PRCNC20240007**

**SEE STRUCTURAL SHEETS BEGINNING WITH CWS0.1**

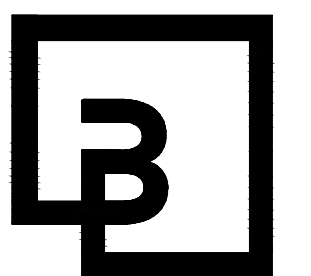
**GENERAL NOTES**

1. SEE CIVIL FOR ADDITIONAL INFO
2. SEE ELECTRICAL FOR ADDITIONAL INFO

CLIENT:



**ARCO**  
BP WEST COAST PRODUCTS, LLC



**Barghausen Consulting Engineers, Inc.**

18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

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10697 REGISTERED ARCHITECT  
DANIEL B. COALMAN  
STATE OF WASHINGTON  
EXP: 08/05/24

**DEVELOPMENT INFORMATION:**

**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

**SITE ADDRESS:**  
**1402 S MERIDIAN**  
**PUYALLUP, WA 98711**

**FACILITY #7184**

DESIGNED BY:	ALLIANCE Z&B:
CHECKED BY:	BP REP:
DRAWN BY:	ALLIANCE PM:
VERSION:	PROJECT NO:
	<b>21730</b>

**DRAWING TITLE:**  
**ARCHITECTURAL**  
**SITE PLAN**

**SHEET NO:**

**AS1.0**











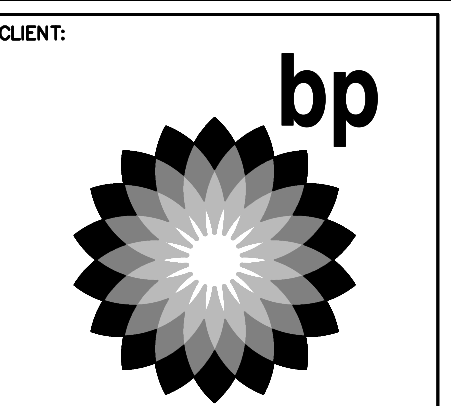
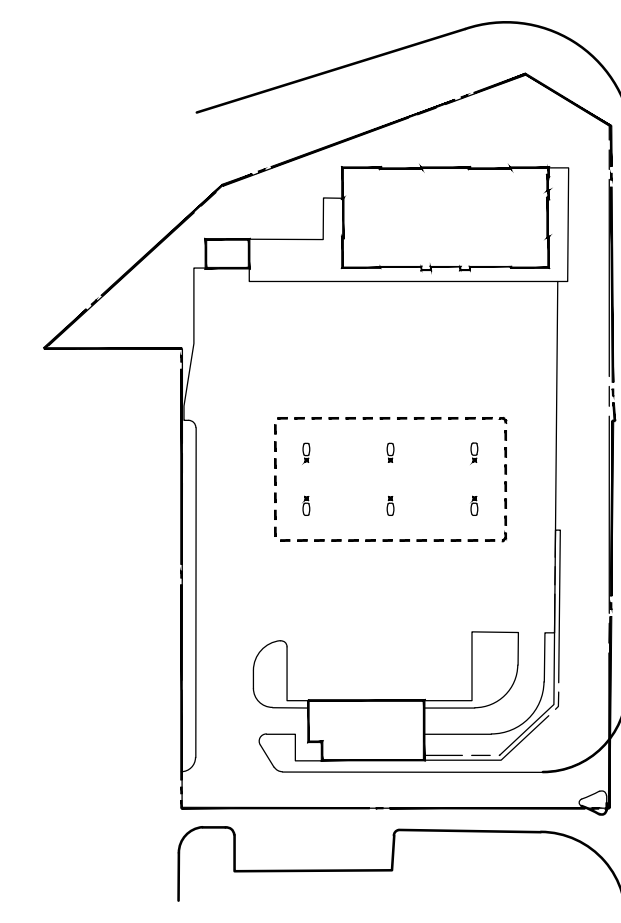
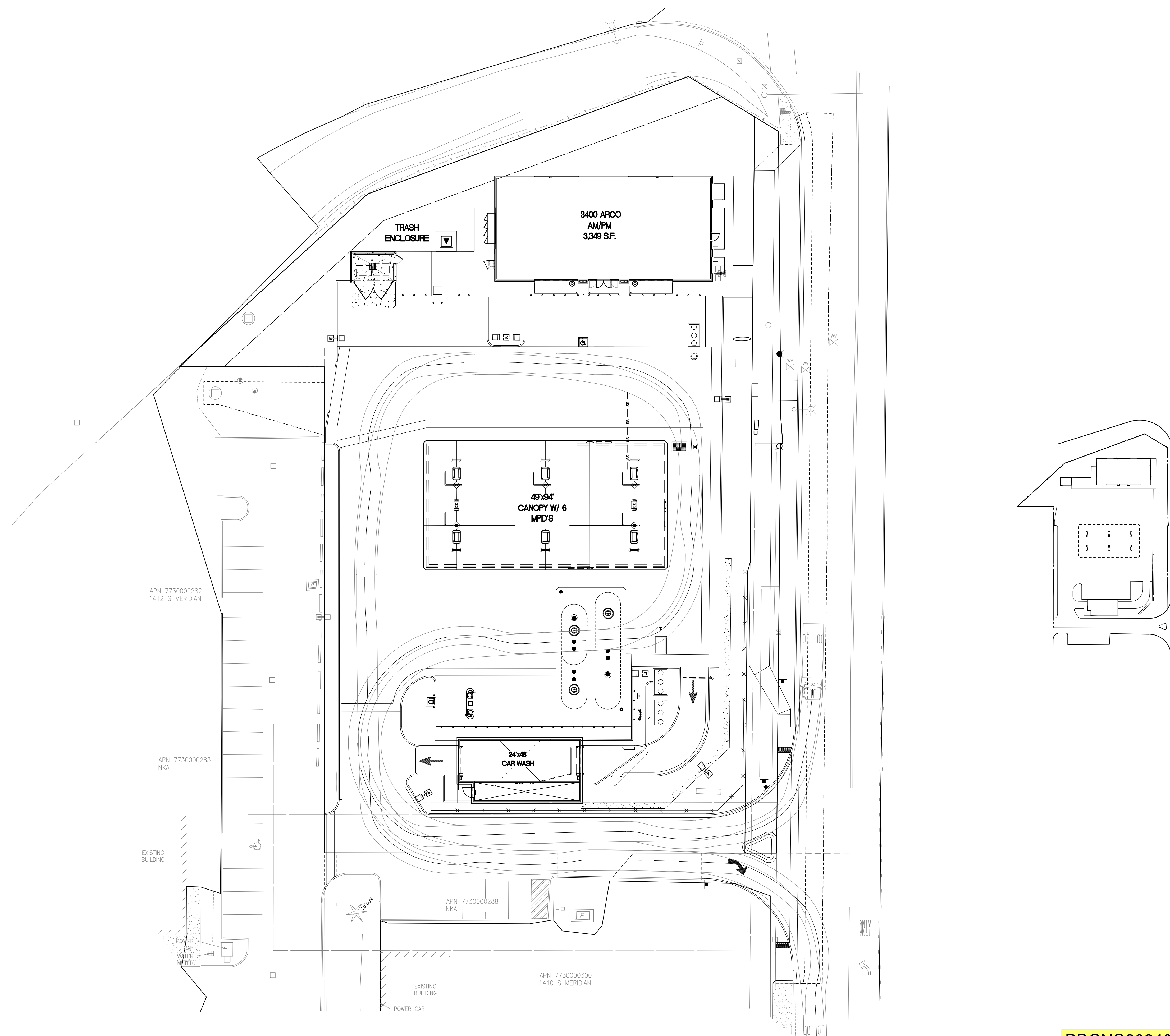




**CONSTRUCTION NOTES:**

**GENERAL NOTES**

1. SEE CIVIL FOR ADDITIONAL INFO
2. SEE ELECTRICAL FOR ADDITIONAL INFO



**B**

**Barghausen Consulting Engineers, Inc.**  
 18215 72nd Avenue South  
 Kent, WA 98032  
 425.251.6222  
 barghausen.com

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10697 REGISTERED ARCHITECT  
 DANIEL B. COLUCCI  
 STATE OF WASHINGTON  
 EXP: 08/05/24

**DEVELOPMENT INFORMATION:**  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

**SITE ADDRESS:**  
**1402 S MERIDIAN**  
**PUYALLUP, WA 98711**

**FACILITY #7184**

DESIGNED BY:	ALLIANCE ZADOK
CHECKED BY:	BP REPM
DRAWN BY:	ALLIANCE PM
VERSION:	PROJECT NO: <b>21730</b>

**DRAWING TITLE:**  
**ARCHITECTURAL**  
**SITE PLAN**

SHEET NO:  
**AS1.0**

PRCNC20240007

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10697 REGISTERED ARCHITECT  
 DANIEL B. COALWIN  
 STATE OF WASHINGTON  
 EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

SITE ADDRESS:  
**1402 S MERIDIAN**  
 PUYALLUP, WA 98571

**FACILITY #7184**

DESIGNED BY: ALLIANCE ZADM:  
 CHECKED BY: BP REP:  
 DRAWN BY: ALLIANCE PM:  
 VERSION: PROJECT NO:  
 - 21730

DRAWING TITLE:  
**CARWASH CODE PLAN**

SHEET NO:  
**CWA0.1**

**CODE INFORMATION:**

APPLICABLE CODES:  
 2018 INTERNATIONAL BUILDING CODE W/WASHINGTON STATE AMENDMENTS  
 2018 INTERNATIONAL MECHANICAL CODE W/WASHINGTON STATE AMENDMENTS  
 2018 UNIFORM PLUMBING CODE W/WASHINGTON STATE AMENDMENTS  
 2018 WASHINGTON STATE ENERGY CODE  
 ICC/ANSI A117.1 2009 ACCESSIBILITY

SCOPE OF WORK:  
 REMODEL OF AN EXISTING BANK BUILDING INTO A CAR WASH WITH AN EQUIPMENT/MECHANICAL ROOM, A UNISEX BATHROOM, AN OFFICE AND A BREAK ROOM

USE AND OCCUPANCY CLASSIFICATION:  
 IBC SECTION 304.1, BUSINESS GROUP 'B'  
 MERCANTILE GROUP 'B' INCLUDES THE USE OF A BUILDING, OR PORTION THEREOF, FOR OFFICE, PROFESSIONAL SERVICE TYPE TRANSACTIONS ETC. THESE INCLUDE A CAR WASH.  
 \*RESTROOMS AND WASH TUNNEL ARE NON-OCCUPIED SPACES PER SECTION 202 DEFINITION OF AN OCCUPIABLE SPACE.

PROPOSED BUILDING - CAR WASH:  
 CONSTRUCTION TYPE: V-B  
 USE GROUP: "B", BUSINESS  
 PROPOSED BUILDING AREA:  
 GROUP B OCCUPANCY (CAR WASH W/ THE FOLLOWING):  
 CAR WASH BUILDING: 2,652 SQ. FT.  
 TOTAL AREA: 2,652 SQUARE FEET  
 SPRINKLERS: NONE (NOT REQUIRED)

**CODE ANALYSIS:**

IBC SECTION 504.1, BUILDING HEIGHT AND NUMBER OF STORIES  
 ALLOWABLE BUILDING HEIGHT AND NUMBER OF STORIES SHALL BE DETERMINED BASED ON THE TYPE OF CONSTRUCTION, OCCUPANCY CLASSIFICATION AND AUTOMATIC SPRINKLERS.

\* ASSUME GROUP "B", BUSINESS, WITH TYPE VB CONSTRUCTION AND NON-SPRINKLERED

IBC TABLE 504.3, ALLOWABLE BUILDING HEIGHT  
 MAXIMUM ALLOWABLE HEIGHT, GROUP B: 40 FEET

\*PROPOSED HEIGHT: 18'-11"; COMPLIES

IBC TABLE 504.4, ALLOWABLE STORIES  
 MAXIMUM NUMBER OF STORIES, GROUP B: 2 STORIES

\*PROPOSED STORIES: 1; COMPLIES

IBC SECTION 506.1, BUILDING AREA  
 ALLOWABLE BUILDING AREA SHALL BE DETERMINED BASED ON THE TYPE OF CONSTRUCTION, OCCUPANCY CLASSIFICATION, AUTOMATIC SPRINKLERS AND THE AMOUNT OF BUILDING FRONTAGE ON A PUBLIC WAY.

IBC TABLE 506.2, ALLOWABLE BUILDING AREA  
 MAXIMUM ALLOWABLE AREA, GROUP B: 9,000 SQUARE FEET

\*TOTAL PROPOSED BUILDING AREA: 2,652 SQUARE FEET; COMPLIES

IBC SECTION 508.3, NON-SEPARATED OCCUPANCIES  
 BUILDINGS OR PORTIONS OF BUILDINGS THAT COMPLY WITH THE PROVISIONS OF THIS SECTION SHALL BE CONSIDERED NON-SEPARATED OCCUPANCIES.

IBC SECTION 508.3.2 ACCESSIBLE BUILDING AREA, HEIGHT & STORIES  
 THE ACCESSIBLE AREA, HEIGHT & STORIES OF THE BUILDING SHALL BE BASED ON THE MOST RESTRICTED ALLOWANCES FOR THE OCCUPANCY GROUPS CONSIDERED

IBC SECTION 508.3.3 SEPARATION  
 NO SEPARATION IS REQUIRED BETWEEN NON-SEPARATED OCCUPANCIES

IBC SECTION 602.5, TYPE V  
 TYPE V CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS, EXTERIOR WALLS AND INTERIOR WALLS ARE OF ANY MATERIALS PERMITTED BY THIS CODE.

TABLE 601, FIRE RESISTANCE RATING FOR BUILDING ELEMENTS  
 FOR TYPE V-B CONSTRUCTION IN HOURS  
 PRIMARY STRUCTURAL FRAME: 0  
 EXTERIOR BEARING WALLS: 0  
 INTERIOR BEARING WALLS: 0  
 EXTERIOR NON-BEARING WALLS: SEE TABLE 602  
 INTERIOR NON-BEARING WALLS: 0  
 FLOOR CONSTRUCTION: 0  
 ROOF CONSTRUCTION: 0

TABLE 602, FIRE RESISTANCE FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

DISTANCE	CONST. TYPE	OCC. GROUP	RATING
X<5	VB	B	1
5</= X <10	VB	B	1
10</=X<30	VB	B	0
X>/=30	VB	B	0

\*ALL EXTERIOR WALLS HAVE A FIRE SEPARATION DISTANCE OF AT LEAST 10'-0"

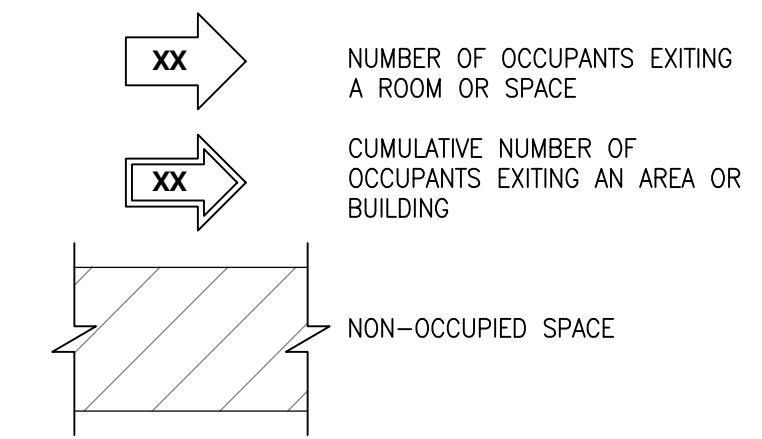
IBC TABLE 1004.5, FLOOR AREAS PER OCCUPANT  
 SEE PLAN BELOW FOR OCCUPANCY CALCULATIONS.

IBC SECTION 1006.2.1, EGRESS BASED ON OCCUPANT LOAD  
 TWO EXITS OR EXIT ACCESS DOORWAYS SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR COMMON PATH OF EGRESS TRAVEL EXCEEDS THE VALUES IN TABLE 1006.2.1.

IBC SECTION 1008.2.1, ILLUMINATION LEVEL UNDER NORMAL POWER  
 THE MEANS OF ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT CANDLE AT THE WALKING SURFACE.

IBC SECTION 1008.3.1, EMERGENCY POWER FOR ILLUMINATION  
 IN THE EVENT OF POWER FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL ILLUMINATE THE FOLLOWING AREAS:  
 AISLES, CORRIDORS, EXIT ACCESS STAIRWAYS AND RAMPS.

**CODE PLAN LEGEND**



**CODE PLAN KEYED NOTES**

1 EMERGENCY EXIT LIGHTING PER ELECTRICAL

**CODE ANALYSIS cont.:**

IBC SECTION 1009.1, ACCESSIBLE MEANS OF EGRESS  
 ACCESSIBLE SPACES SHALL BE PROVIDED WITH NOT LESS THAN ONE ACCESSIBLE MEANS OF EGRESS. WHERE MORE THAN ONE MEANS OF EGRESS ARE REQUIRED, EACH ACCESSIBLE PORTION OF THE SPACE SHALL HAVE NOT LESS THAN TWO ACCESSIBLE MEANS OF EGRESS.

IBC SECTION 1010.1.1, SIZE OF DOORS  
 THE MINIMUM WIDTH OF EACH DOOR OPENING SHALL BE SUFFICIENT FOR THE OCCUPANT LOAD AND SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES MINIMUM.

IBC SECTION 1010.1.2.1, DIRECTION OF SWING  
 DOORS SHALL SWING IN THE DIRECTION OF TRAVEL WHERE SERVING A ROOM OR AREA CONTAINING AN OCCUPANT LOAD OF 50 OR MORE PERSONS.

IBC SECTION 1010.1.9, DOOR OPERATIONS  
 EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

IBC SECTION 1013.1, EXIT SIGNS, WHERE REQUIRED  
 EXITS AND EXIT ACCESS DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF TRAVEL.

EXCEPTION 1: EXIT SIGNS ARE NOT REQUIRED IN ROOMS OR AREAS THAT REQUIRE ONLY ONE EXIT OR EXIT ACCESS.

IBC SECTION 1013.4, RAISED CHARACTER AND BRAILLE EXIT SIGNS  
 A SIGN STATING "EXIT" IN RAISED CHARACTERS AND BRAILLE AND COMPLYING WITH ICC ANSII A117.1 SHALL BE PROVIDED ADJACENT TO EACH EXIT DISCHARGE DOOR.

IBC SECTION 1103.2.9 EQUIPMENT SPACES  
 SPACES FREQUENTED ONLY BY SERVICE PERSONNEL FOR MAINTENANCE, REPAIR OR OCCASIONAL MONITORING OF EQUIPMENT ARE NOT REQUIRED TO COMPLY WITH THIS CHAPTER

IBC TABLE 2902.1, MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

OCCUPANCY	WATER CLOSETS UNISEX	LAVATORIES UNISEX
B	1/500	1/750

OCCUPANTS:  
 B 6 OCCUPANTS

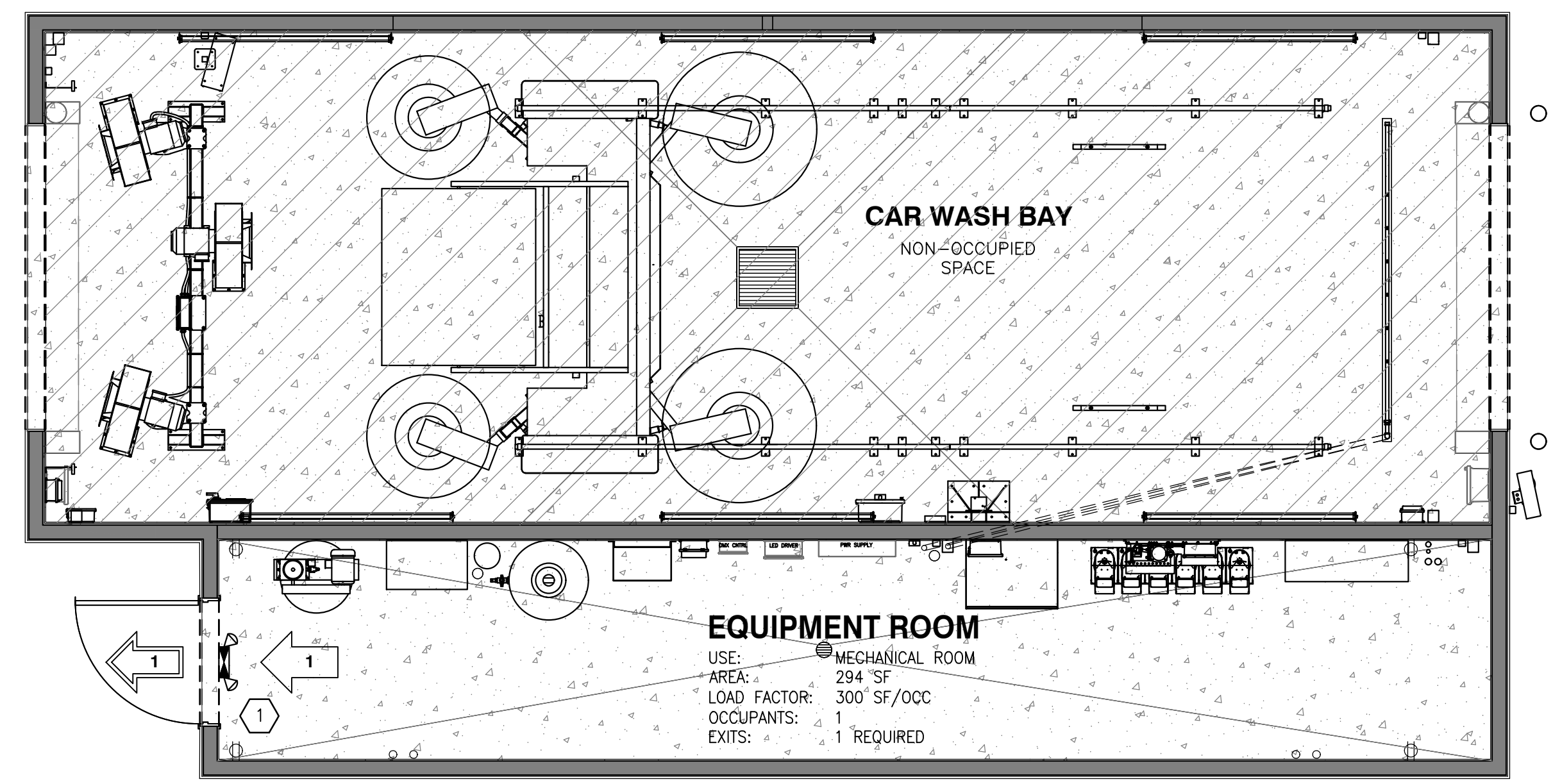
TOTAL REQUIRED PLUMBING FIXTURES:  
 UNISEX = 1 WATER CLOSET AND 1 LAV

PLUMBING FIXTURES PROVIDED:  
 0 WATER CLOSET AND 0 LAV, URINAL NOT PROVIDED  
 ADJACENT C-STORE HAS (2) UNISEX WATER CLOSETS AND (2) LAVS

WSEC 402.1.1.2, SEMI-HEATED BUILDINGS  
 THE CAR WASH BUILDING IS CONSIDERED SEMI-HEATED AND IS TO MEET THE REQUIREMENTS OF THIS SECTION

WSEC C402.5.1, AIR BARRIER  
 A CONTINUOUS AIR BARRIER SHALL BE PROVIDED THROUGHOUT THE BUILDING THERMAL ENVELOPE (CONDITIONED SPACE)

WSEC C402.5.1.2, BUILDING TEST  
 THE BUILDING SHALL BE TESTED AND MEET THE AIR LEAKAGE RATES REQUIRED



01 CONSTRUCTION FLOOR PLAN  
 SCALE: 1/4"=1'-0"

PRCNC20240007

### DOOR NOTES / HARDWARE

- (1) EQUIPMENT EXTERIOR DOOR:
- 1-1/2" PAIR FULL MORTISED STAINLESS STEEL BUTT HINGES (4-1/2"x4-1/2" NRP)
  - KICK DOWN DOOR HOLDER, HAGER 270C S1
  - 12"x40" EXTERIOR STAINLESS STEEL KICK PLATE
  - 30"x40" INTERIOR STAINLESS STEEL KICK PLATE
  - LEVER HANDLE WITH KEY OUTSIDE AND PUSH BUTTON INSIDE
  - LOCKSET (ANSI F82/SCHLAGE D50BD LESS CORE, RHODES LEVER 625, BEST CORE W/ 625 FINISH)

### DOOR SCHEDULE

TYPE	SIZE	QTY	MFR/MODEL	MATERIAL	FRAME	RATING	HARDWARE	REMARKS
1	4'-0"x7'-0"x1-3/4"	1		18 GA. INSULATED METAL	16 GA. INSULATED METAL	N/A	1	DOOR AND FRAME FACTORY PRIMED

### GENERAL NOTES

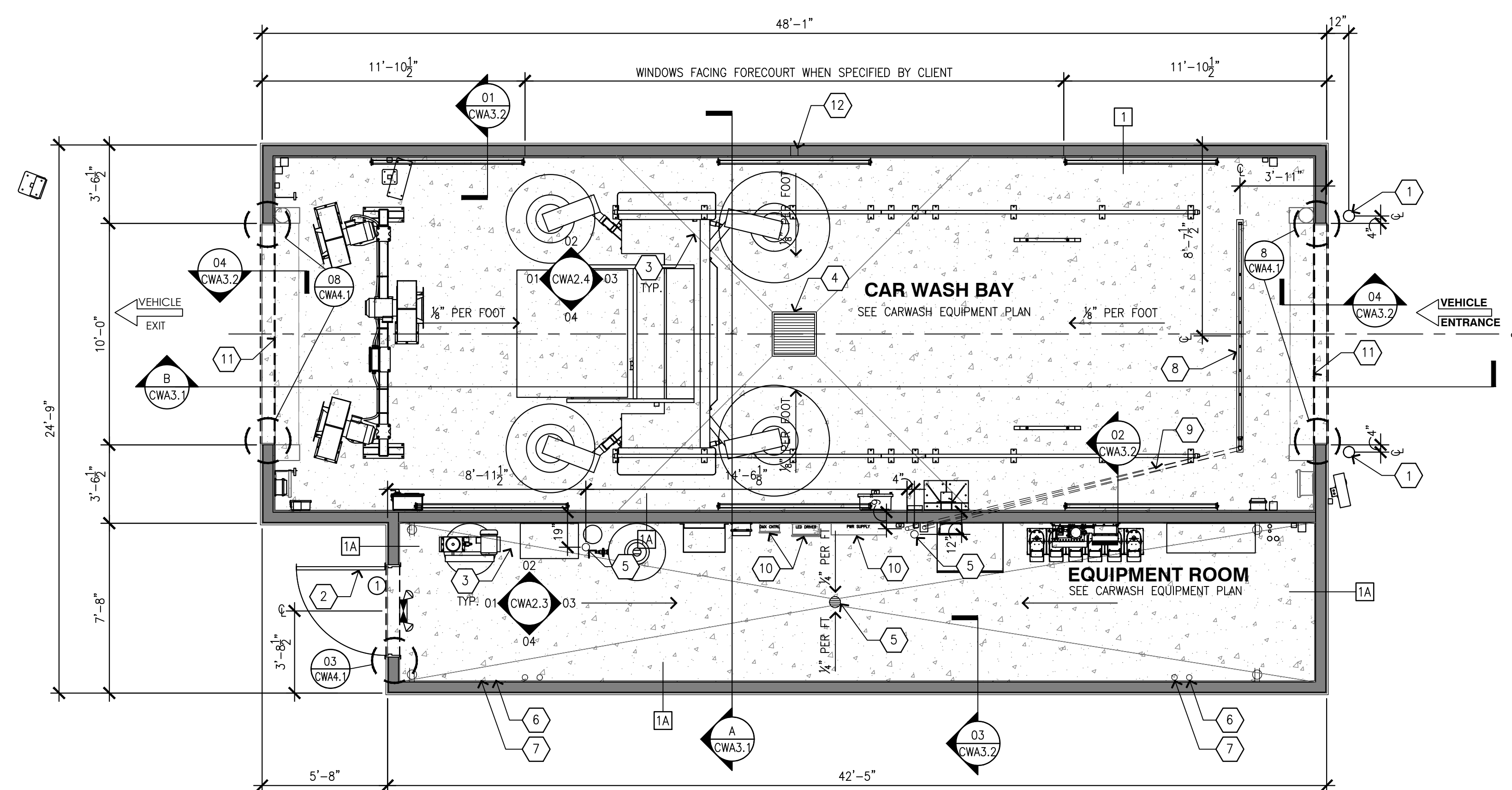
- A. ALL DIMENSIONS ARE TO FACE OF PLYWOOD/FOUNDATION UNLESS NOTED OTHERWISE.
- B. ALL DEVOTED DIMENSIONS ARE TO BE USED. PLANS SHALL NOT BE SCALED.
- C. EXTERIOR AND INTERIOR WALLS ARE 2x6. SEE STRUCTURAL PLANS FOR FRAMING REQUIREMENTS.
- D. REFER TO SHEET CW01.1 FOR THE CAR WASH EQUIPMENT PLAN AND SCHEDULE.
- E. ALL CONDUITS SHALL BE CONCEALED IN THE WALL AND TERMINATIONS SHALL BE PER THE DIMENSIONED PLAN AND ELEVATIONS. CONFIRM TERMINATION LOCATIONS WITH CAR WASH EQUIPMENT INSTALLER PRIOR INSTALLING THE CONDUITS.
- F. TERMINATIONS SHALL BE AT THE BACK OF SURFACE MOUNTED BOXES AND EQUIPMENT IF FEASIBLE.
- G. ALL PIPING SHALL BE CONCEALED IN THE WALL.
- H. ALL WALL & CEILING PENETRATIONS IN THE CAR WASH BAY SHALL BE SEALED.
- I. FLAME SPREAD CLASSIFICATIONS FOR INTERIOR WALLS SHALL COMPLY WITH LOCAL CODES.
- J. FIRE EXTINGUISHERS (2A-10B:C) SHALL BE INSTALLED AT CAR WASH BAY AND MECHANICAL ROOM. CONFIRM FINAL DETAILS WITH LOCAL FIRE INSPECTOR.

### KEYED NOTES

- 1 6" x 48" HIGH BOLLARD FILLED WITH CONCRETE, REFER TO DETAIL ON CIVIL PLANS
- 2 EQUIPMENT ROOM DOOR, REFER TO DOOR SCHEDULE
- 3 DEPRESSED SLAB, REFER TO STRUCTURAL SLAB PLAN
- 4 CATCH BASIN, REFER TO PLUMBING PLANS
- 5 FLOOR DRAIN, REFER TO PLUMBING PLANS
- 6 ROOF DRAIN, REFER TO PLUMBING PLANS AND CIVIL PLANS FOR CONTINUATION.
- 7 ROOF OVERFLOW DRAIN, REFER TO PLUMBING PLANS
- 8 3-1/2" WIDE x 1-1/2" DEEP x 10'-6" LENGTH TRENCH BY GC FOR UNDERCAR MANIFOLD, REFER TO DETAIL 12/CWA4.1 & STRUCTURAL PLANS
- 9 2" ABS SCH 40 SLEEVE WITH 90 DEGREE SWEEPS AT BOTH ENDS WITH A MODULAR PIPE SEALING SYSTEM FOR THE UNDER CAR MANIFOLD HIGH PRESSURE HOSE
- 10 POWER SUPPLY, LED DRIVER AND DMX CONTROLLER PLACED NEAR CENTER OF BAY FOR CABLE REACH.

### WALL LEGEND

- WOOD FRAMED WALL
- 1 2x6 STUDS @ 16"o.c.
- 1A 2x6 STUDS @ 16"o.c. W/ R-21 BATT INSULATION



**01 CONSTRUCTION FLOOR PLAN**  
SCALE: 1/4"=1'-0"

NO.	DATE	REVISION DESCRIPTION
1	2/6/24	PERMIT RESUBMITTAL

10697 REGISTERED ARCHITECT  
DANIEL B. COLVIN  
STATE OF WASHINGTON  
EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

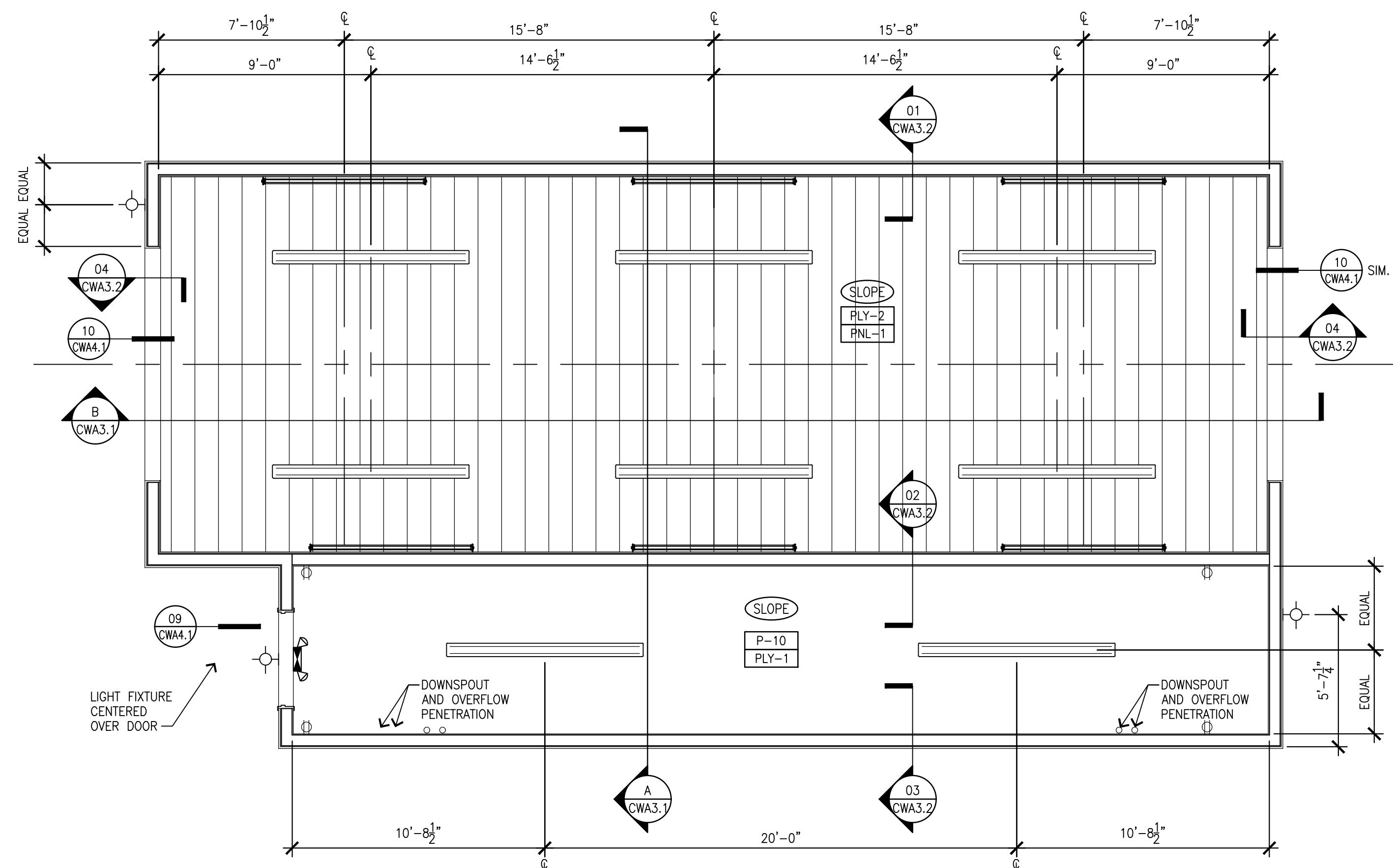
SITE ADDRESS:  
**1402 S MERIDIAN**  
**PUYALLUP, WA 98671**

**FACILITY #7184**  
DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REPM:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

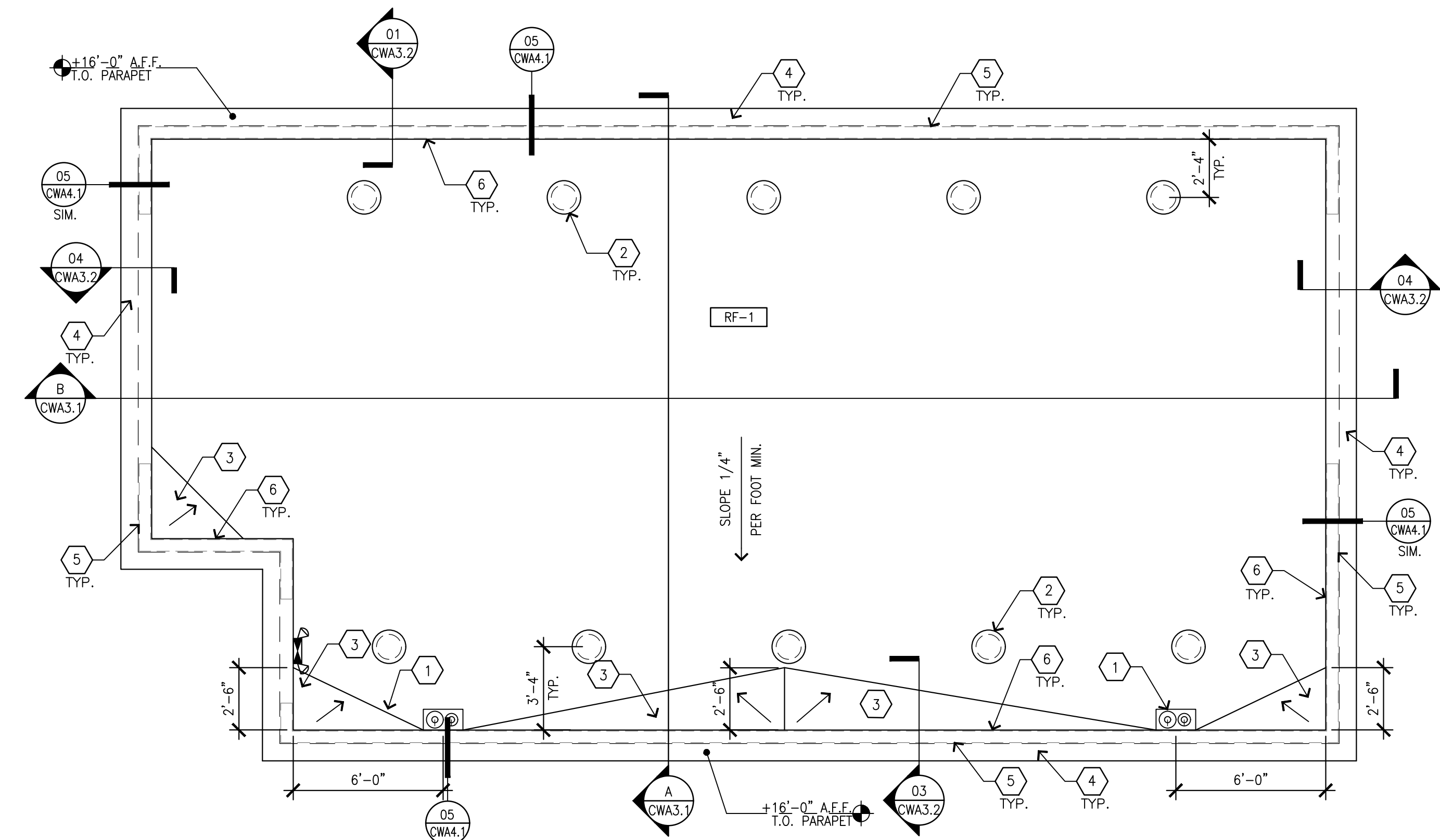
### CONSTRUCTION FLOOR PLAN

PRCNC20240007

### CWA1.1



01 REFLECTED CEILING PLAN  
SCALE: 1/4"=1'-0"



02 ROOF PLAN  
SCALE: 1/4"=1'-0"

**CEILING GENERAL NOTES**

- A. ALL DIMENSIONS SHOWN ON REFLECTED CEILING PLAN ARE FROM FACE OF PLYWOOD, UNLESS NOTED OTHERWISE.
- B. ALL DENOTED DIMENSIONS ARE TO BE USED. PLANS SHALL NOT BE SCALED.
- C. ALL CONDUITS SHALL BE CONCEALED IN THE WALL & CEILING. TERMINATIONS SHALL BE PER THE DIMENSIONED PLAN.
- D. LIGHT FIXTURE CONDUIT TERMINATIONS SHALL BE AT THE BACK OF THE FIXTURE. REFER TO ELECTRICAL LIGHTING PLAN FOR LIGHTING SPECIFICATIONS AND FIXTURE MOUNTING HEIGHTS.
- E. ALL PIPING SHALL BE CONCEALED IN THE WALL & CEILING.
- F. ALL WALL & CEILING PENETRATIONS IN THE CAR WASH BAY SHALL BE SEALED.
- G. REFER TO SYMBOL (X-X) FOR ALL CEILING HEIGHTS ON PLAN.

**FINISH SYMBOLS**

- SUBSTRATE**
- PLY-1 5/8" PLYWOOD, REFER TO STRUCTURAL FOR SPECIFICATION
  - PLY-2 5/8" PLYWOOD (CDX), REFER TO STRUCTURAL FOR SPECIFICATION
  - PNL-1 1/2" EXTRUTECH PANELS, #P1300-WHITE

- PAINT COLOR**
- P-10 BENJAMIN MOORE, PM-28, "LINEN WHITE", SEMI-GLOSS FINISH

**CEILING LEGEND**

- (EM) - DENOTES EMERGENCY BACKUP LIGHTING
- LED SURFACED MOUNTED LINEAR FIXTURE
- LED WALL MOUNTED LINEAR FIXTURE
- LED EXTERIOR WALL MOUNTED FIXTURE
- EXIT SIGN W/ EMERGENCY LIGHTING
- OVERHEAD WALL RECEPTACLES

**ROOF GENERAL NOTES**

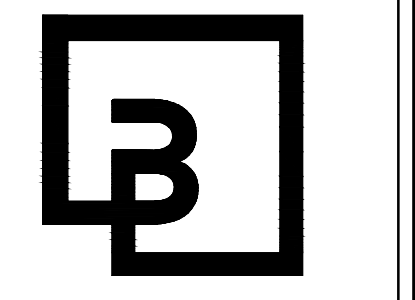
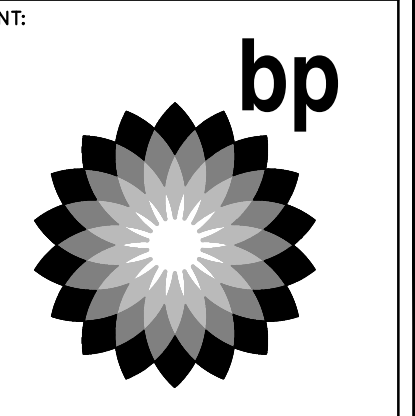
- A. REFER TO SPECIFICATIONS BOOK FOR ROOF SYSTEM, INCLUDING GUARANTEES, CURBS, FLASHING, AND ECT.
- B. REFER TO ROOFING MANUFACTURERS WRITTEN INSTRUCTIONS AND DETAILS FOR ROOFING SYSTEM INSTALLATION. CONTRACTOR TO PROVIDE COMPLETE ROOFING PACKAGE PER MANUFACTURERS RECOMMENDATIONS.
- C. ROOF ASSEMBLY SHALL COMPLY WITH U.L. I-90 AND FM CLASS "B" RATINGS INCLUDING COPING, FLASHING, PARAPET WALL, AND ROOF SYSTEM.
- D. DO NOT STOCKPILE EQUIPMENT OR MATERIALS ON THE ROOF STRUCTURE, UNLESS APPROVED IN WRITING BY THE ARCHITECT, STRUCTURAL ENGINEER, AND THE TRUSS MANUFACTURER.
- E. GENERAL CONTRACTOR IS TO PROVIDE TEMPORARY CONSTRUCTION PERIMETER GUARDRAIL TO COMPLY WITH CODE OF FEDERAL REGULATIONS 29 CFR 1926, SUBPART M (OSCA), GUARDRAIL TO BE 42" HEIGHT AND BE ABLE TO WITHSTAND 200 POUNDS AT TOP EDGE.
- F. ALL DIMENSIONS SHOWN ON ROOF PLAN ARE FROM FACE OF PLYWOOD, UNLESS NOTED OTHERWISE.
- G. REFER TO PLUMBING PLANS FOR VENT PIPE PENETRATION AND CURB DETAILS. ALL ROOF PENETRATIONS SHALL BE THROUGH THE CURBS, UNLESS NOTED OTHERWISE.

**KEYED NOTES**

- 1 ROOF DRAIN AND OVERFLOW PER DETAIL 04/CWA4.1
- 2 ROOF VENT PER DETAIL 11/CWA4.1. VENTS SHALL BE CENTERED BETWEEN JOISTS
- 3 TAPERED INSULATION CRICKET @ 1" PER FOOT
- 4 SHOP FORMED PRE-FINISHED METAL COPING, REFER TO DETAIL 05/CWA4.1
- 5 FACE OF EXTERIOR WALL BELOW
- 6 FACE OF PARAPET WALL

**ROOFING**

- RF-1 TPO ROOFING MEMBRANE WITH PROTECTION BOARD AND 3" EXPANDED POLYSTYRENE RIGID INSULATION



**Barghausen Consulting Engineers, Inc.**  
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10697 REGISTERED ARCHITECT  
PANEL B COLLUMBIAN STATE OF WASHINGTON  
EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98571

FACILITY #7184

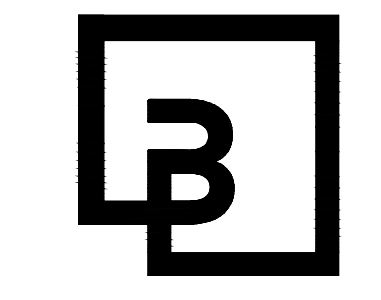
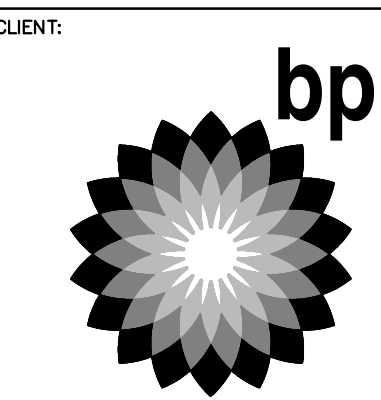
DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REP:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

DRAWING TITLE:  
**REFLECTED CEILING PLAN AND ROOF PLAN**

SHEET NO:

**CWA1.2**

PRCNC20240007



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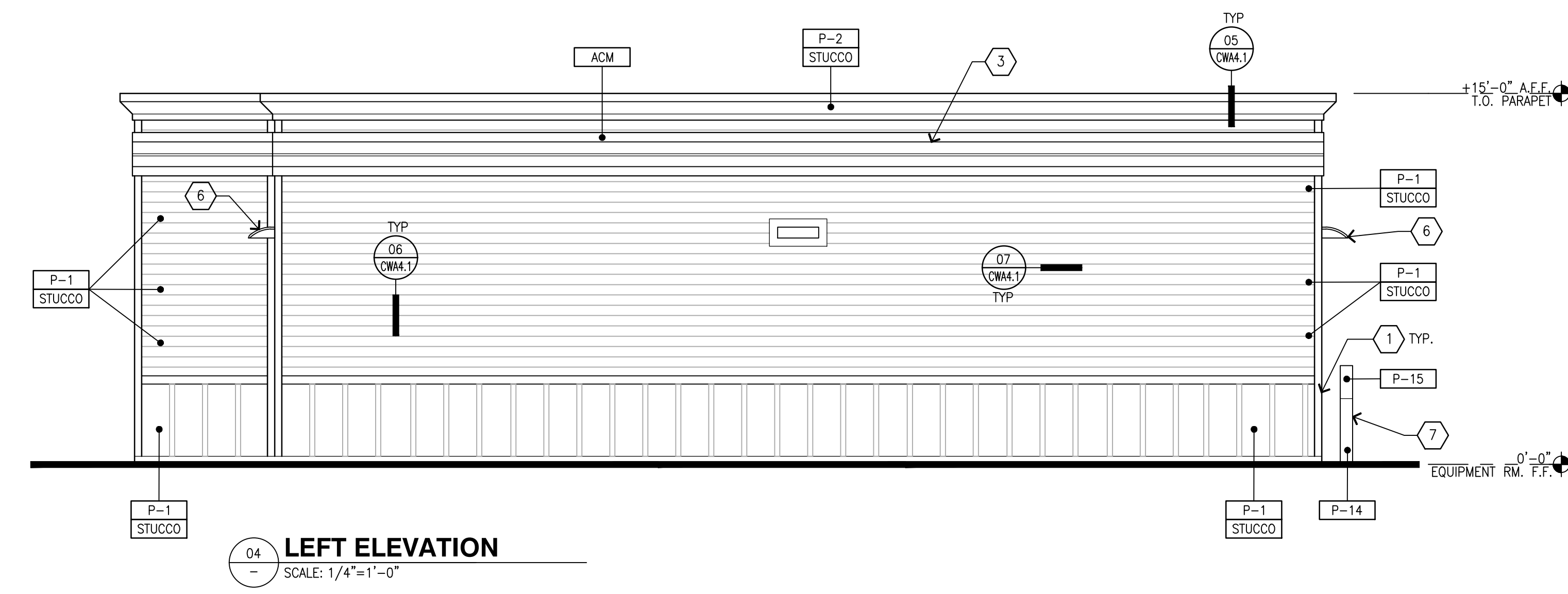
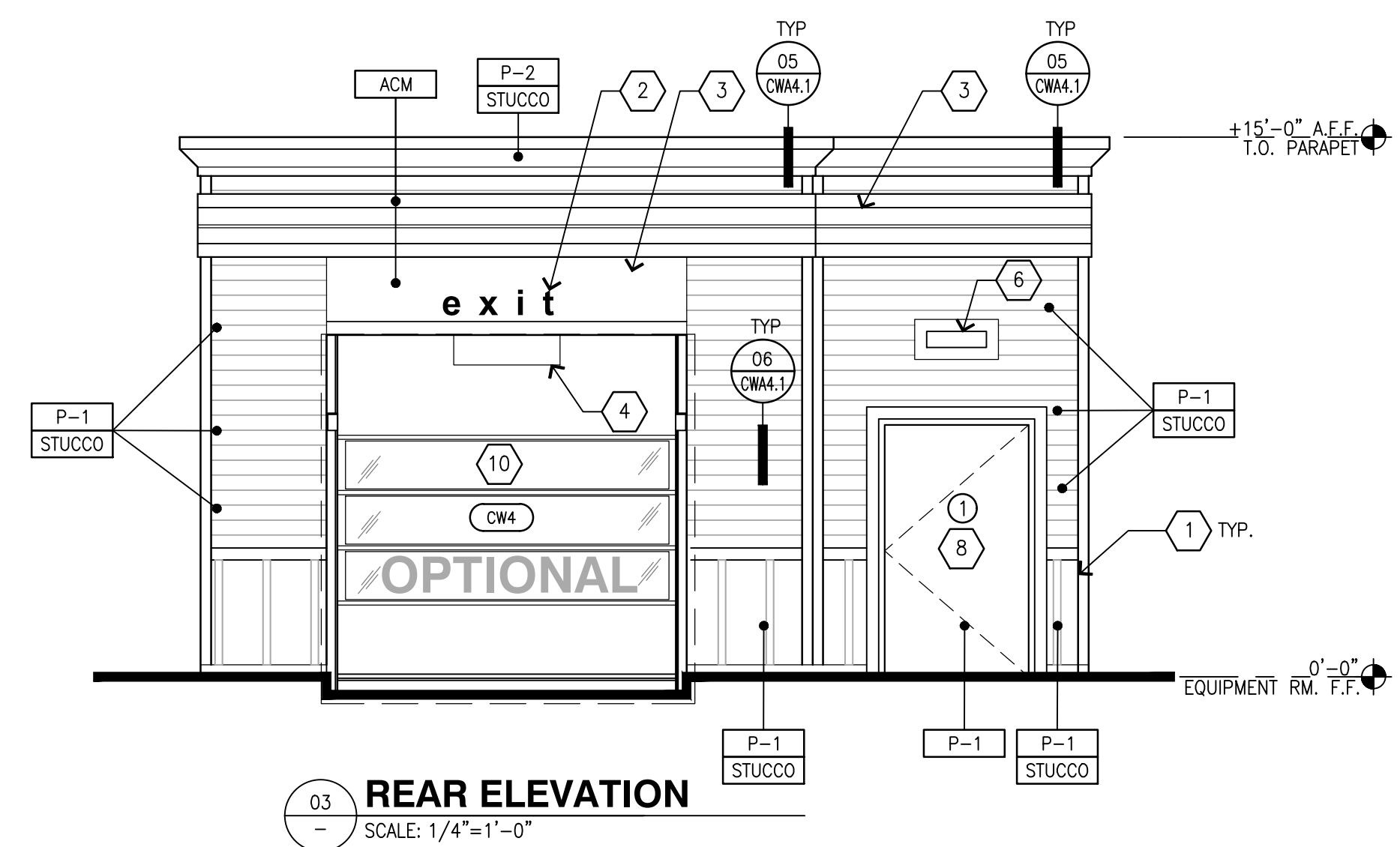
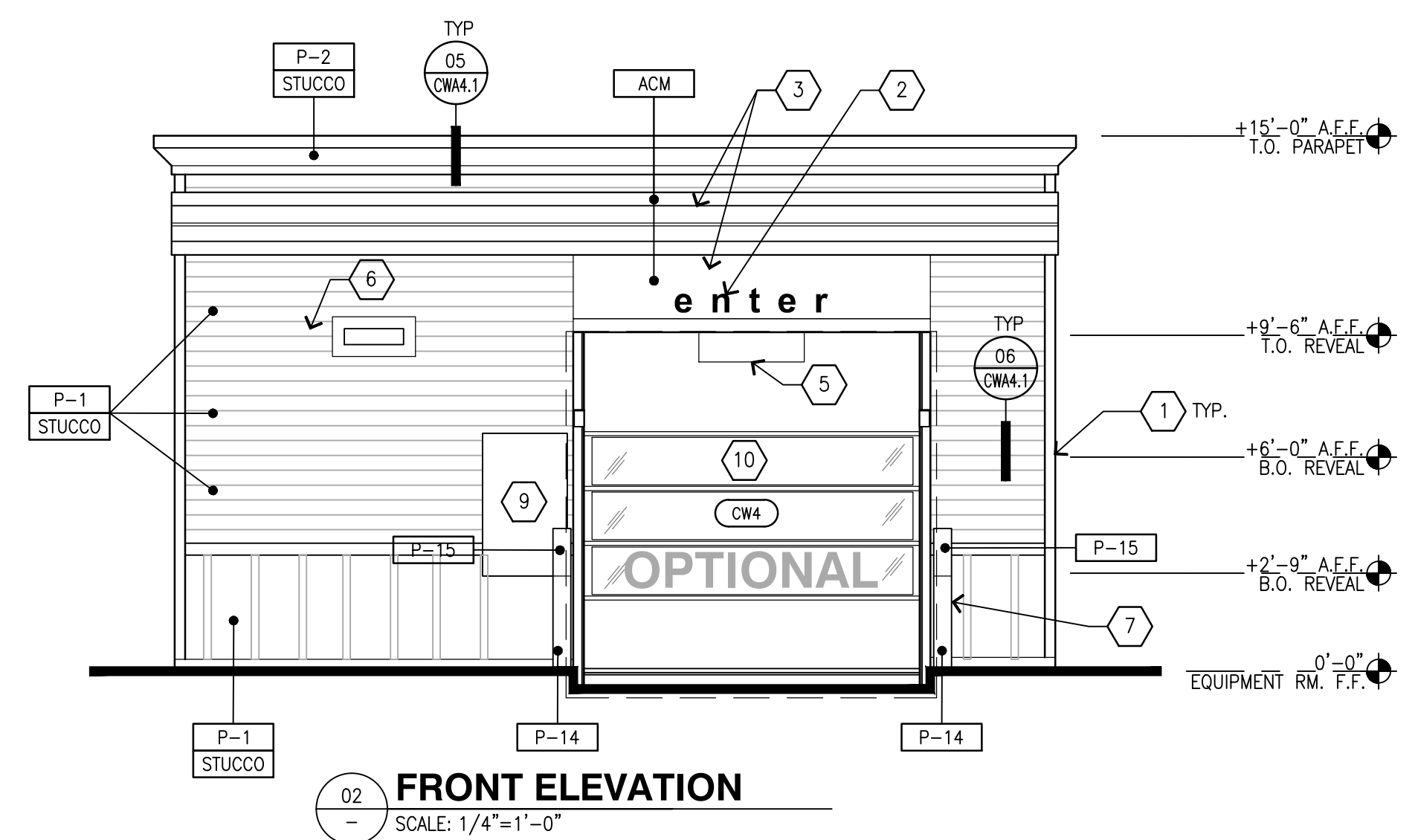
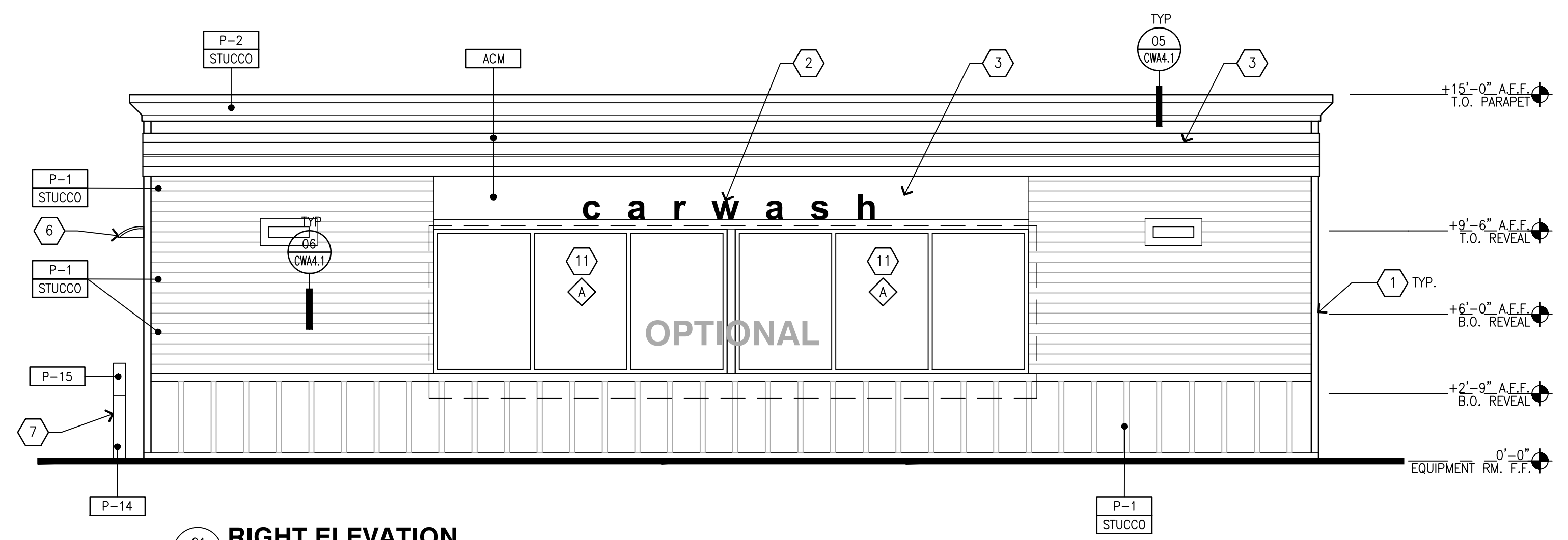
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 DRAWN BY: ALLIANCE PM  
 VERSION: PROJECT NO:  
 - 21730

DRAWING TITLE:  
**EXTERIOR ELEVATIONS**

SHEET NO:

**CWA2.1**



**KEYED NOTES**

- 1 1" REVEAL
- 2 VINYL LETTERS APPLIED TO ACM
- 3 VINYL DECAL APPLIED TO ACM
- 4 "NO ENTRY" SIGN
- 5 OVERHEAD CLEARANCE BAR
- 6 WALL MOUNTED LED FIXTURE
- 7 CONCRETE FILLED BOLLARD, REFER TO DETAIL 5/CWA4.2
- 8 METAL DOOR & FRAME
- 9 INSTRUCTIONAL SIGN PANEL

**COLOR LEGEND**

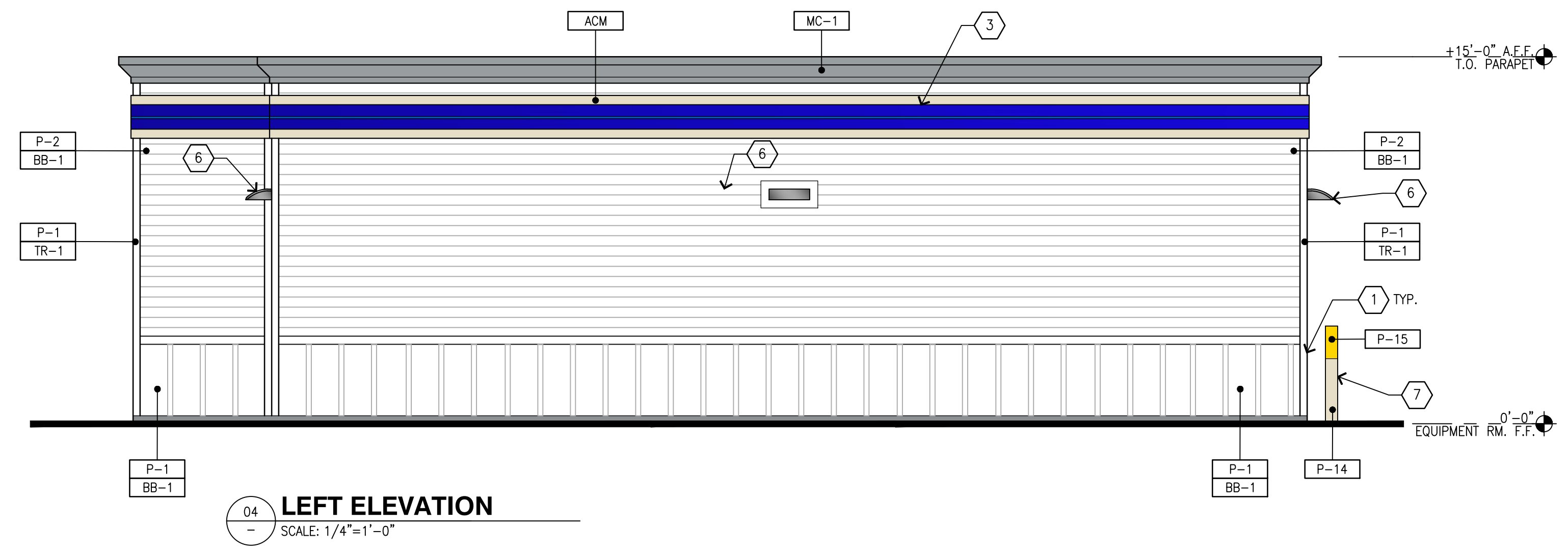
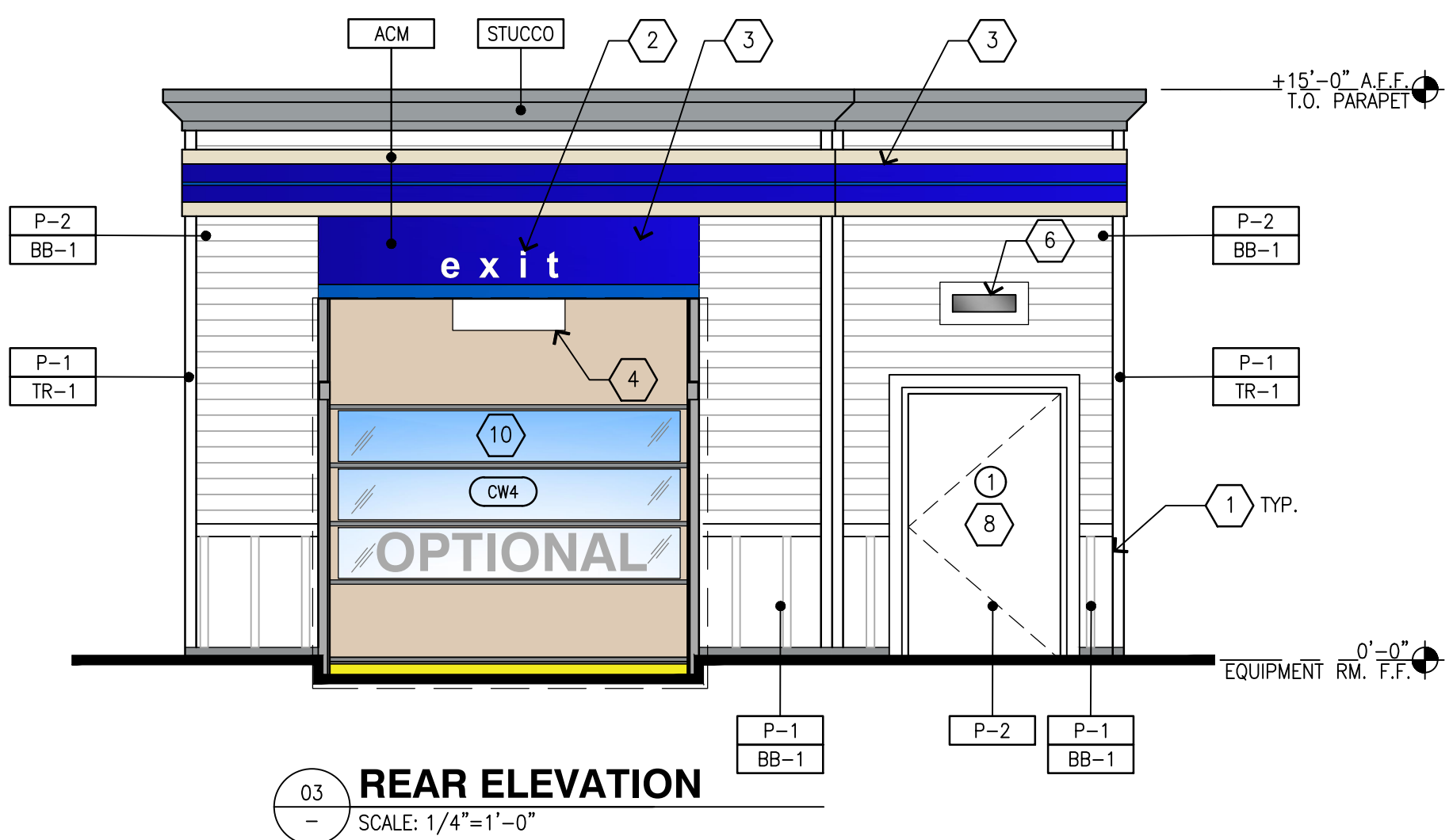
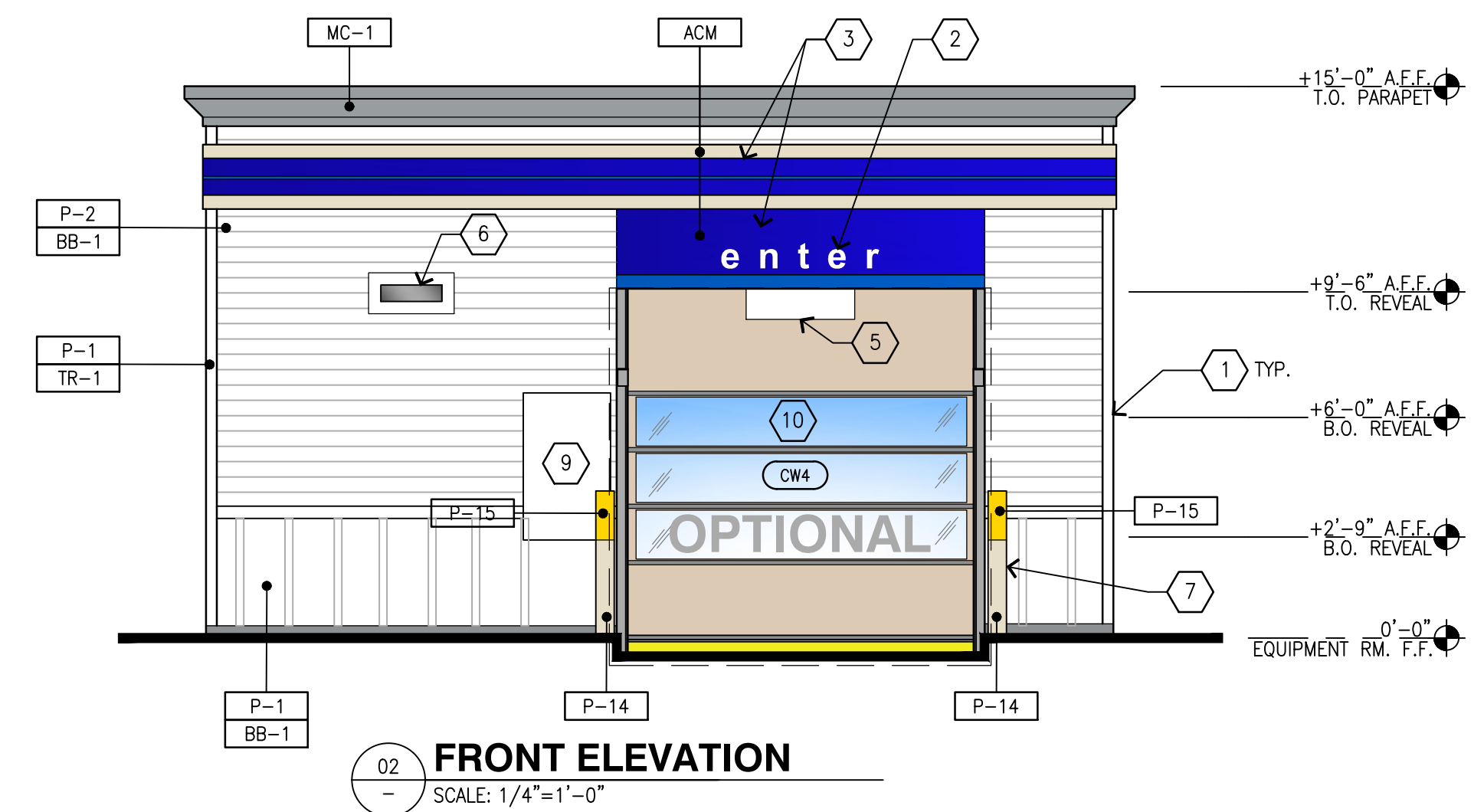
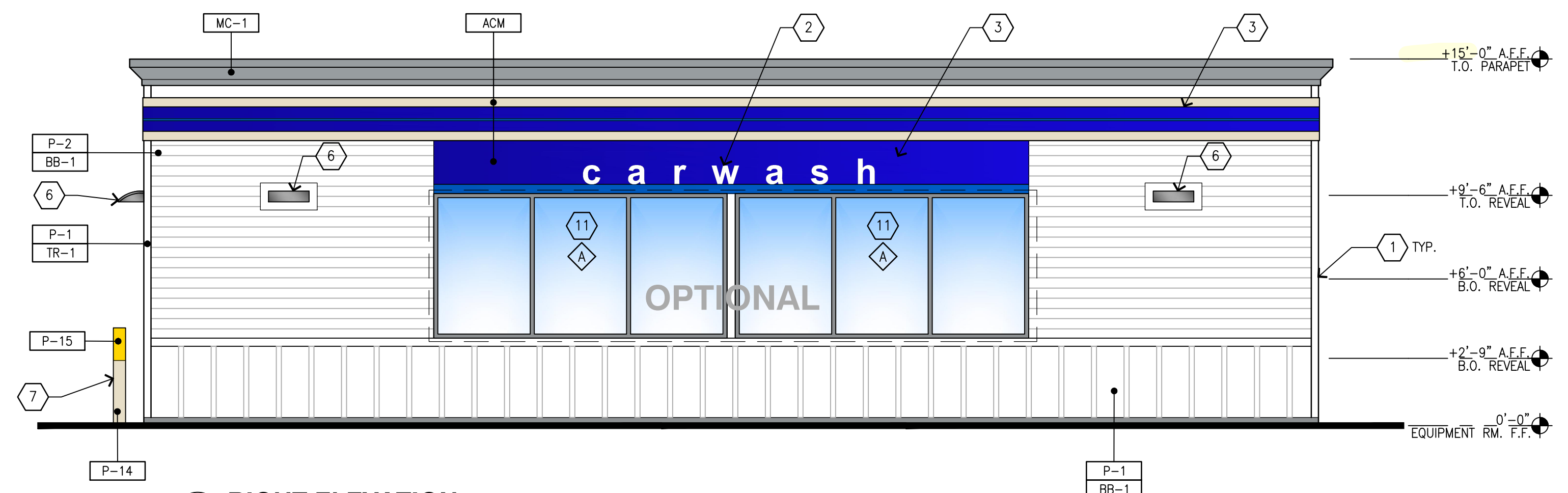
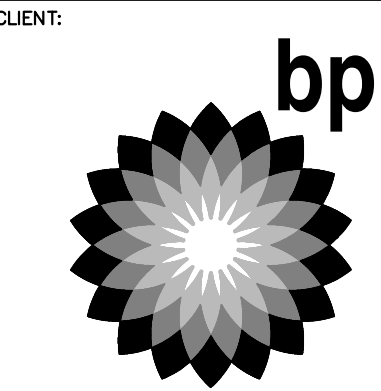
- P-1 BENJAMIN MOORE, 1030, "BRANDY CREAM", SATIN FINISH
- P-2 BENJAMIN MOORE, 2121-30, "PEWTER", HIGH GLOSS
- P-14 BP PEARL - BENJAMIN MOORE, OC-8, "ELEPHANT TUSK"
- P-15 BP YELLOW - BENJAMIN MOORE, 2022-10, "YELLOW"

**MATERIAL LEGEND**

- STUCCO 3/8" CEMENT PLASTER, INSTALLED PER MFG. SPECIFICATIONS; TEXTURE: FINE SAND FINISH
- ACM ALUMINUM COMPOSITE MATERIAL

PRCNC20240007



**KEYED NOTES**

- 1 1" REVEAL
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- 3 VINYL DECAL APPLIED TO ACM
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- 7 CONCRETE FILLED BOLLARD, REFER TO DETAIL 5/CWA4.2
- 8 METAL DOOR & FRAME
- 9 INSTRUCTIONAL SIGN PANEL
- 10 VINYL ROLL UP DOOR, COLOR: BEIGE, REFER TO SHEET CWQ1.1
- 11 WASH BAY WINDOWS

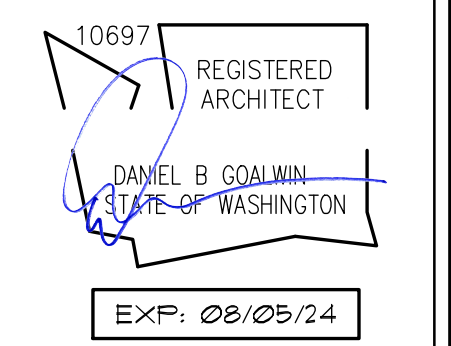
**COLOR LEGEND**

- P-1 BENJAMIN MOORE, 1077 "GREAT PLAINS GOLD", SATIN FINISH
- P-2 BENJAMIN MOORE, 1030 "BRANDY CREAM", SATIN FINISH
- P-3 BENJAMIN MOORE, 2121-30 "PEWTER", HIGH GLOSS FINISH
- P-14 BP PEARL - BENJAMIN MOORE, OC-8, "ELEPHANT TUSK"
- P-15 BP YELLOW - BENJAMIN MOORE, 2022-10, "YELLOW"

**MATERIAL LEGEND**

- BB-1 BATTEN AND BOARD WAINSCOT - JAMES HARDIE CEMENT FIBER BOARD HARDIE PANEL VERTICAL SIDING, SMOOTH, BOARD PORTION
- LS-1 LAP SIDING - JAMES HARDIE FIBER BOARD HARDIE PLANK LAP SIDING, SMOOTH 7.25" WIDTH, 6" EXPOSURE
- TR-1 TRIM OUTSIDE CORNERS & WAINSCOT CAP - JAMES HARDIE CEMENT FIBER BOARD HARDIE TRIM, SMOOTH, 5/4"x4"x12"
- MC-1 PRE-FINISHED METAL CORNICE

NO.	DATE	REVISION DESCRIPTION
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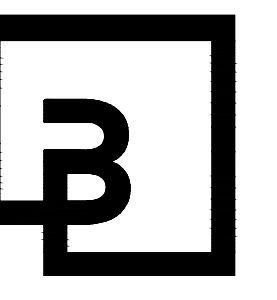
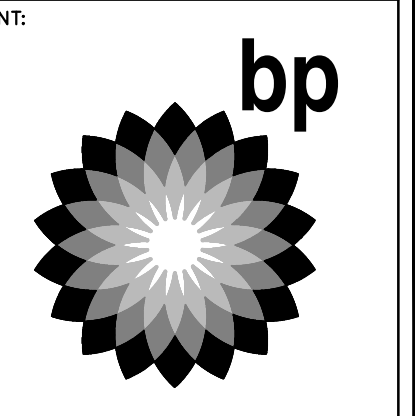
**FACILITY #7184**

DESIGNED BY: ALLIANCE Z&M  
CHECKED BY: BP REPM  
DRAWN BY: ALLIANCE PM  
VERSION: PROJECT NO: 21730

PRCNC20240007

DRAWING TITLE:  
**COLOR EXTERIOR ELEVATIONS**

SHEET NO:  
**CWA2.1**



**Barghausen Consulting Engineers, Inc.**  
 18215 72nd Avenue South  
 Kent, WA 98032  
 425.251.6222  
 barghausen.com

NO.	DATE	REVISION DESCRIPTION
1	2/6/24	PERMIT RESUBMITTAL
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10697 REGISTERED ARCHITECT  
 DANIEL B. COULWIN  
 STATE OF WASHINGTON  
 EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

SITE ADDRESS:  
**1402 S MERIDIAN**  
 PUYALLUP, WA 98571

**FACILITY #7184**

DESIGNED BY: ALLIANCE ZADM:  
 CHECKED BY: BP REPM:  
 DRAWN BY: ALLIANCE PM:  
 VERSION: PROJECT NO:  
 - 21730

DRAWING TITLE:  
**INTERIOR ELEVATIONS**

SHEET NO:

**CWA2.3**

**GENERAL NOTES**

- A. REFER TO SHEET CW01.1 FOR EQUIPMENT PLAN AND SCHEDULE.
- B. ALL CONDUITS SHALL BE CONCEALED IN THE WALL AND TERMINATIONS SHALL BE PER THE DIMENSIONED PLAN AND ELEVATIONS. CONFIRM TERMINATION LOCATIONS WITH CAR WASH EQUIPMENT INSTALLER PRIOR INSTALLING THE CONDUITS.
- C. TERMINATIONS SHALL BE AT THE BACK OF SURFACE MOUNTED BOXES AND EQUIPMENT IF FEASIBLE.

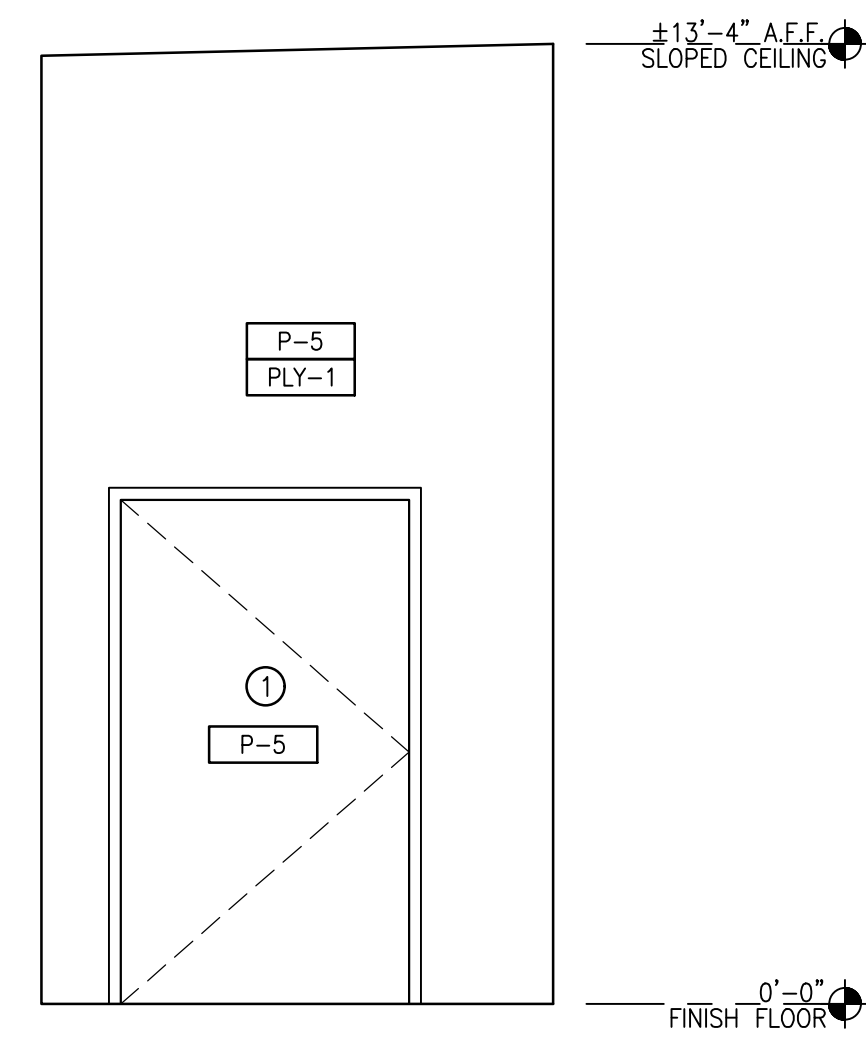
**FINISH SYMBOLS**

**PAINT COLOR**

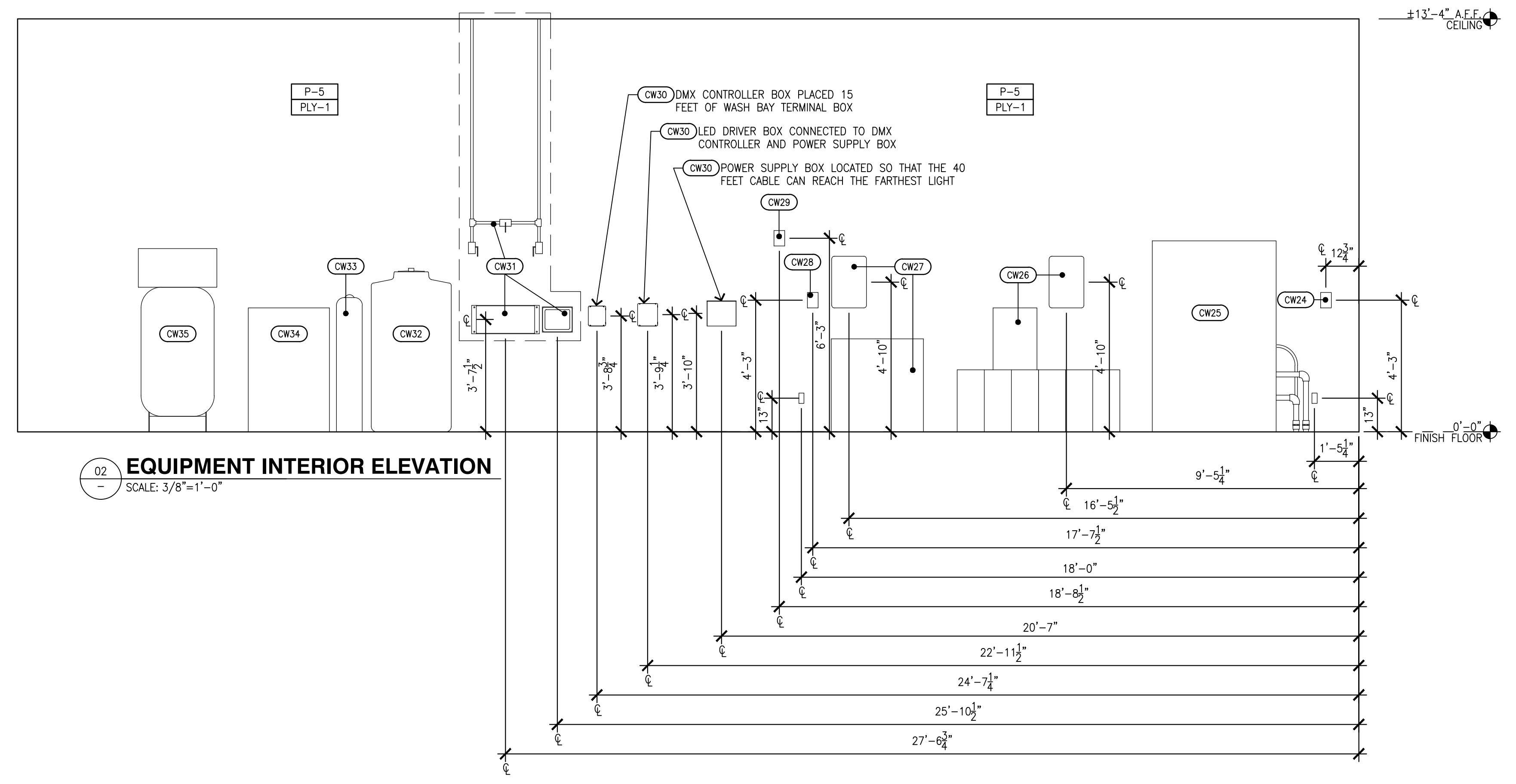
P-5 BENJAMIN MOORE, 2121-70, "CHANTILLY LACE" SEMI-GLOSS FINISH

**SUBSTRATE**

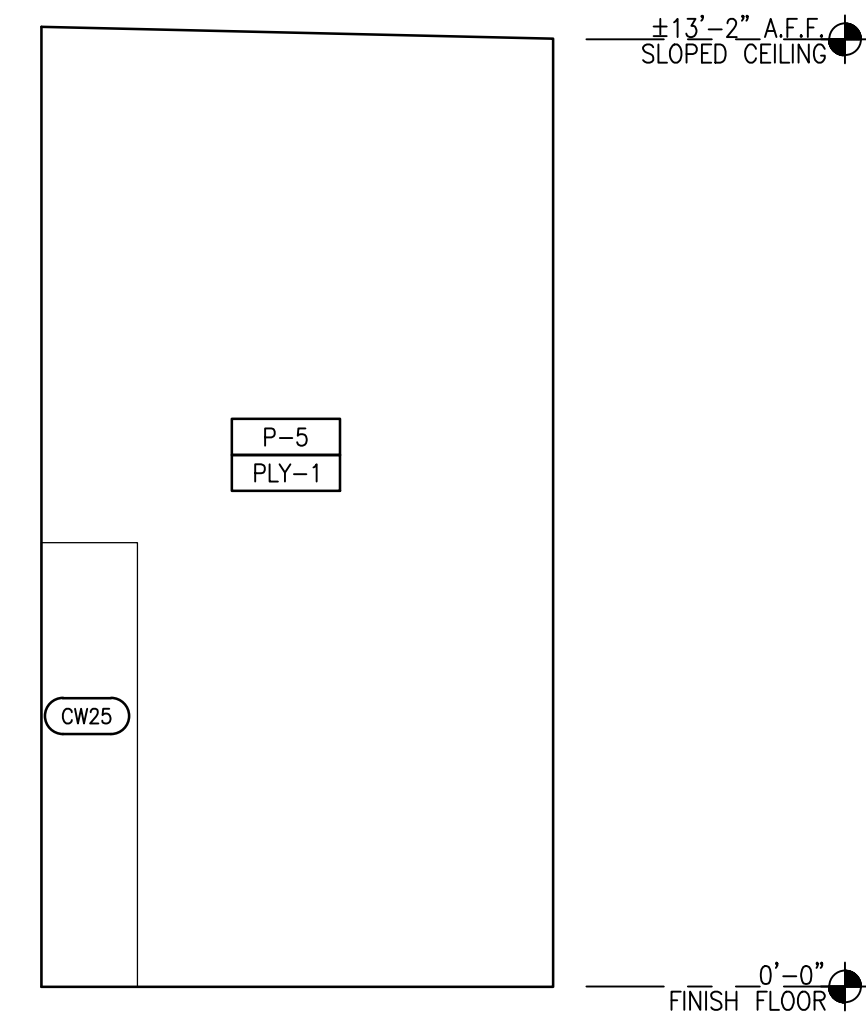
PLY-1 TYPE: 5/8" PLYWOOD



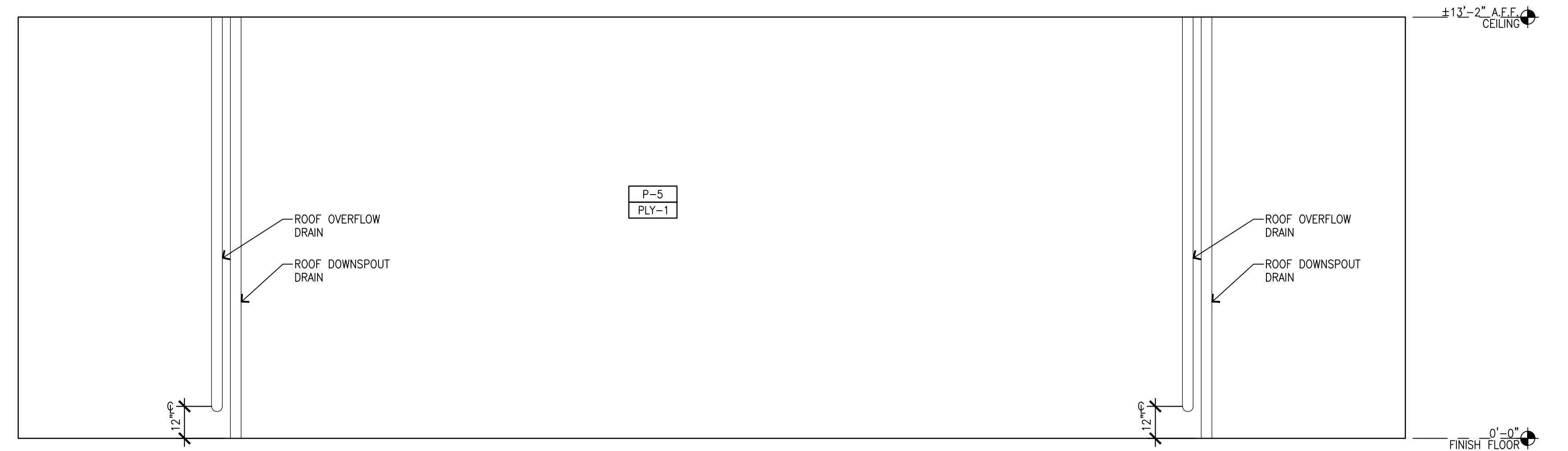
01 EQUIPMENT INTERIOR ELEVATION  
 SCALE: 3/8"=1'-0"



02 EQUIPMENT INTERIOR ELEVATION  
 SCALE: 3/8"=1'-0"



03 EQUIPMENT INTERIOR ELEVATION  
 SCALE: 3/8"=1'-0"



04 EQUIPMENT INTERIOR ELEVATION  
 SCALE: 3/8"=1'-0"

PRCNC20240007

**GENERAL NOTES**

- A. REFER TO SHEET CW01.1 FOR EQUIPMENT PLAN AND SCHEDULE.
- B. ALL CONDUITS SHALL BE CONCEALED IN THE WALL AND TERMINATIONS SHALL BE PER THE DIMENSIONED PLAN AND ELEVATIONS. CONFIRM TERMINATION LOCATIONS WITH CAR WASH EQUIPMENT INSTALLER PRIOR INSTALLING THE CONDUITS.
- C. TERMINATIONS SHALL BE AT THE BACK OF SURFACE MOUNTED BOXES AND EQUIPMENT IF FEASIBLE.
- D. ALL PIPING SHALL BE CONCEALED IN THE WALL.
- E. ALL WALL & CEILING PENETRATIONS IN THE CAR WASH BAY SHALL BE SEALED.

**KEY NOTES**

- ① WASH BAY WINDOWS

**FINISH SYMBOLS**

**PAINT COLOR**

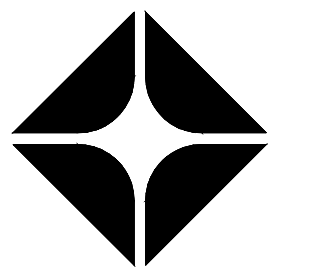
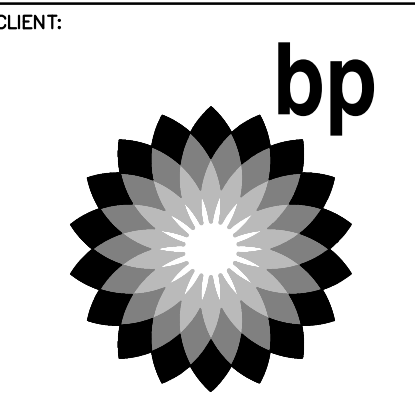
- P-5 BENJAMIN MOORE, 2121-70, "CHANTILLY LACE" SEMI-GLOSS FINISH

**WALL PANEL**

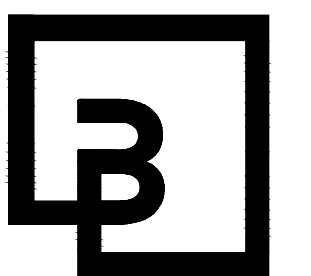
- VP-1 PVC 12" FLAT PANEL  
MFR: EXTRUTECH PLASTICS, INC.  
PRODUCT: P1300 PANEL  
COLOR: WHITE

**SUBSTRATE**

- PLY-1 TYPE: 5/8" PLYWOOD
- PLY-2 TYPE: 5/8" PLYWOOD (CDX)



ARCO  
BP WEST COAST PRODUCTS, LLC



**Barghausen Consulting Engineers, Inc.**  
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10697 REGISTERED ARCHITECT  
DANIEL B. COULWIN  
STATE OF WASHINGTON  
EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98571

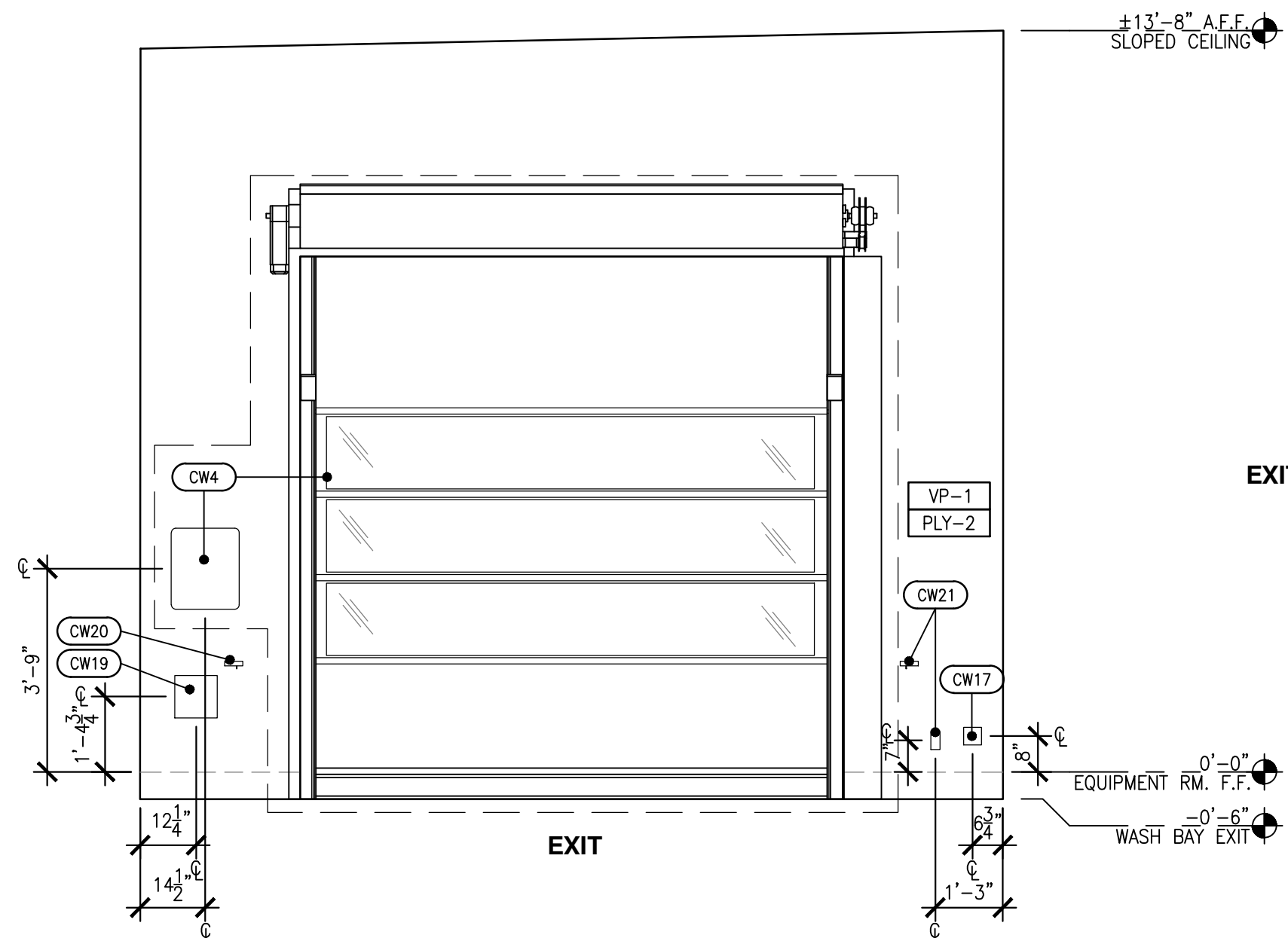
FACILITY #7184  
DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REP: M  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**INTERIOR ELEVATIONS**

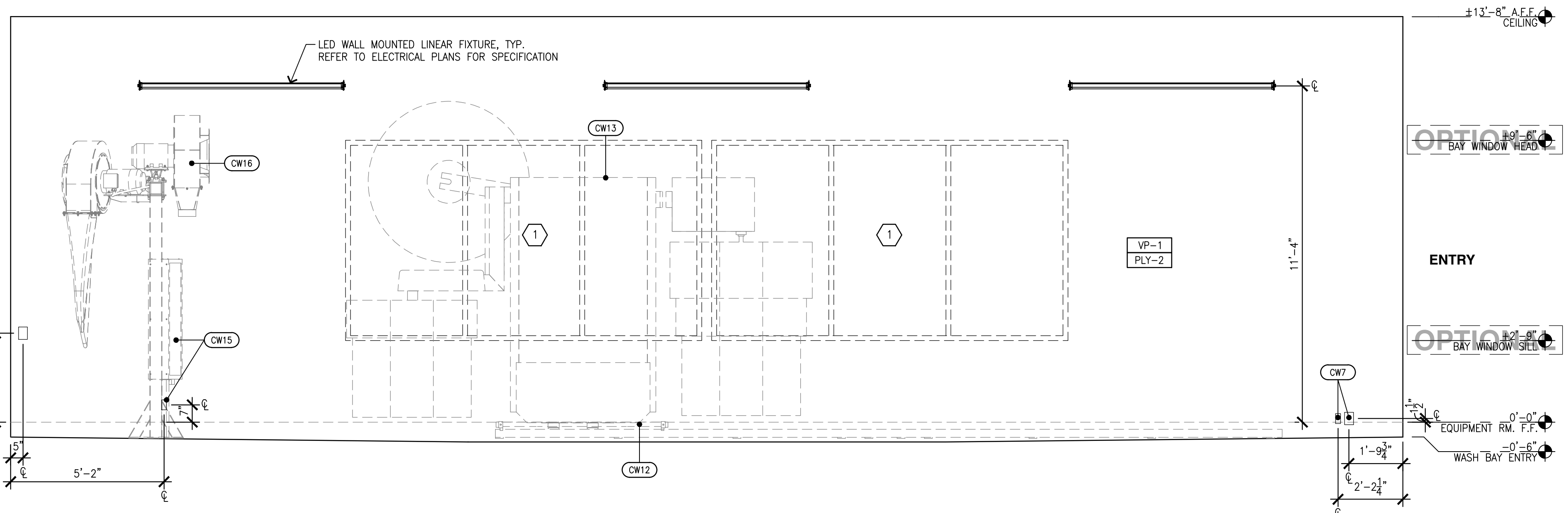
SHEET NO:

**CWA2.4**

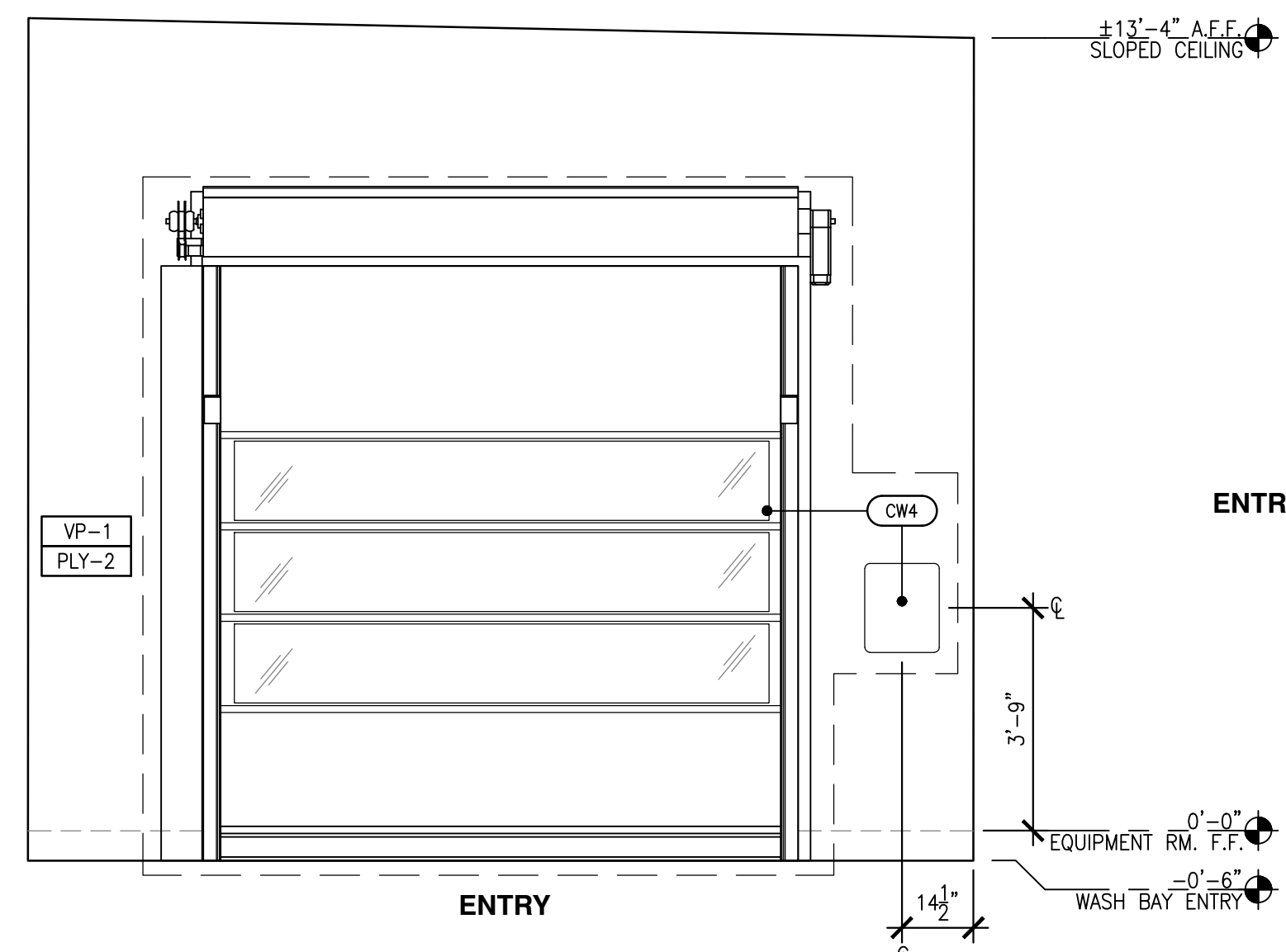
PRCNC20240007



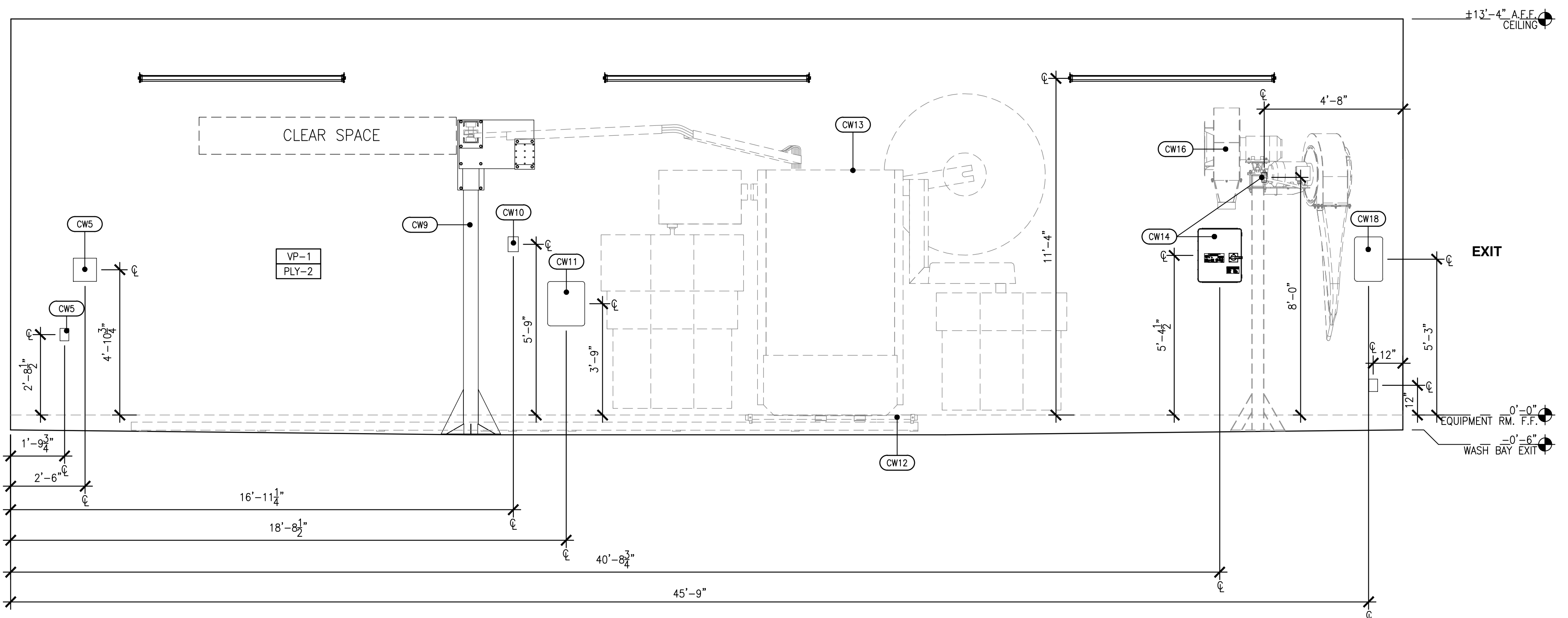
01 WASH BAY INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"



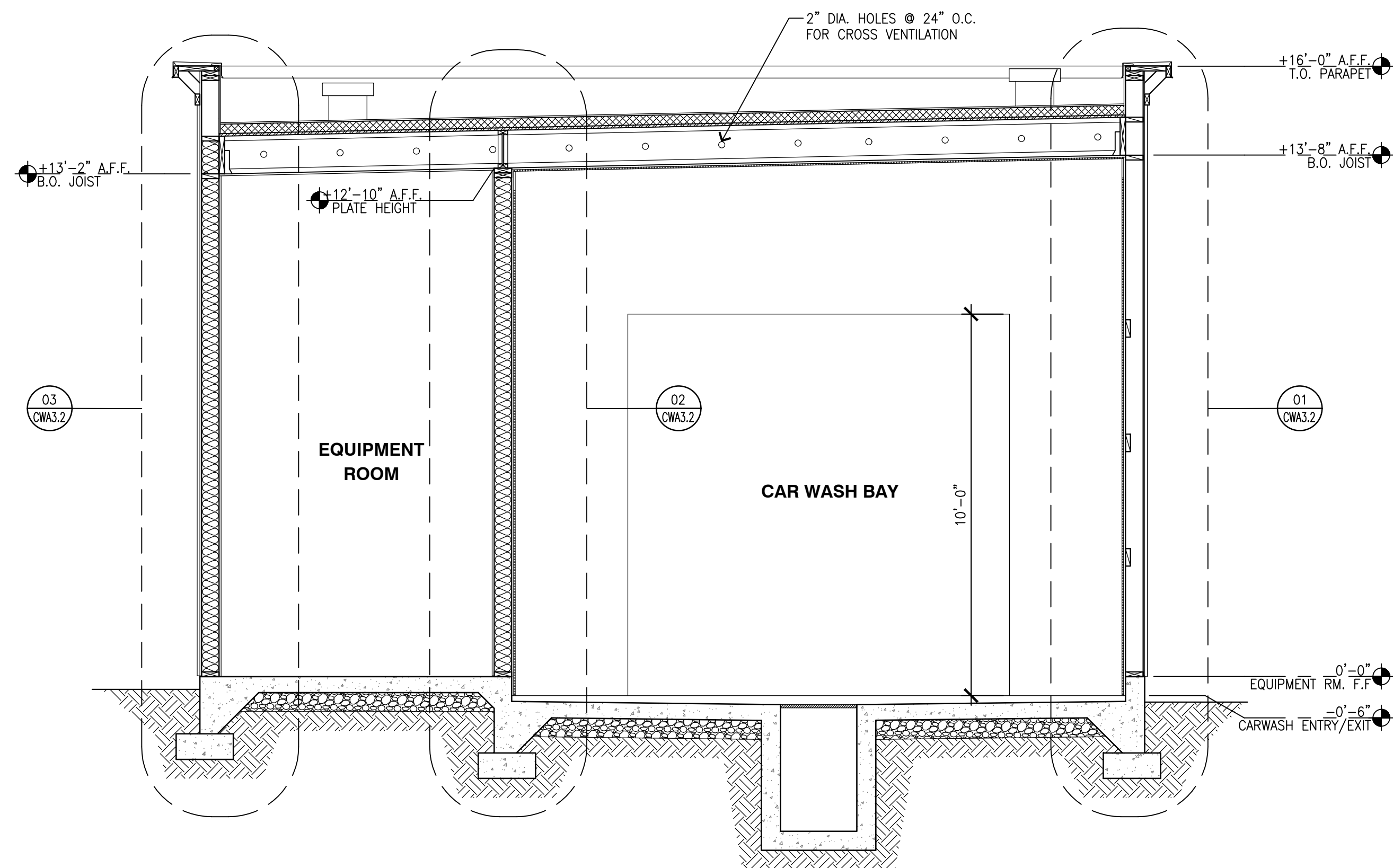
02 WASH BAY INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"



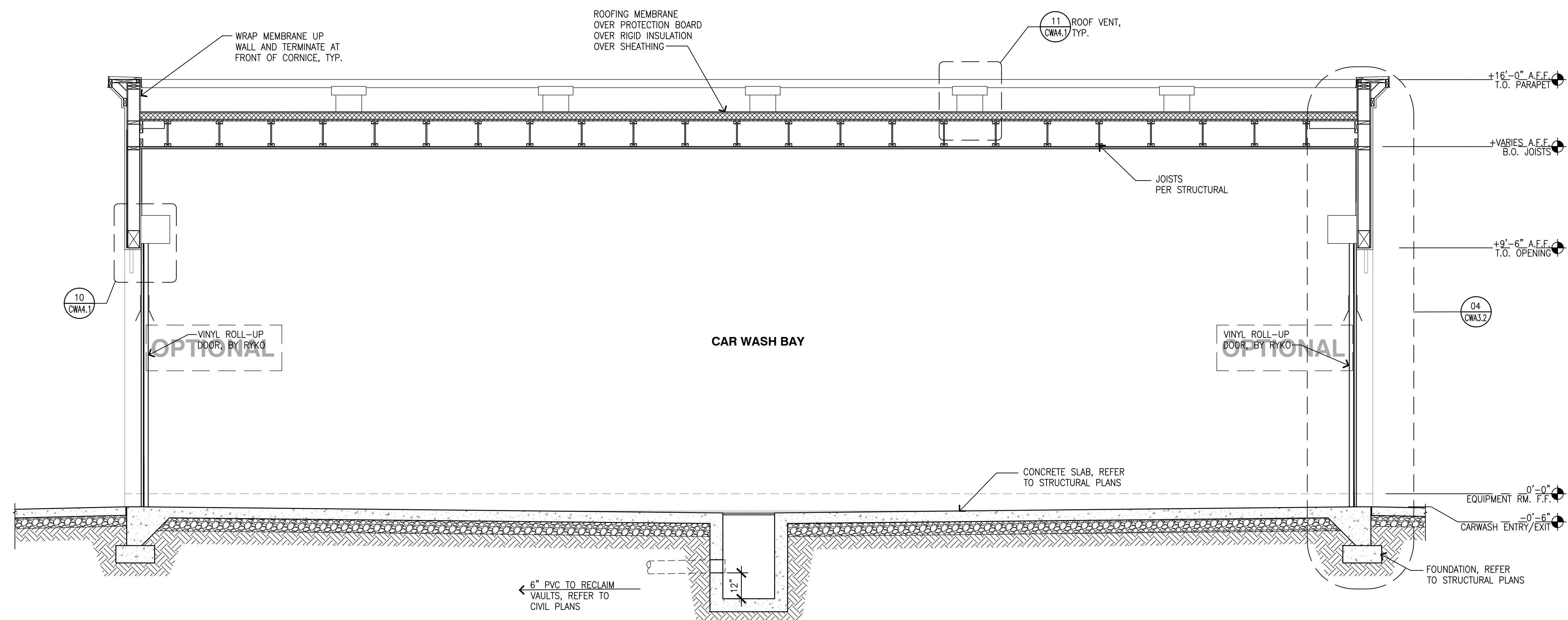
03 WASH BAY INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"



04 WASH BAY INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"

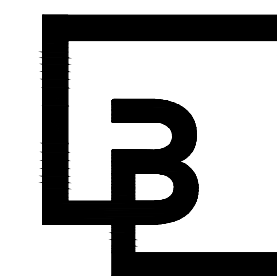
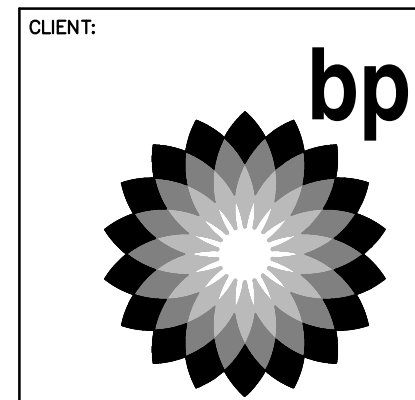


**A BUILDING SECTION**  
SCALE: 3/8"=1'-0"



**B BUILDING SECTION**  
SCALE: 3/8"=1'-0"

PRCNC20240007



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10697 REGISTERED ARCHITECT  
DANIEL B. COLWELL  
STATE OF WASHINGTON  
EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm FUEL CANOPY w/ 6 MPD's**

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98371

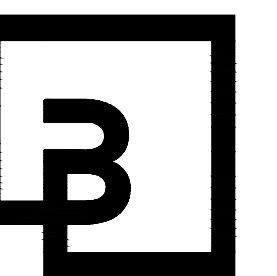
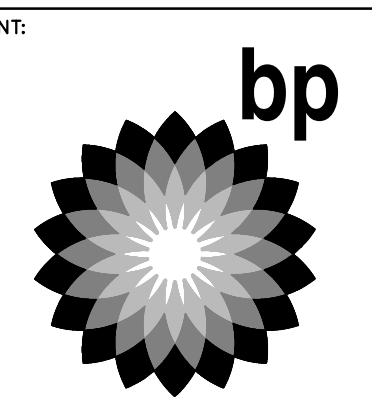
FACILITY #7184  
DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REPM  
DRAWN BY: ALLIANCE PM  
VERSION: PROJECT NO:  
21730

DRAWING TITLE:  
**BUILDING SECTIONS**

SHEET NO:  
**CWA3.1**

**GENERAL NOTES**

- A. SEE GENERAL PROJECT NOTES T1.1
- B. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL FLASHING AND FOR ALL ROOF EQUIPMENT CURBS.
- C. GENERAL CONTRACTOR RESPONSIBLE FOR FURNISHING AND LOCATING ROOF TOP EQUIPMENT.
- D. SEE STRUCTURAL DRAWINGS FOR COMPLETE NOTES AND STRUCTURAL FRAMING DETAILS.
- E. REFER TO TYPICAL WALL SECTIONS FOR DIMENSIONS AND MATERIALS.



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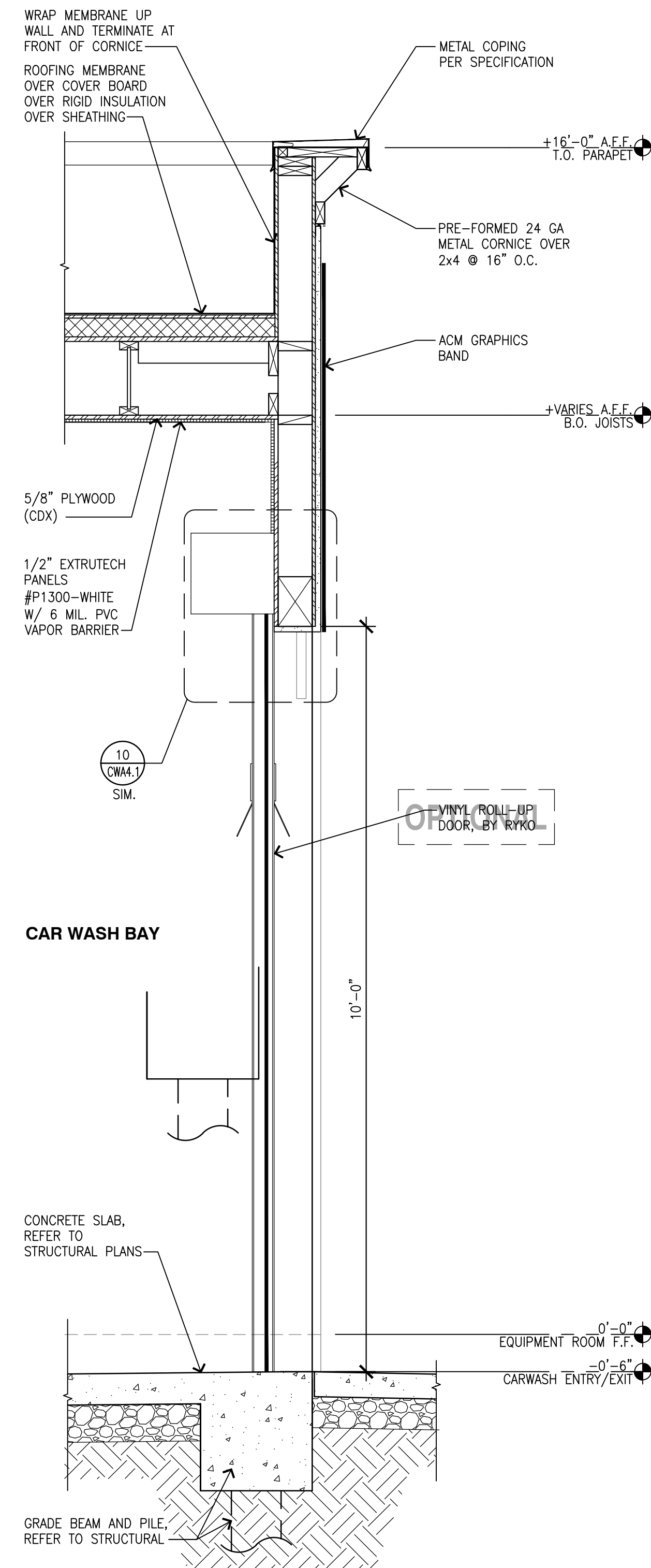
SITE ADDRESS:  
 1402 S MERIDIAN  
 PUYALLUP, WA 98571

FACILITY #7184  
 DESIGNED BY: ALLIANCE ZADM:  
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 VERSION: PROJECT NO:  
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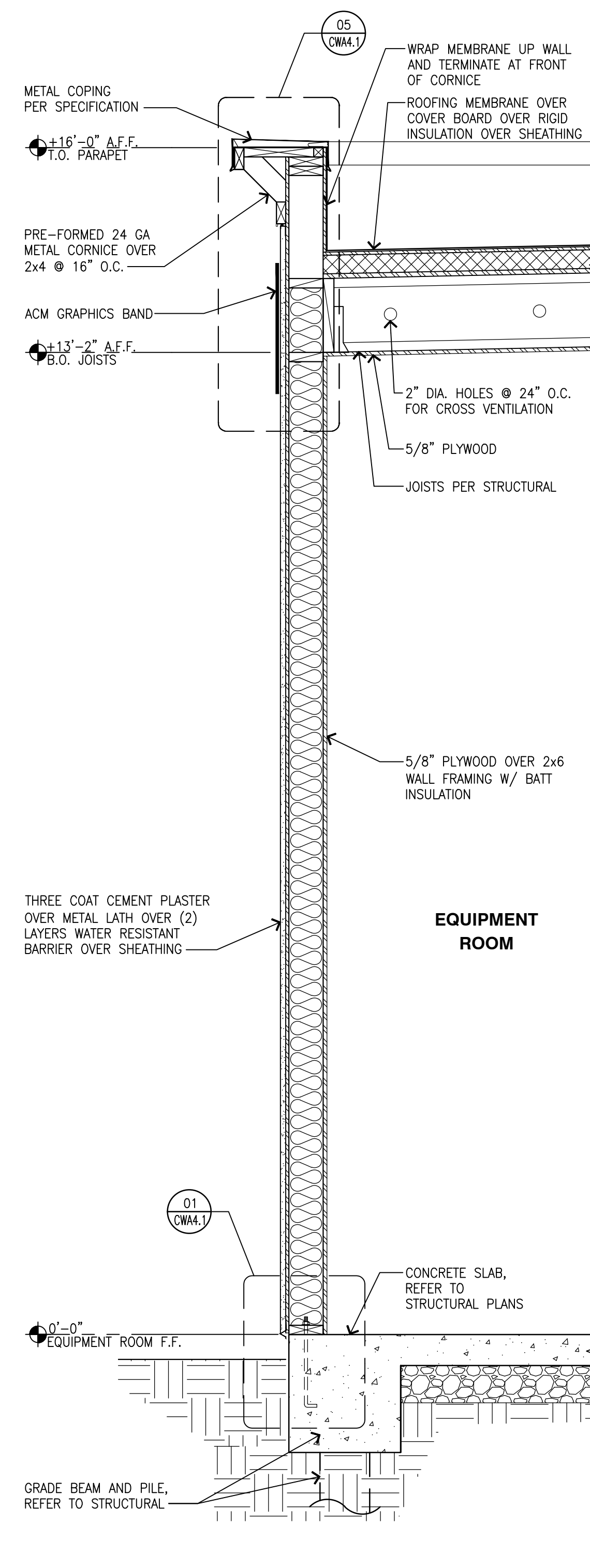
**WALL SECTIONS**

SHEET NO:

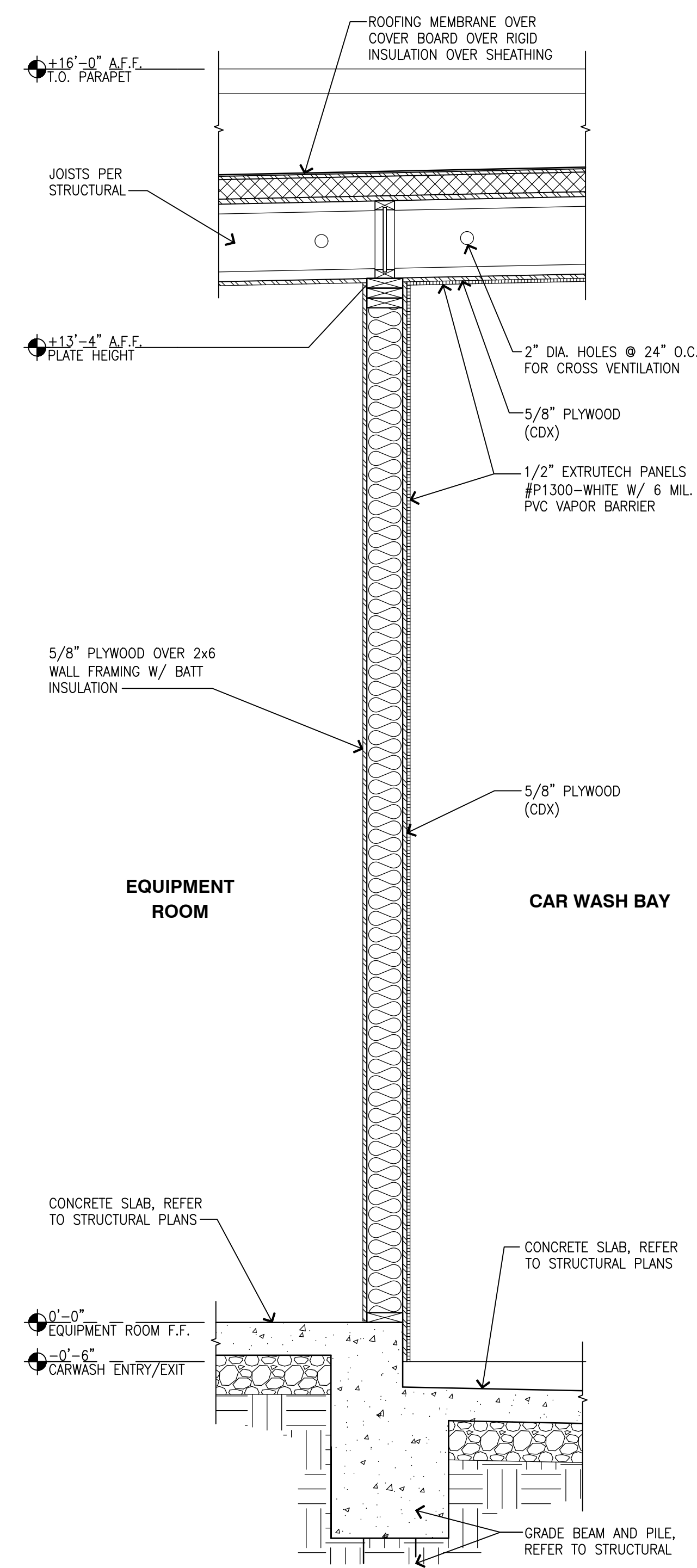
**CWA3.2**



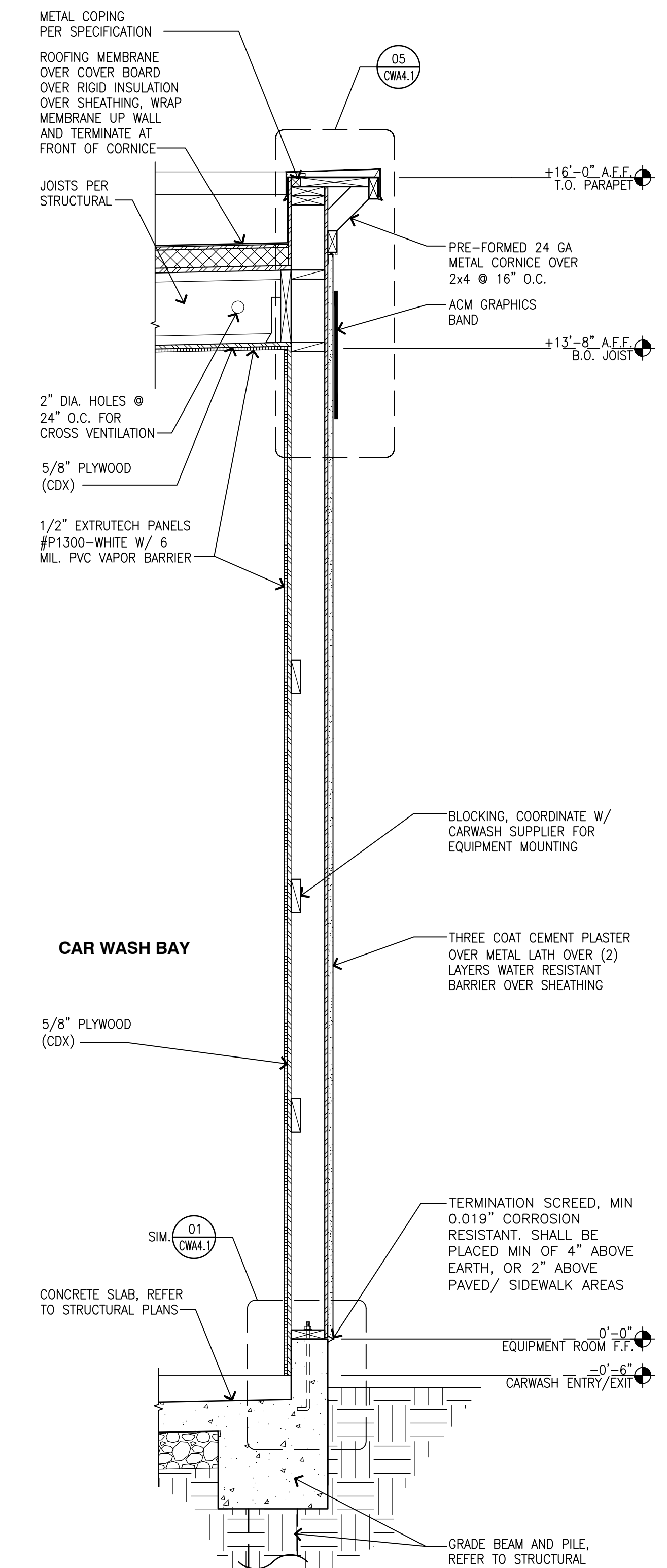
**04 WALL SECTION**  
 SCALE: 3/4"=1'-0"



**03 WALL SECTION**  
 SCALE: 3/4"=1'-0"

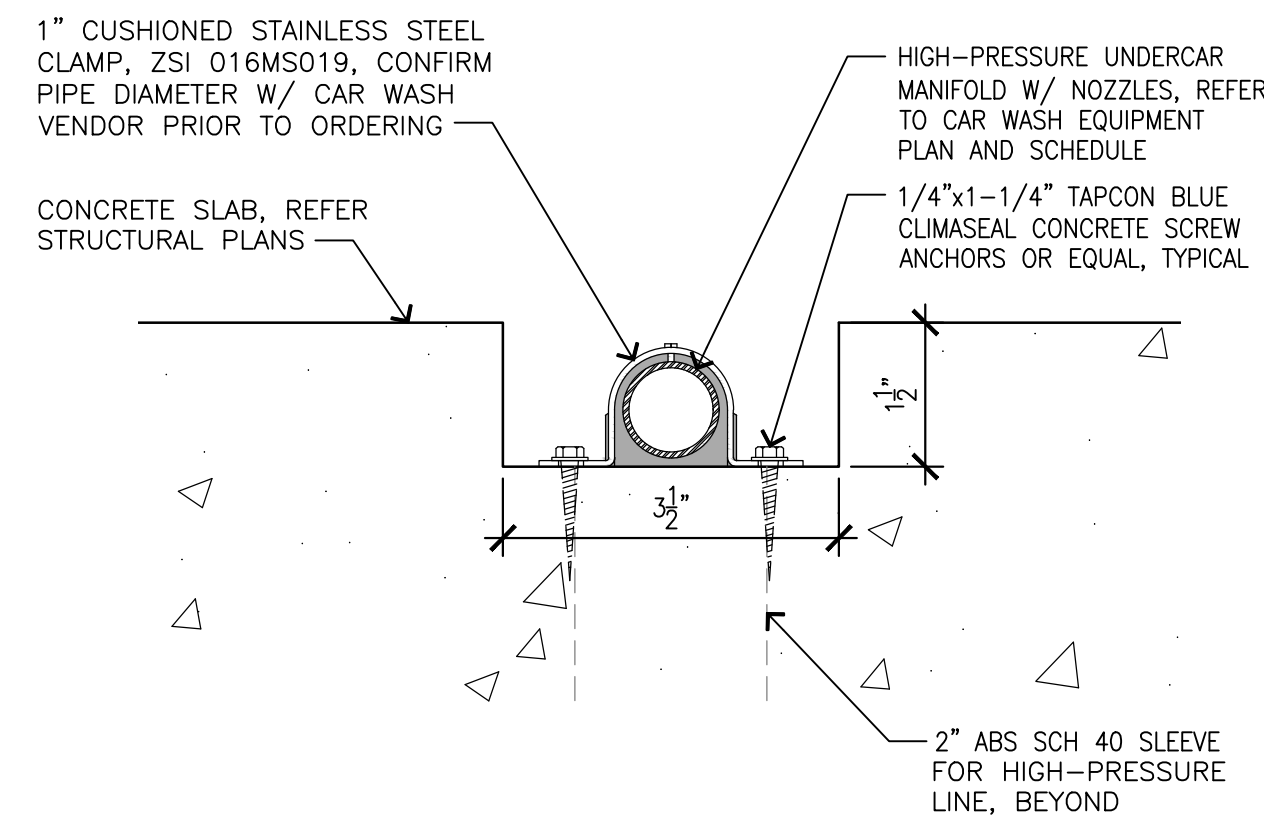


**02 WALL SECTION**  
 SCALE: 3/4"=1'-0"

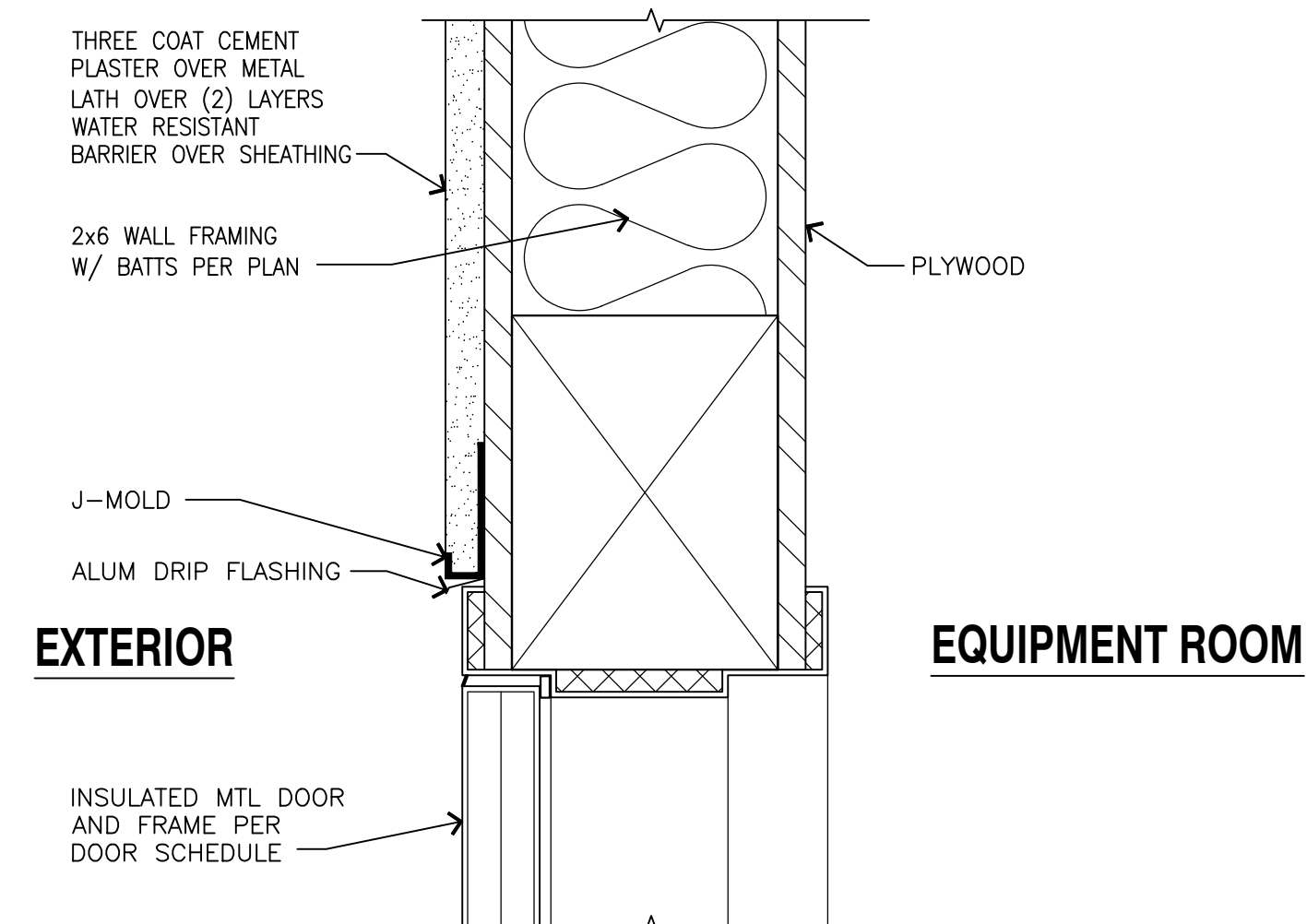


**01 WALL SECTION**  
 SCALE: 3/4"=1'-0"

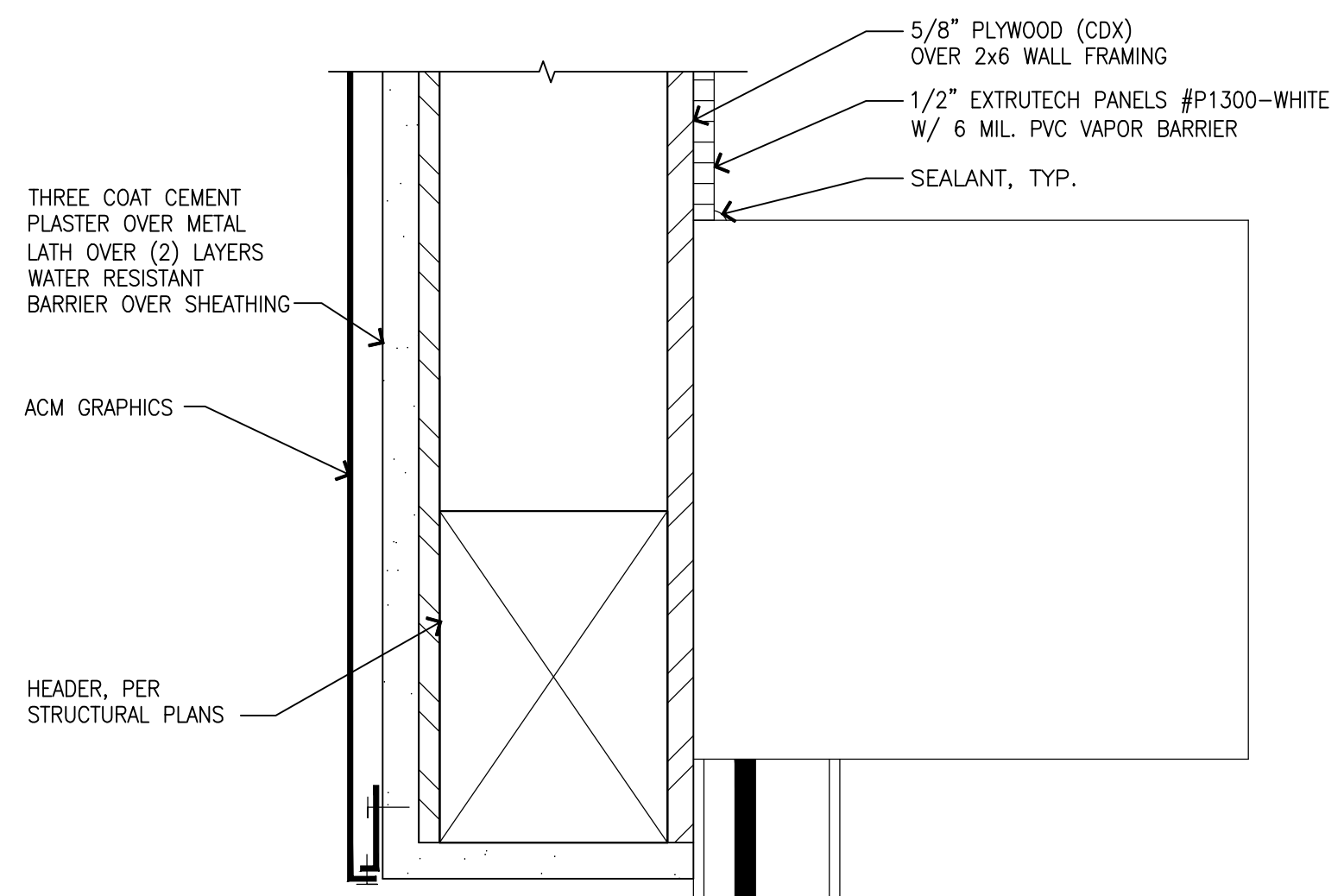
**PRCNC20240007**



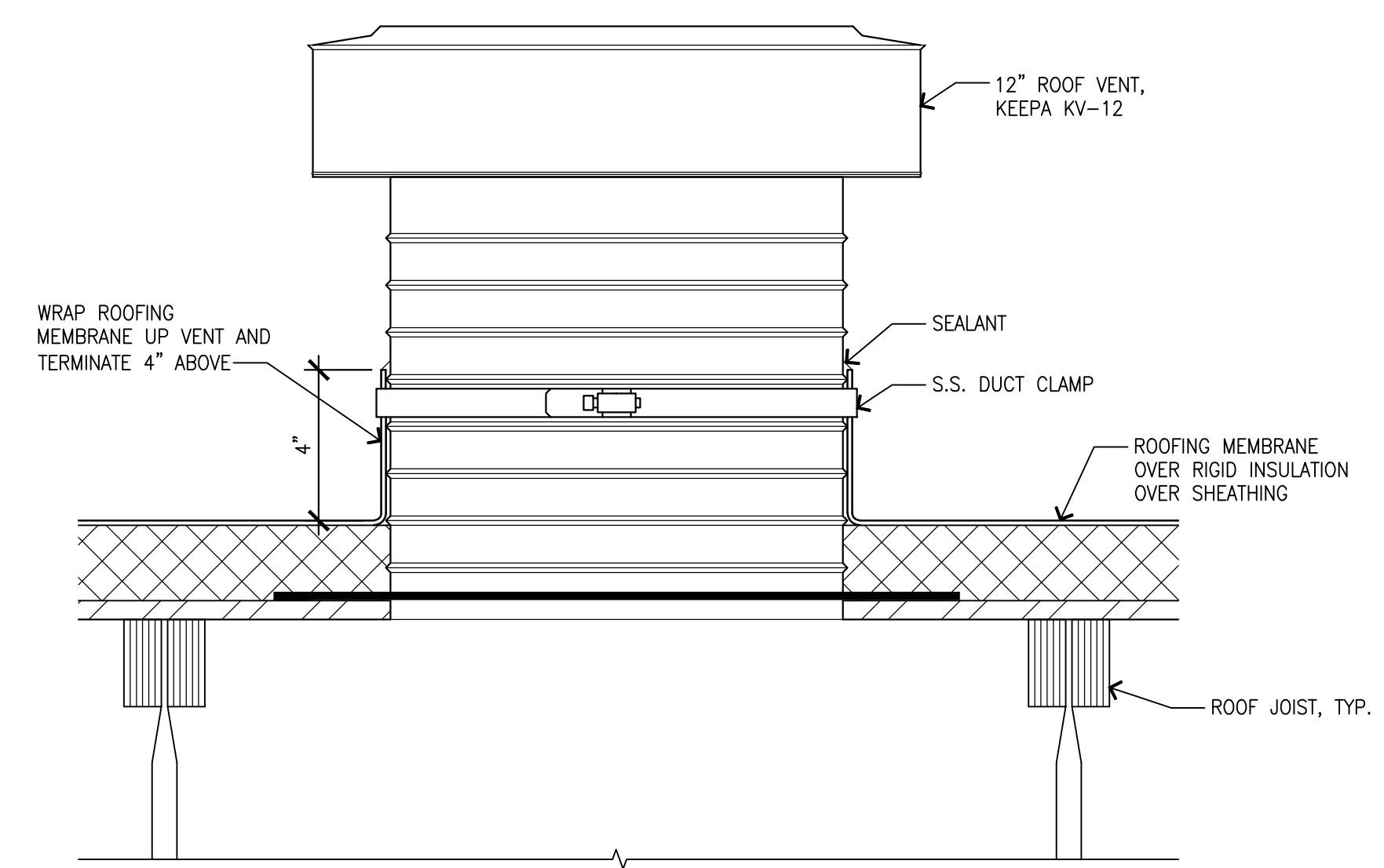
12 MANIFOLD TRENCH  
SCALE: 6"=1'-0"



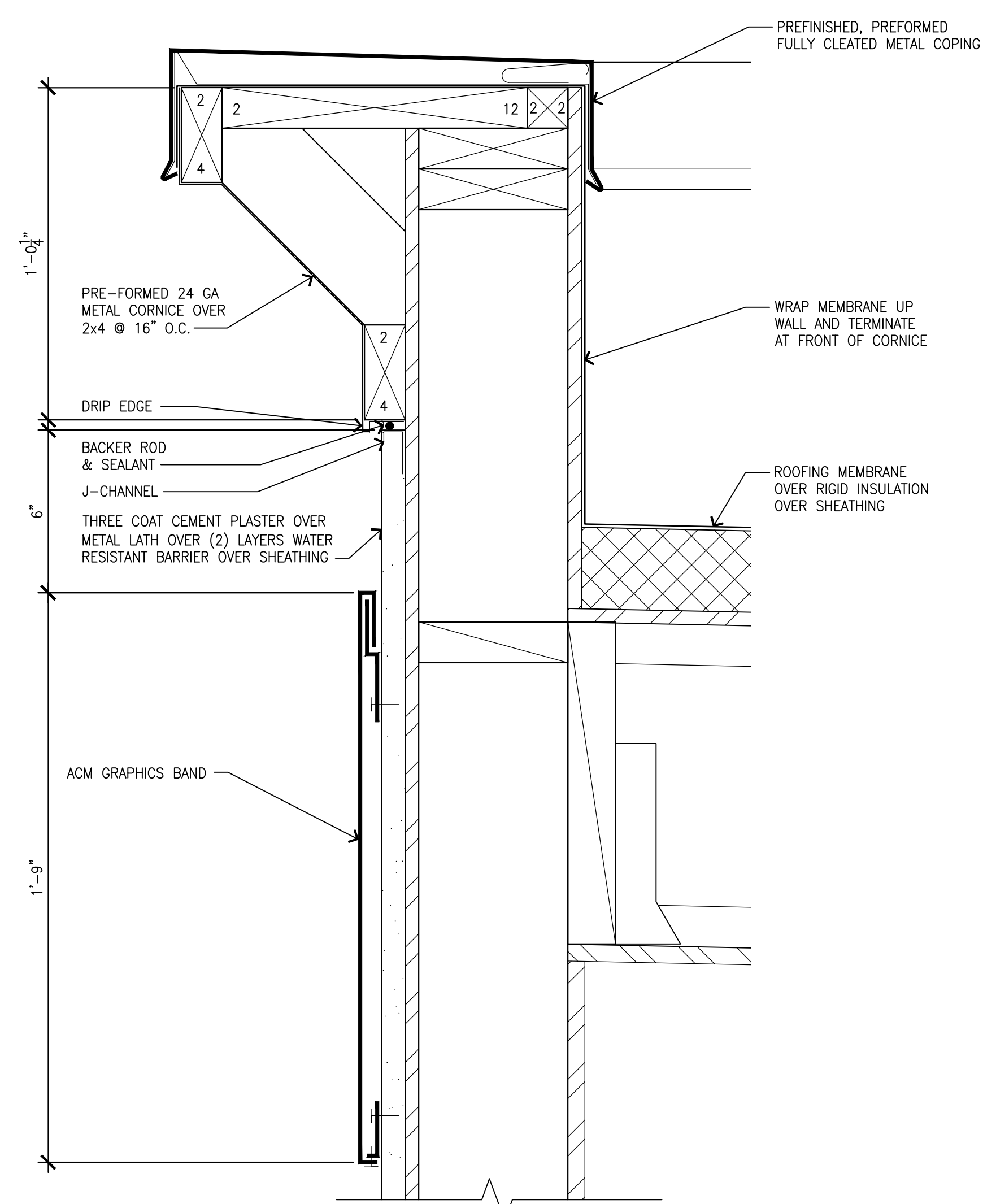
09 EXTERIOR DOOR HEADER  
SCALE: 3"=1'-0"



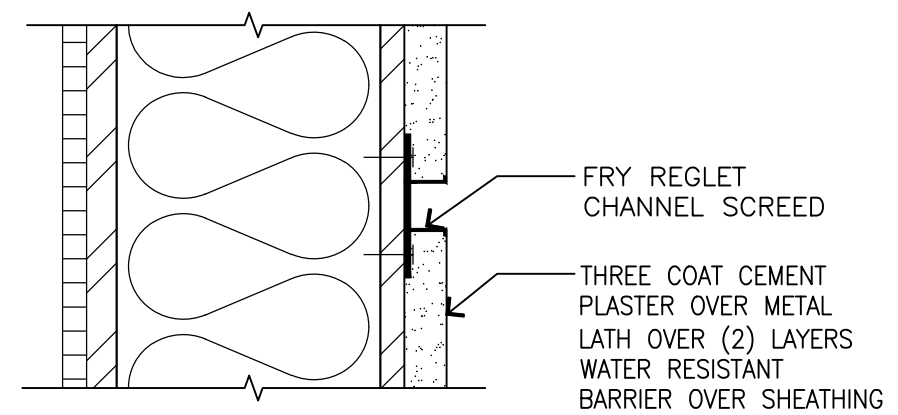
10 EXTERIOR ROLL UP DOOR HEADER  
SCALE: 3"=1'-0"



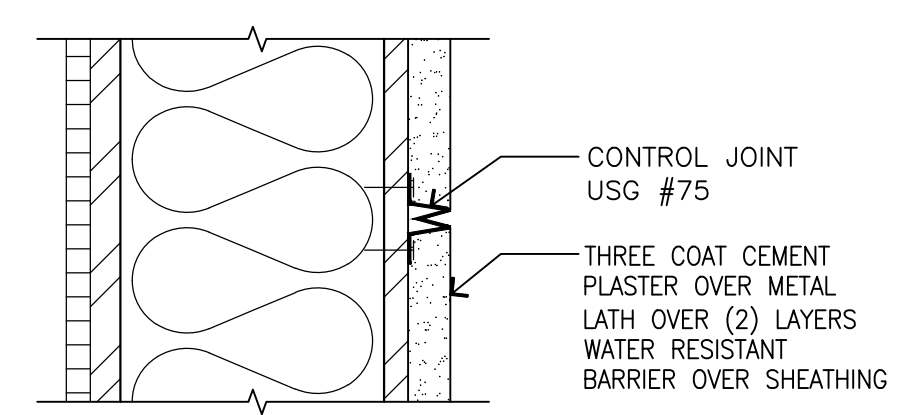
11 ROOF VENT  
SCALE: 3"=1'-0"



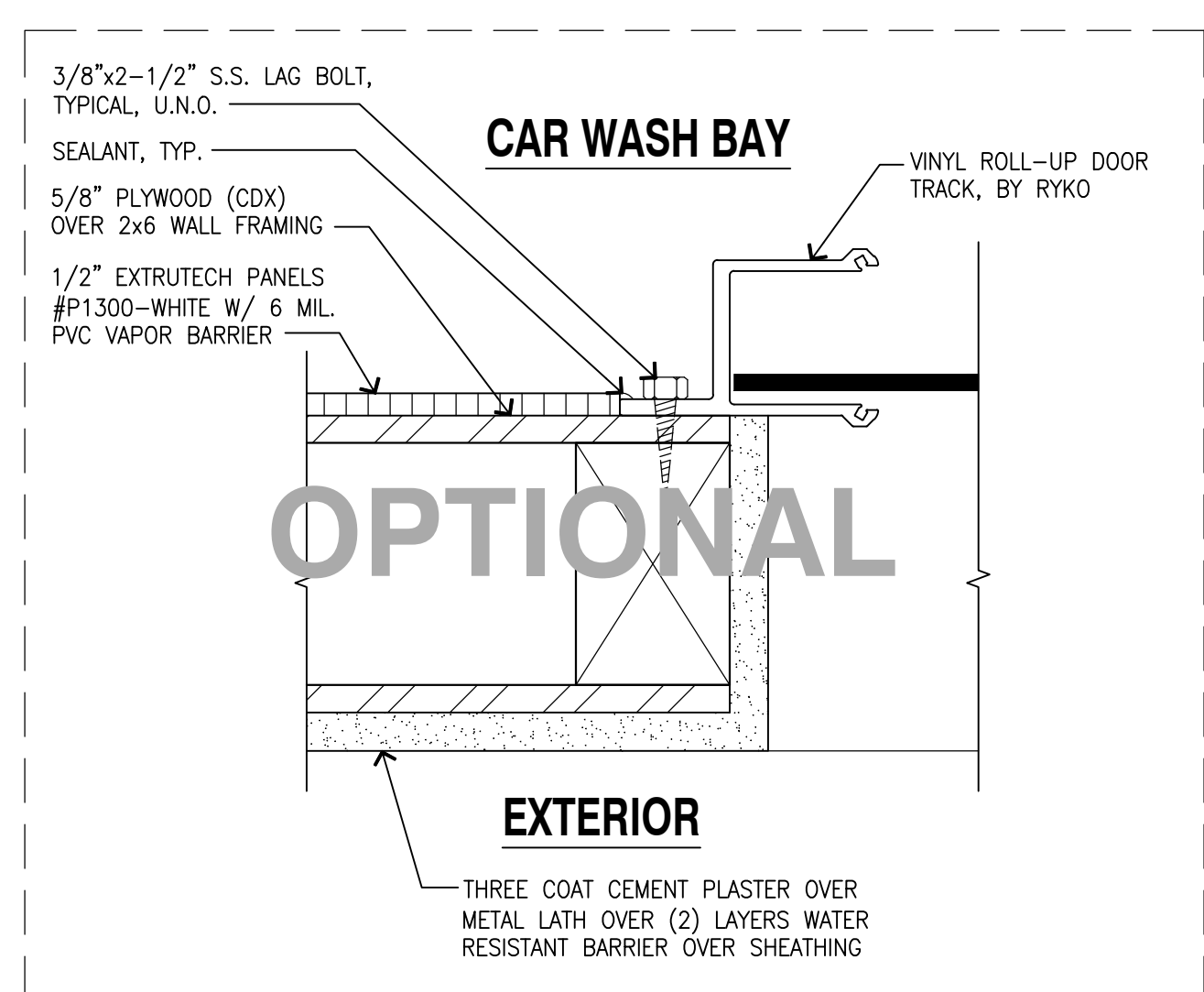
05 CORNICE DETAIL  
SCALE: 3"=1'-0"



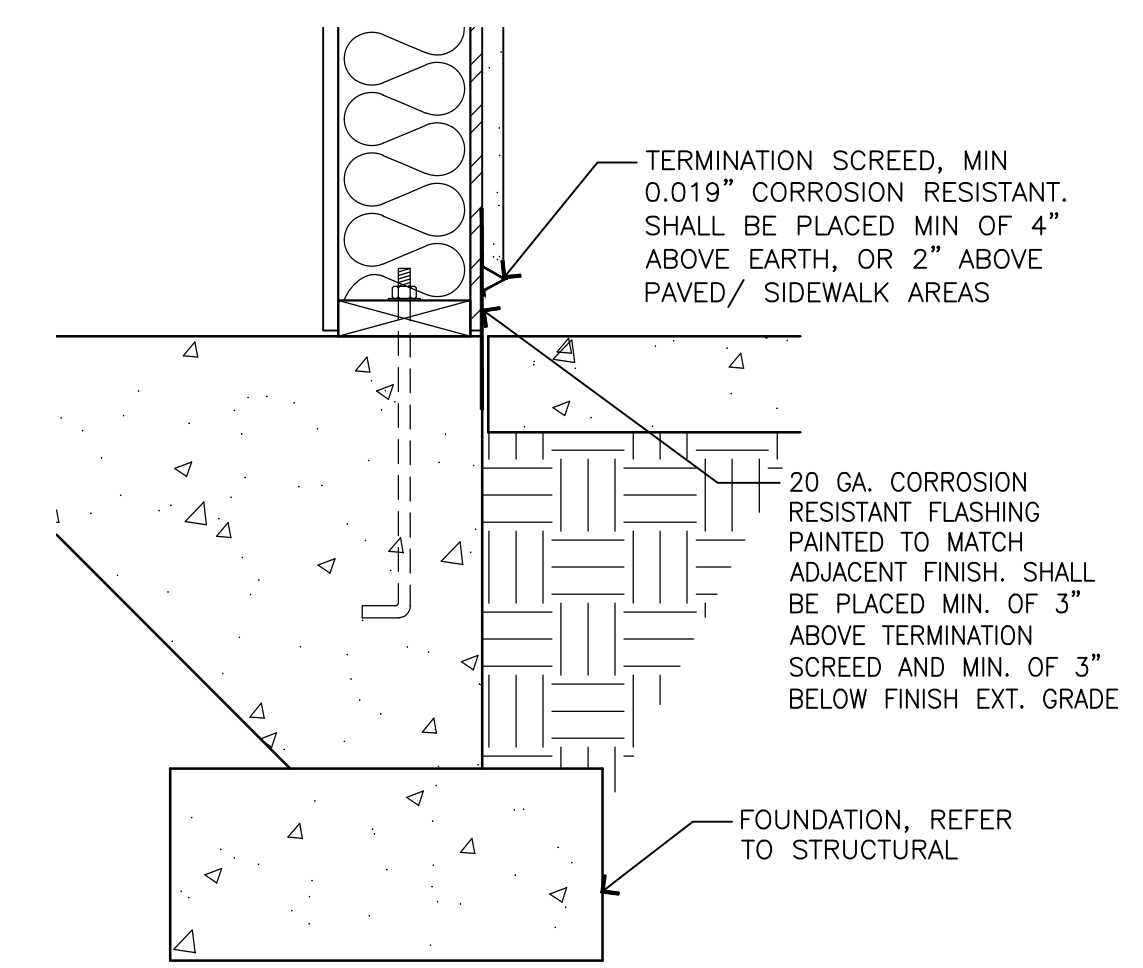
06 HORIZONTAL REVEAL  
SCALE: 3"=1'-0"



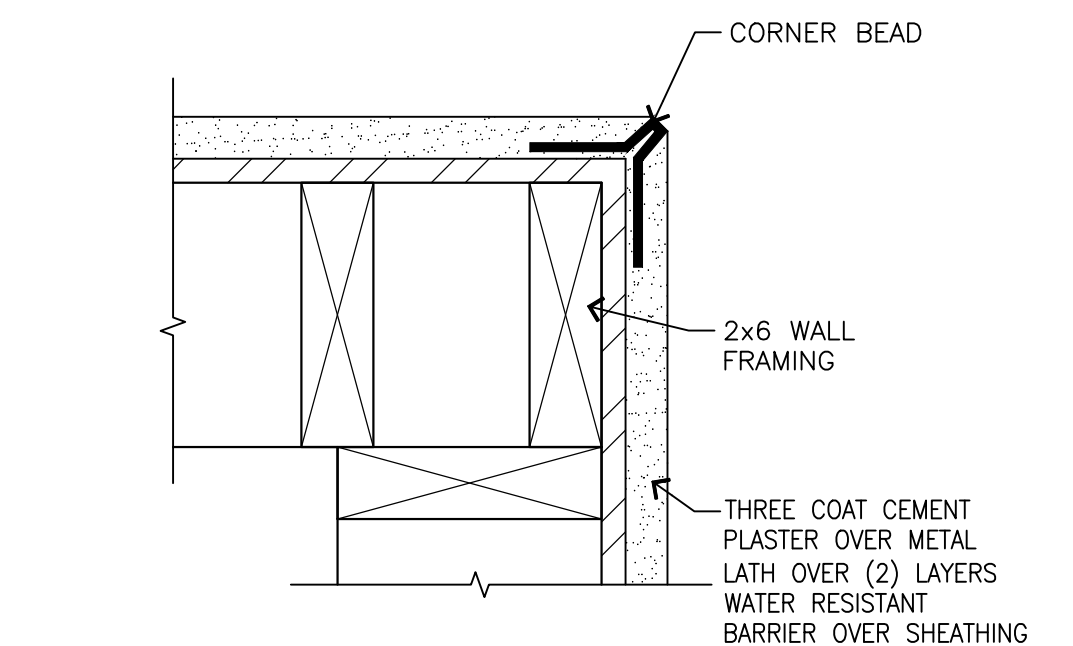
07 VERTICAL CONTROL JOINT  
SCALE: 3"=1'-0"



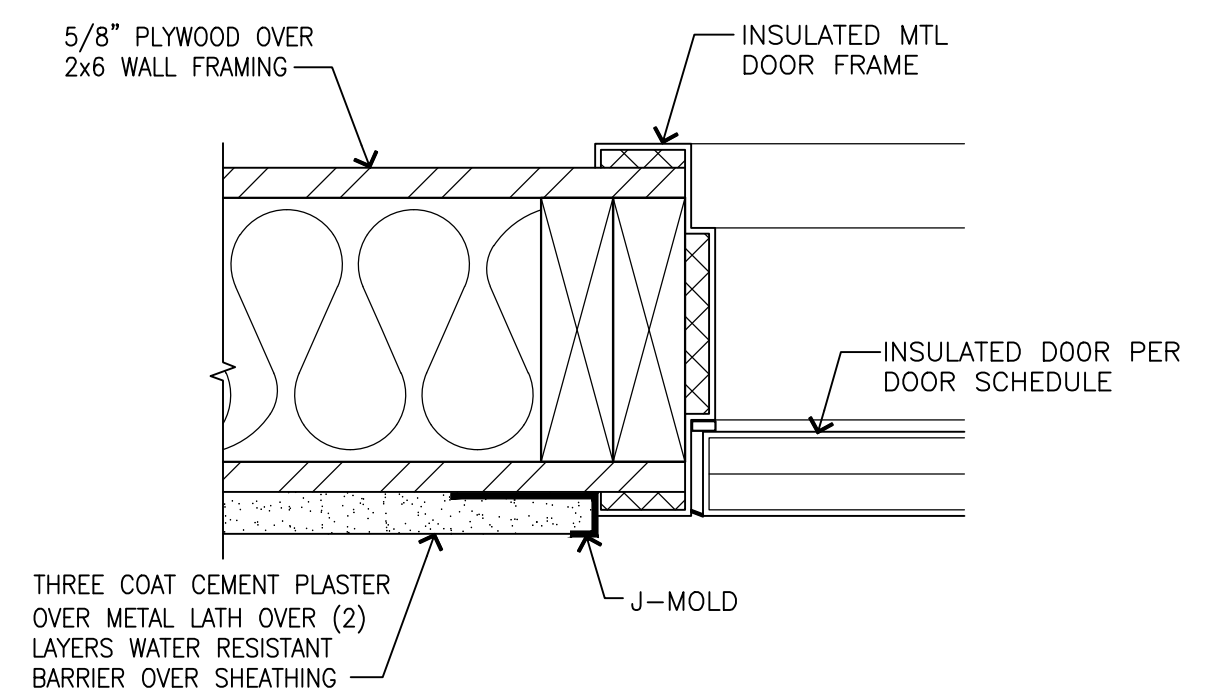
08 ROLL-UP DOOR JAMB  
SCALE: 3"=1'-0"



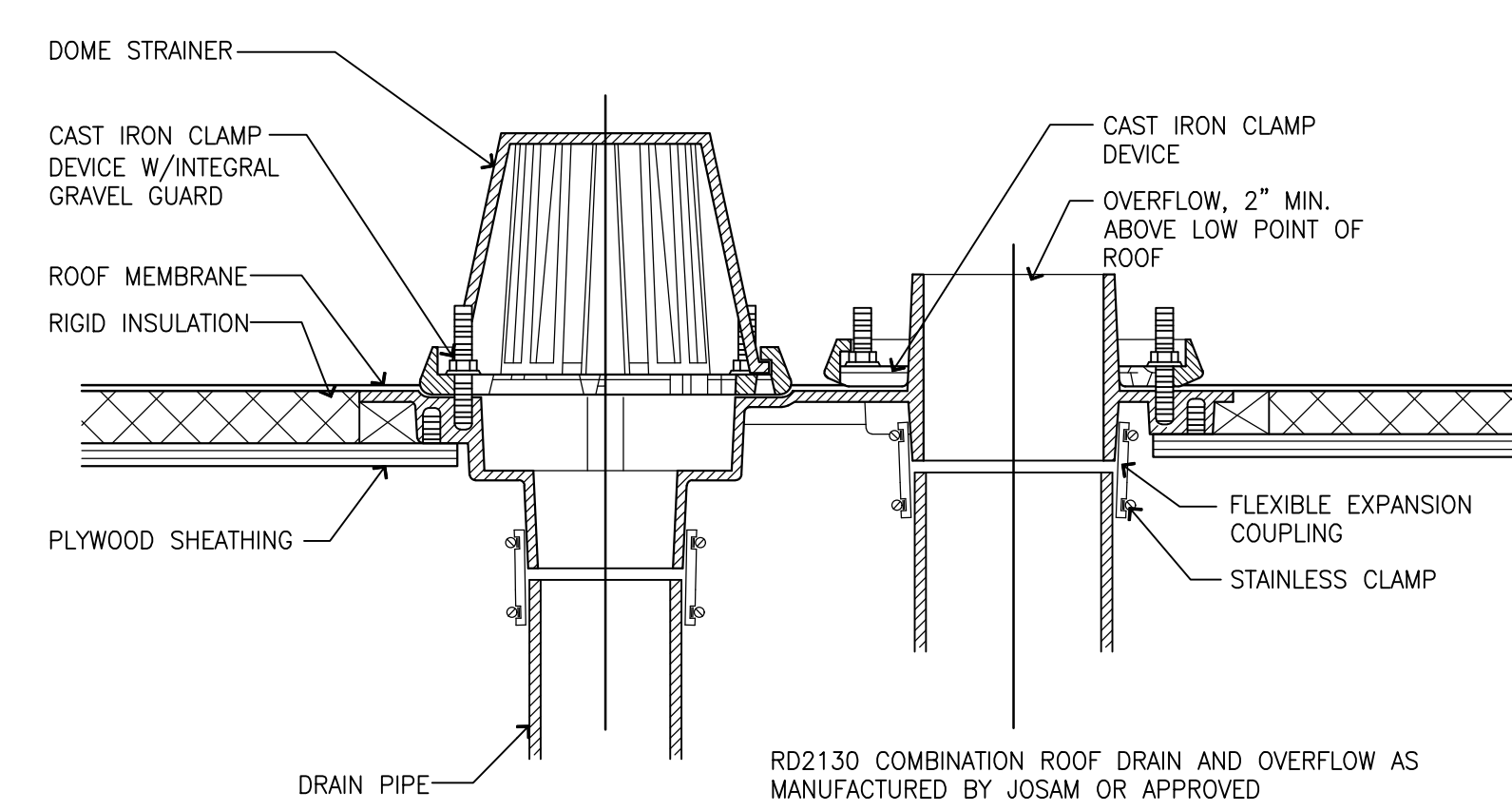
01 TERMINATION SCREED  
SCALE: 1-1/2"=1'-0"



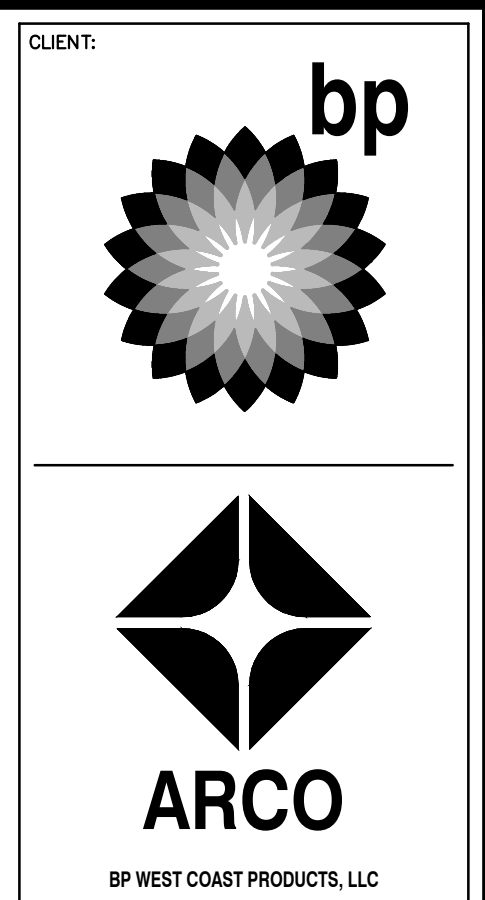
02 CORNER DETAIL  
SCALE: 3"=1'-0"



03 EXTERIOR DOOR JAMB  
SCALE: 3"=1'-0"



04 COMBINATION ROOF DRAIN  
SCALE: NTS



**B**

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10697 REGISTERED ARCHITECT  
DANIEL B. COULWIN  
STATE OF WASHINGTON  
EXP: 08/05/24

DEVELOPMENT INFORMATION:

**ARCO NTI**

**3400 am/pm FUEL CANOPY w/ 6 MPD's**

SITE ADDRESS:

**1402 S MERIDIAN**  
PUYALLUP, WA 98871

**FACILITY #7184**

DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REPM  
DRAWN BY: ALLIANCE PM  
VERSION: PROJECT NO: 21730

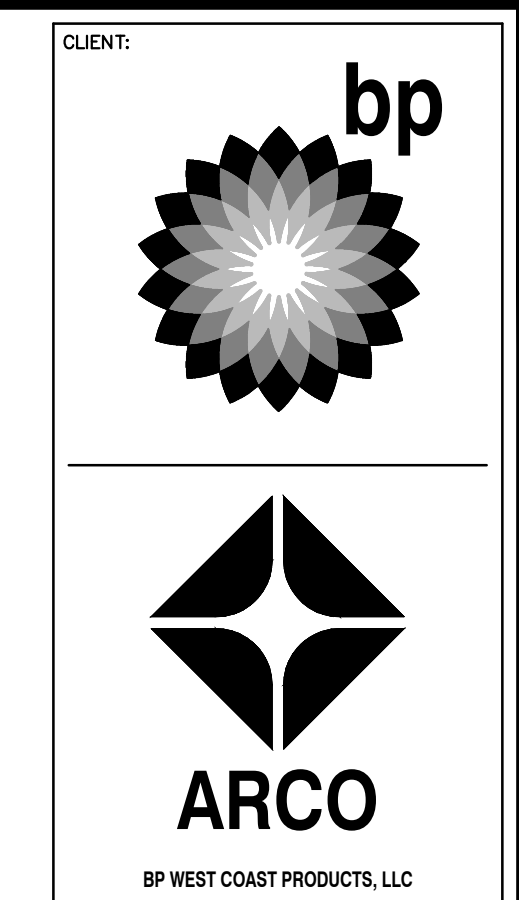
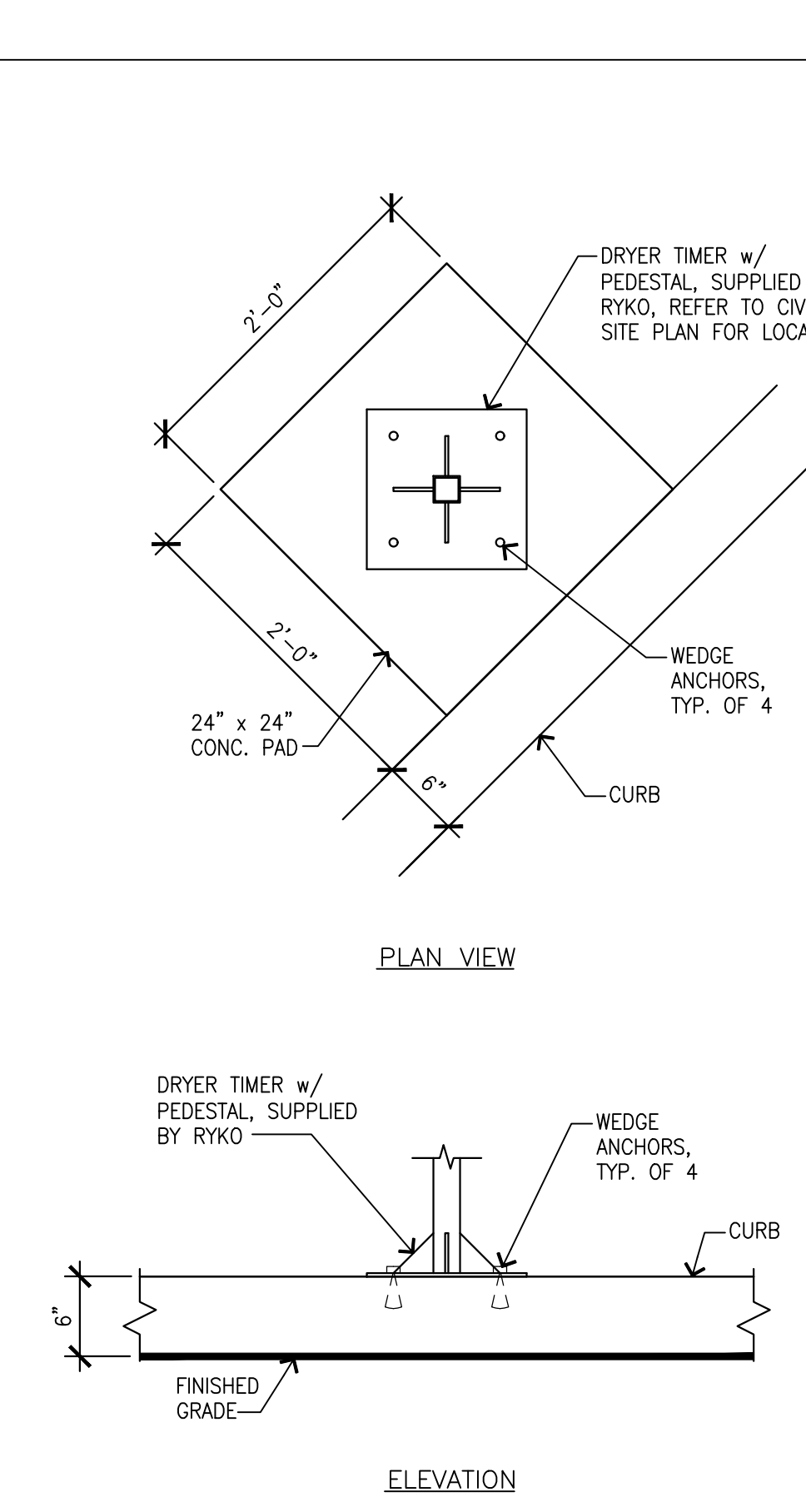
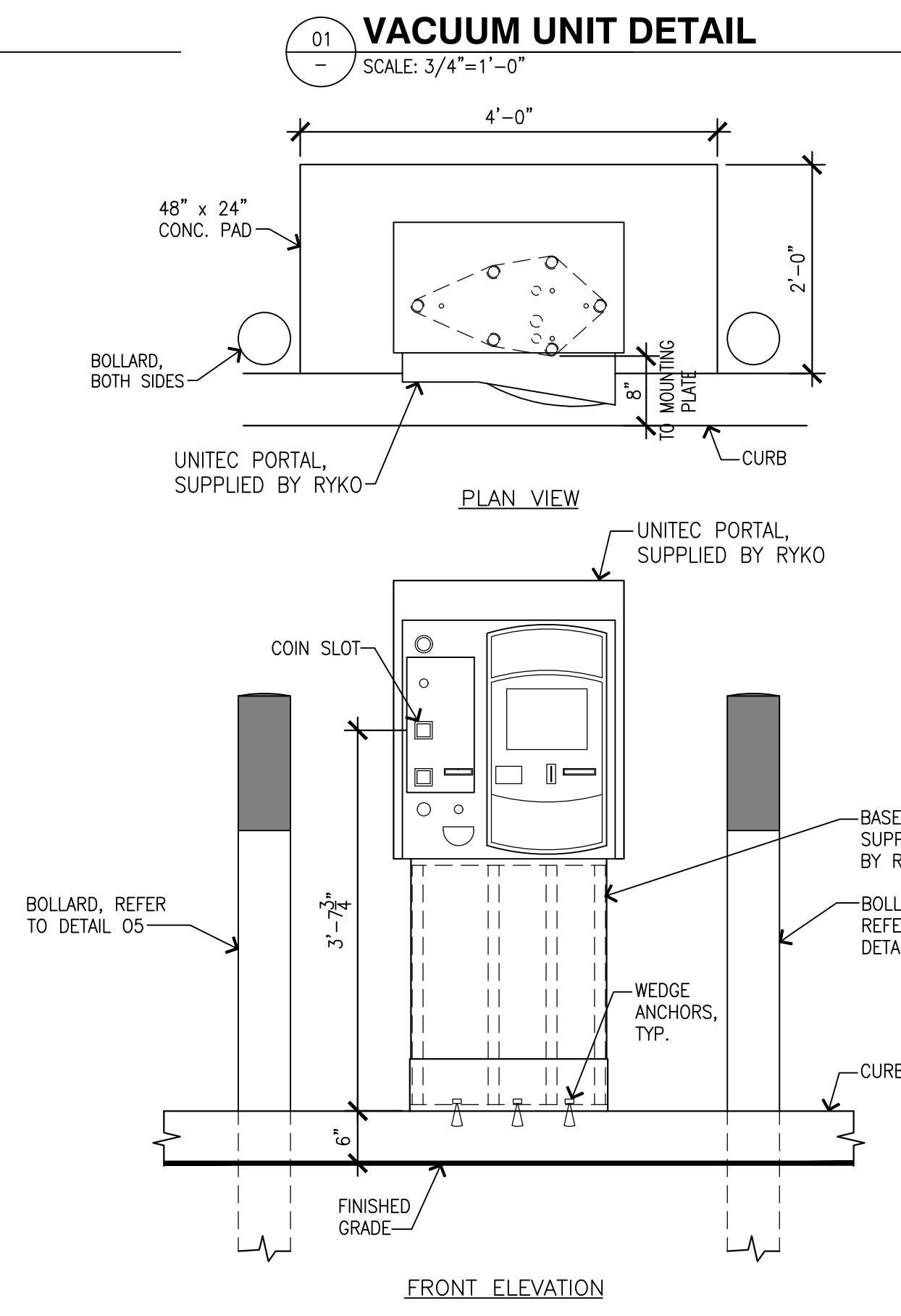
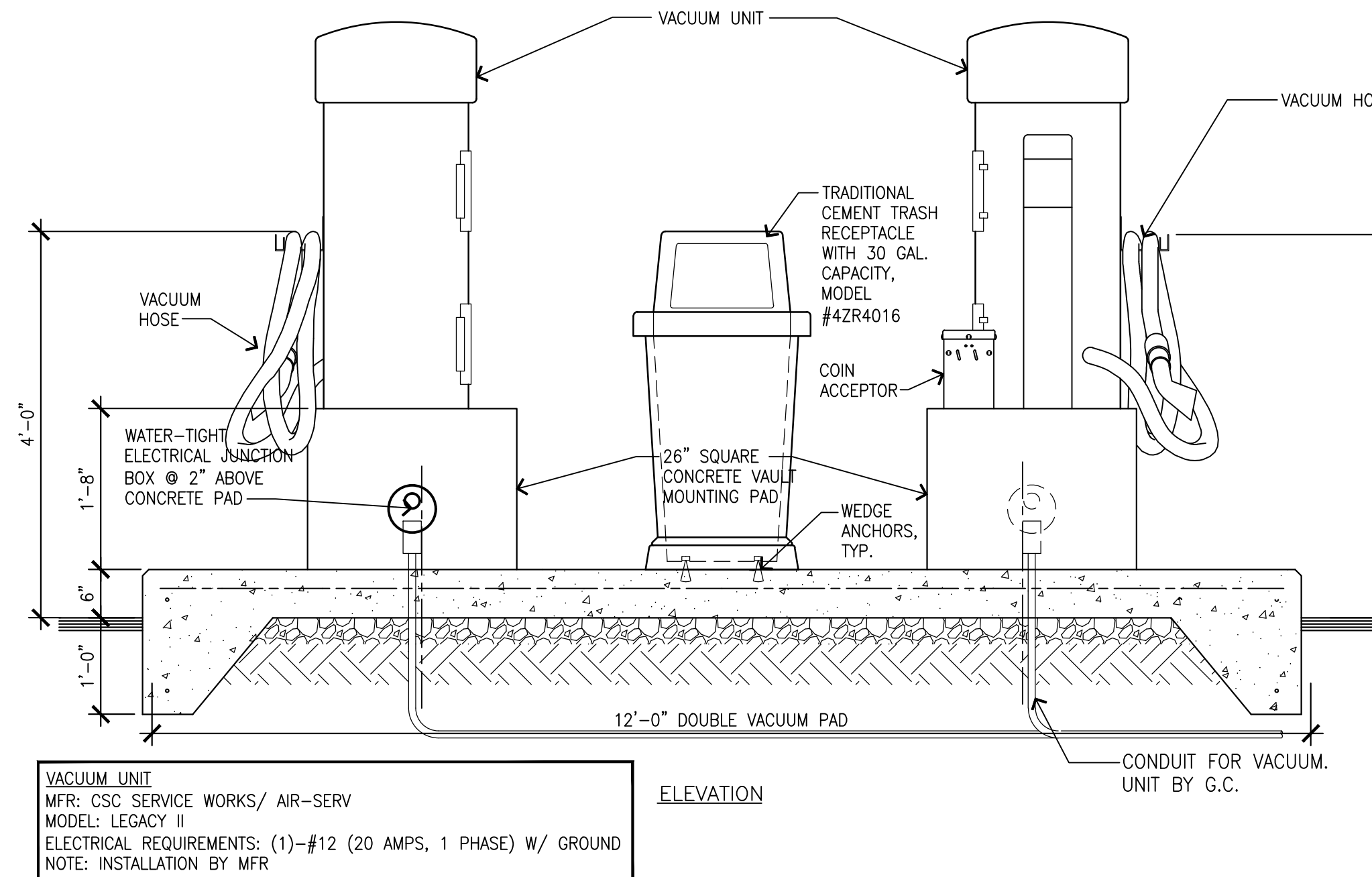
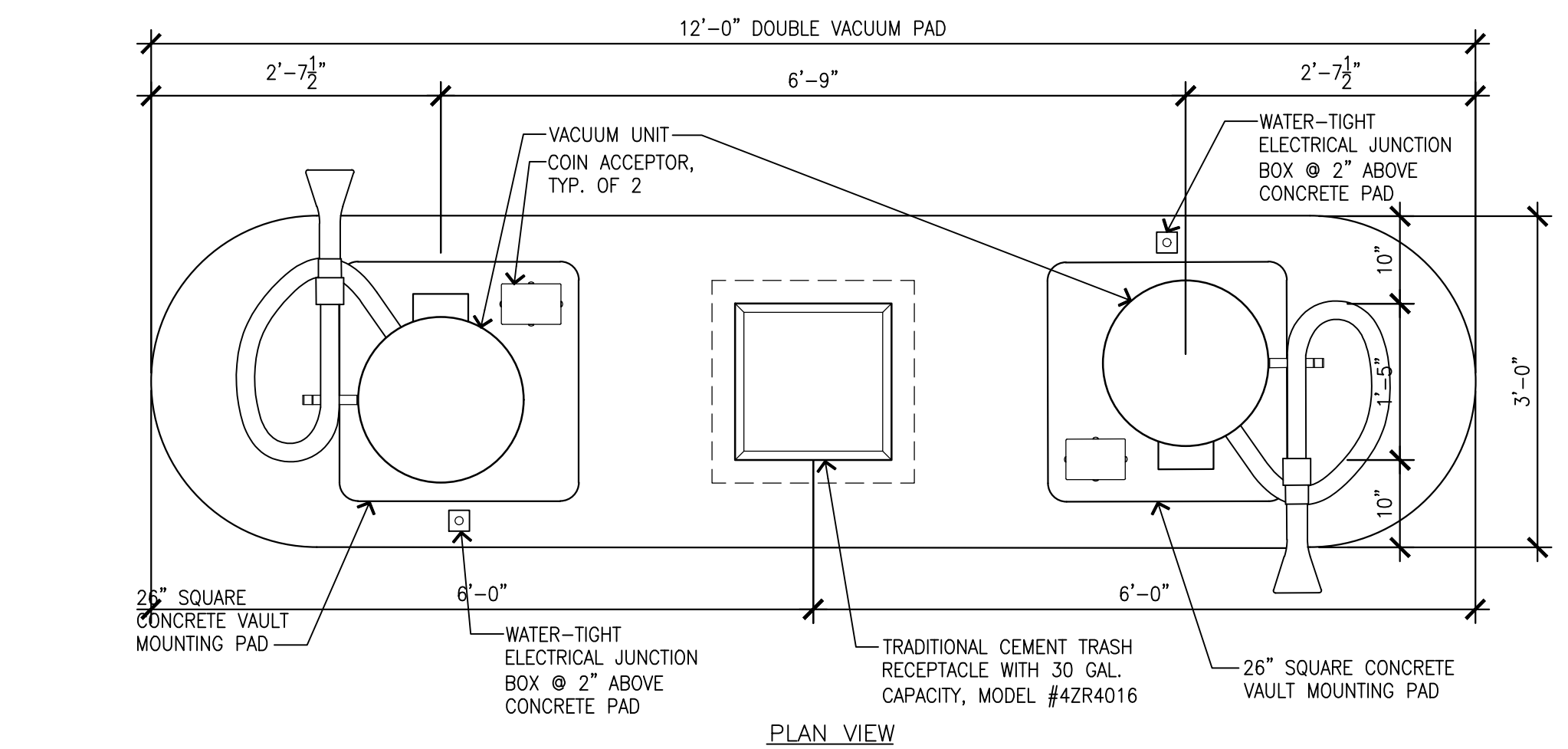
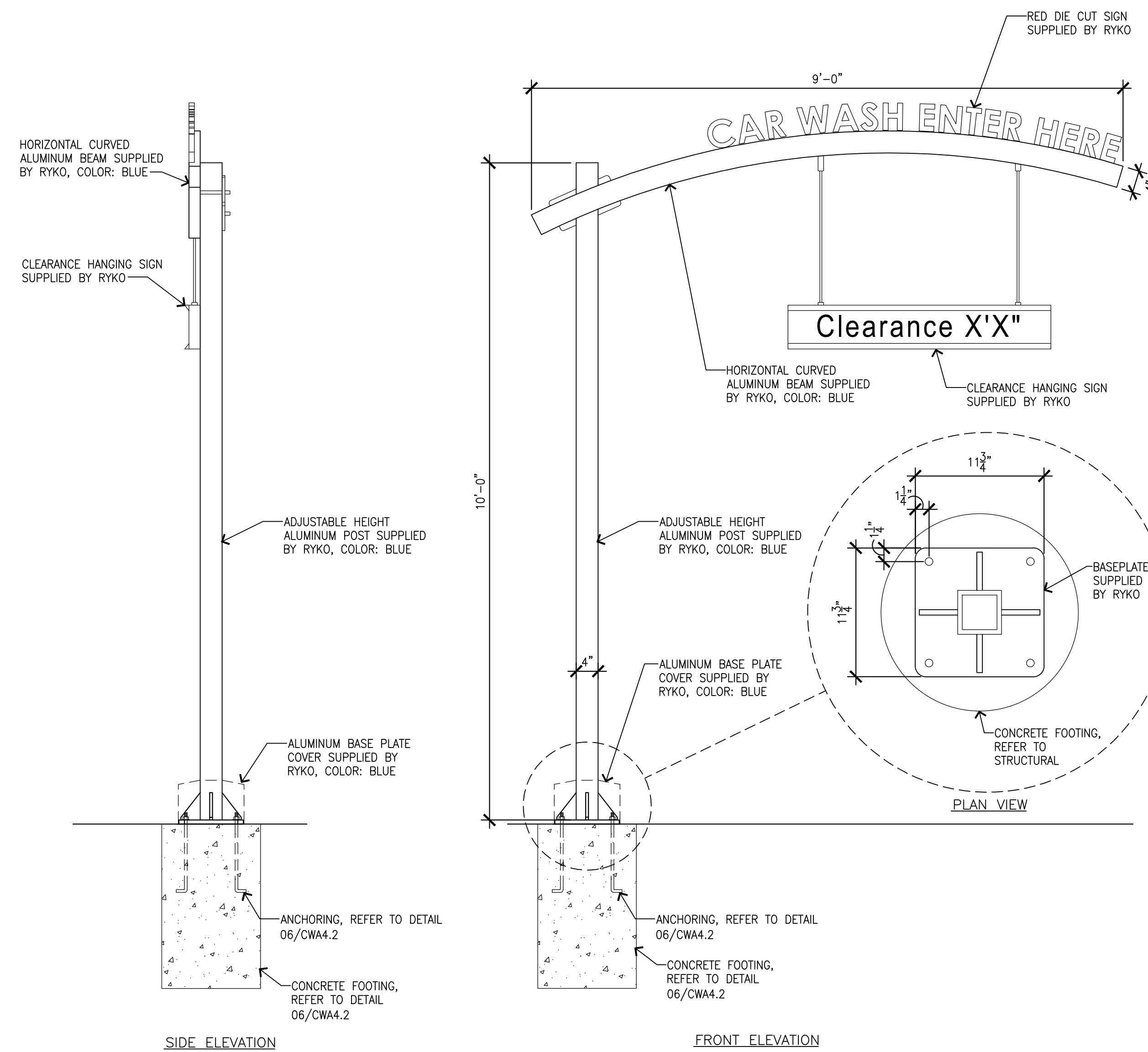
DRAWING TITLE:

**DETAILS**

SHEET NO:

**CWA4.1**

PRCNC20240007



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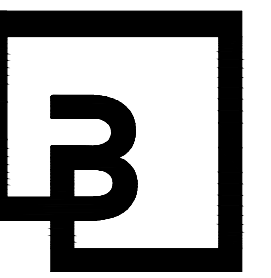
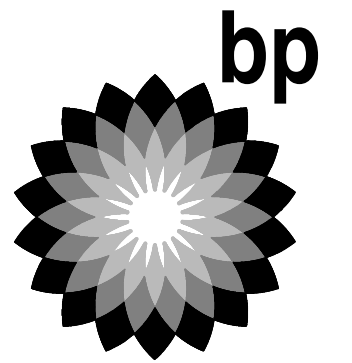
SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98711

FACILITY #7184  
DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REPA:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

DRAWING TITLE:  
**SITE DETAILS**

SHEET NO:  
**CWA4.2**

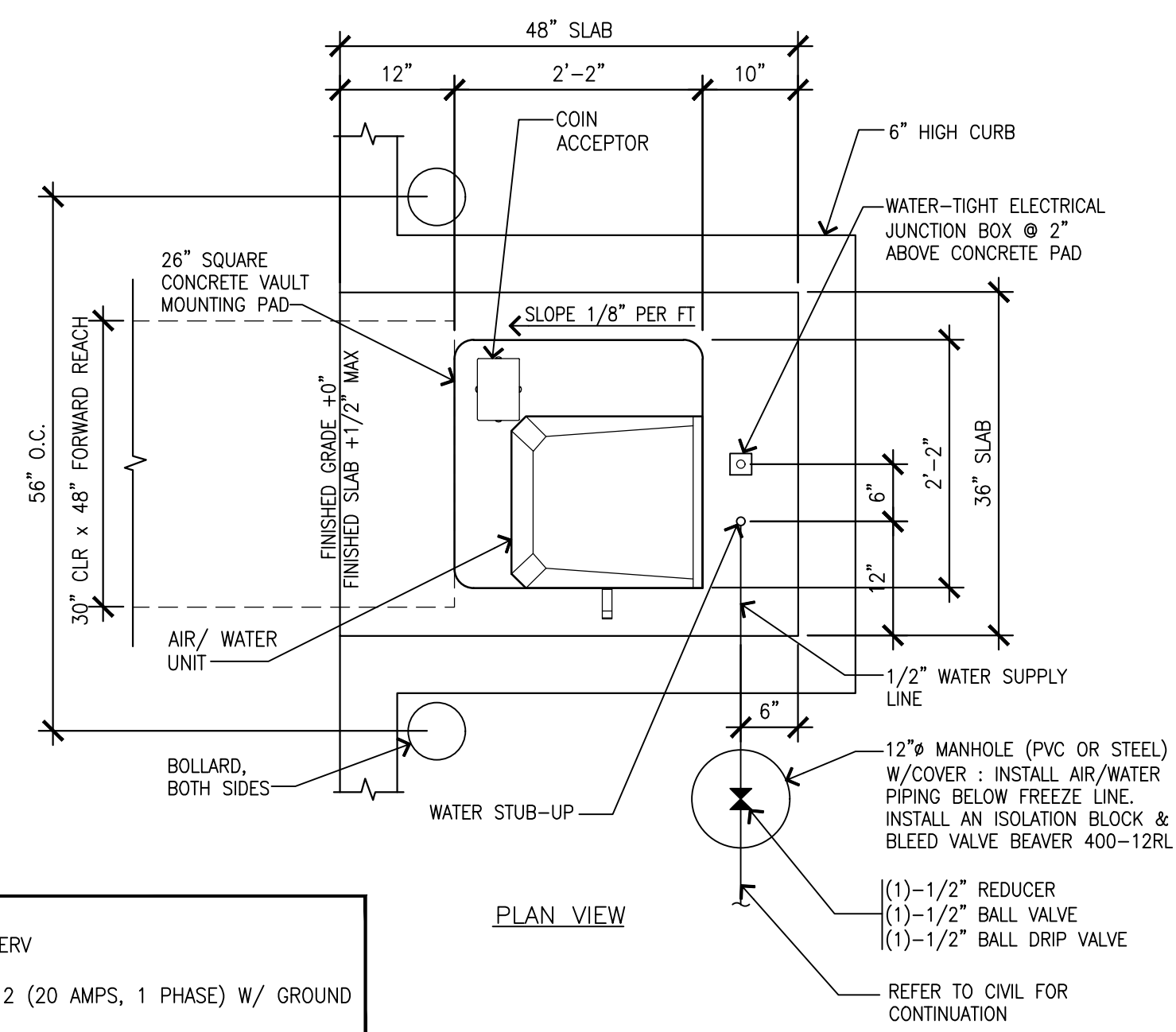
PRCNC20240007



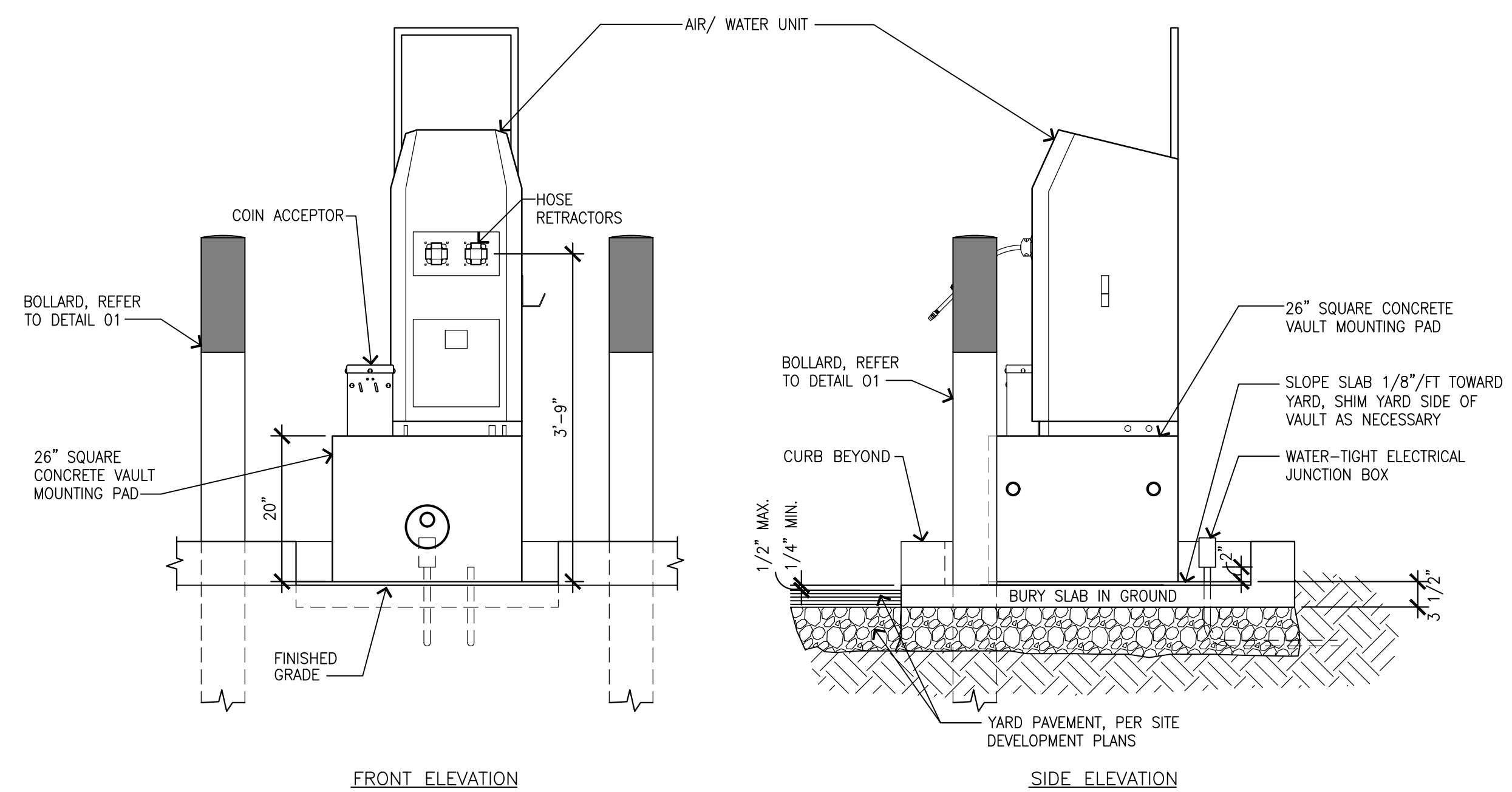
**Barghausen Consulting Engineers, Inc.**  
 18215 72nd Avenue South  
 Kent, WA 98032  
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SEAL:  
 10697 REGISTERED ARCHITECT  
 DANIEL B. COALWIN  
 STATE OF WASHINGTON  
 EXP: 08/05/24



**AIR/WATER UNIT**  
 MFR: CSC SERVICE WORKS/ AIR-SERV  
 MODEL: LEGACY II  
 ELECTRICAL REQUIREMENTS: (1)-#12 (20 AMPS, 1 PHASE) W/ GROUND  
 NOTE: INSTALLATION BY MFR



**AIR/WATER UNIT DETAIL**  
 SCALE: 3/4"=1'-0"

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD's**

SITE ADDRESS:  
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 PUYALLUP, WA 98571

**FACILITY #7184**  
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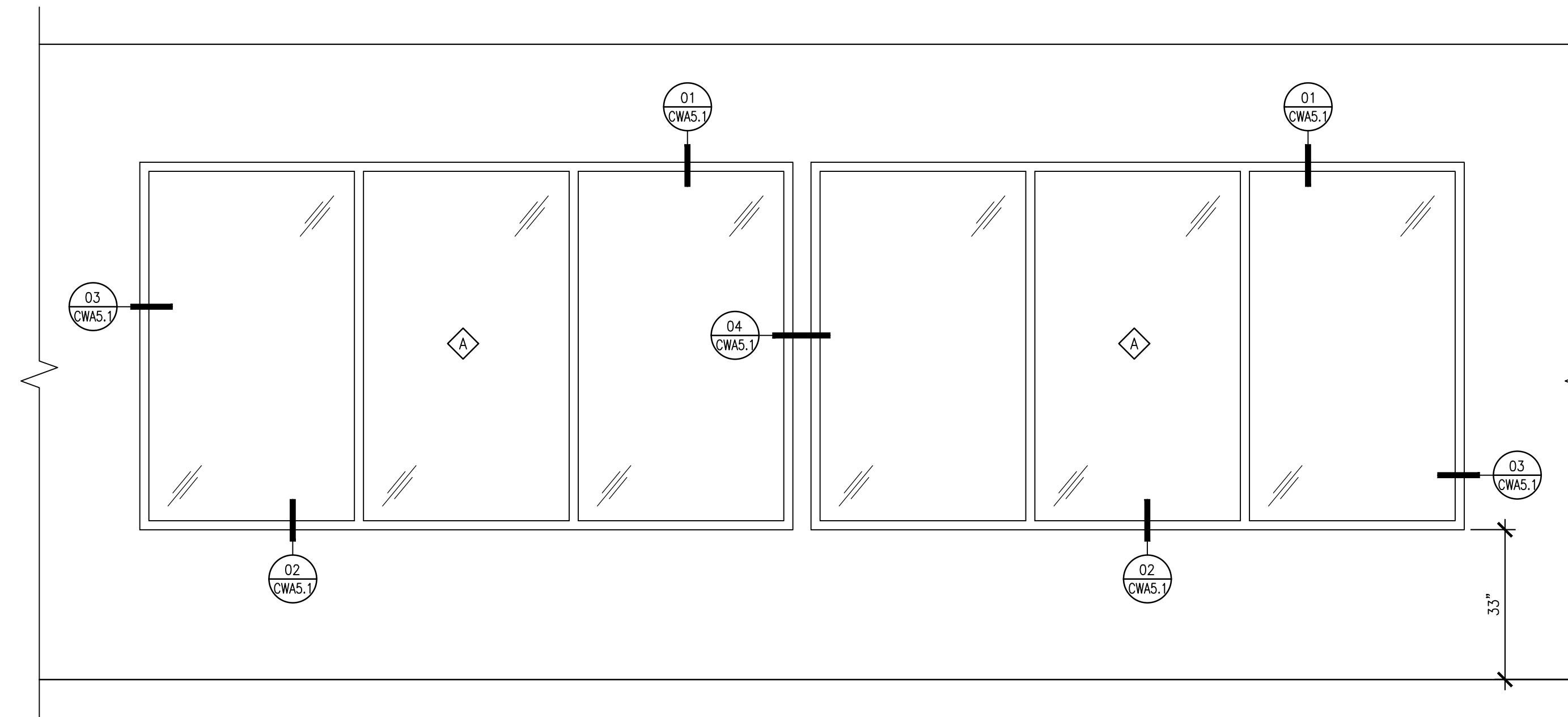
DRAWING TITLE:  
**SITE DETAILS**

SHEET NO:

PRCNC20240007

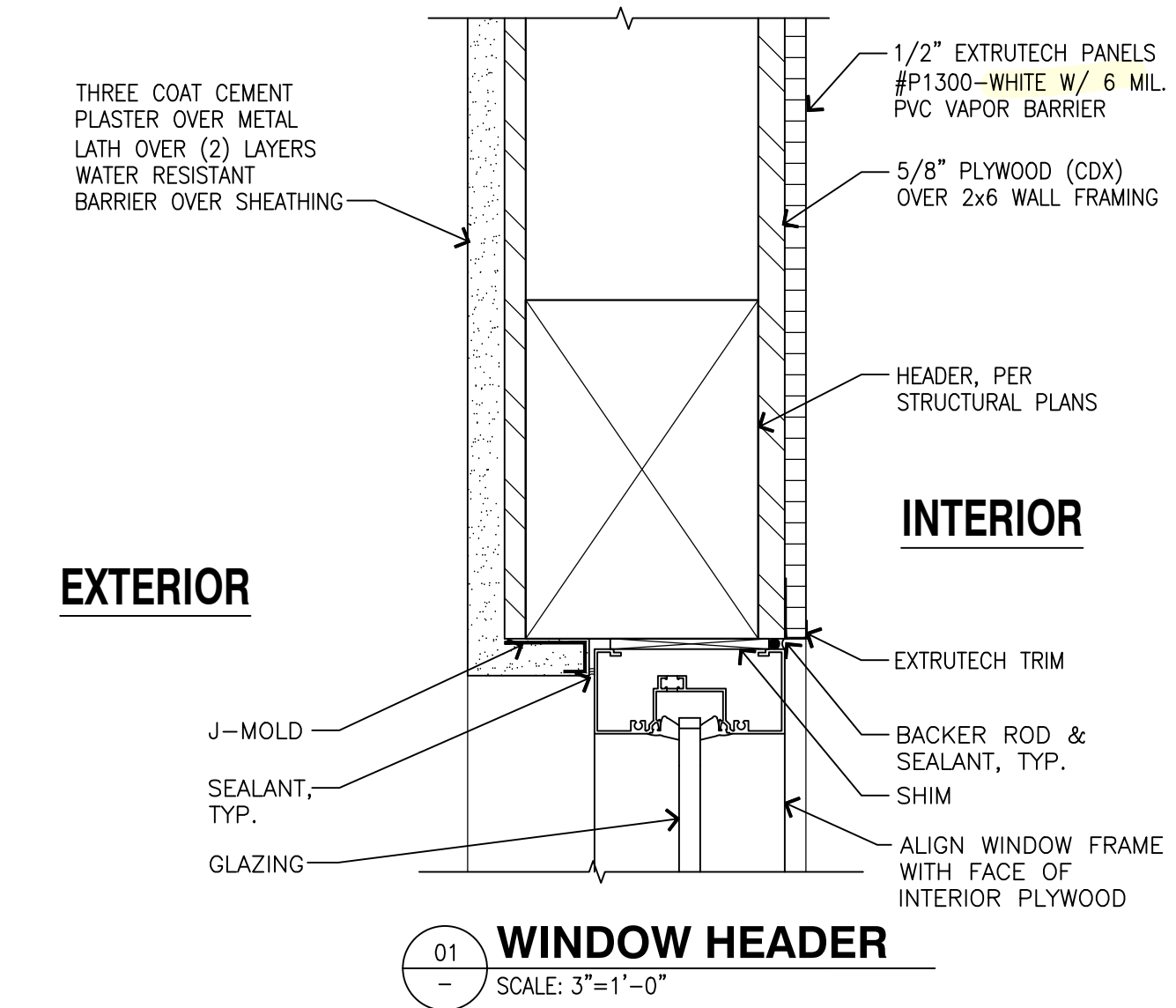
**CWA4.3**



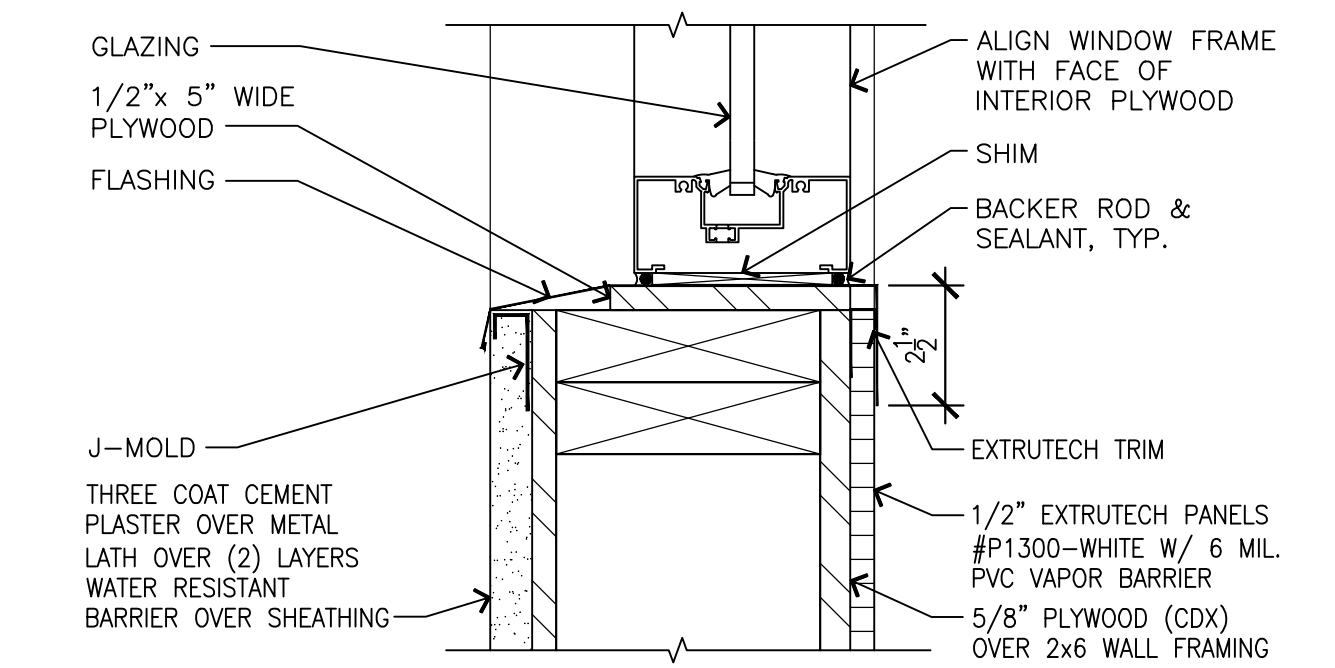


05 WINDOW ELEVATION  
SCALE: 1/2"=1'-0"

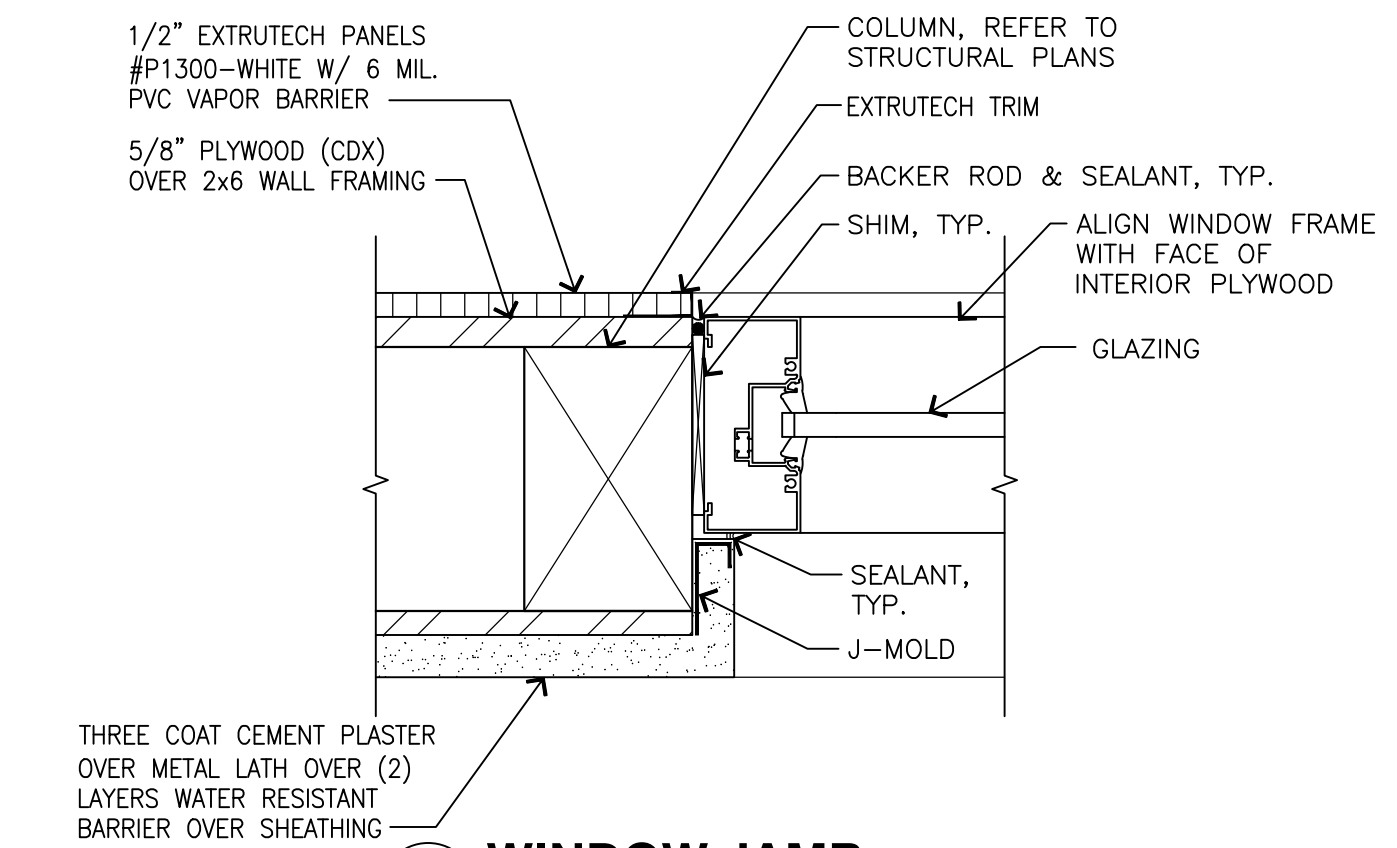
WINDOW SCHEDULE						
TYPE	SIZE	QTY	MFR/MODEL	GLAZING	FRAME	REMARKS
A	12'-0"W x 6'-9"H	2	KAWNEER TRIFAB 451 FRAMING	1/4" TEMPERED GLAZING	CLEAR ANODIZED ALUMINIUM	G.C. SHALL VERIFY ROUGH OPENING SIZE PRIOR TO ORDERING



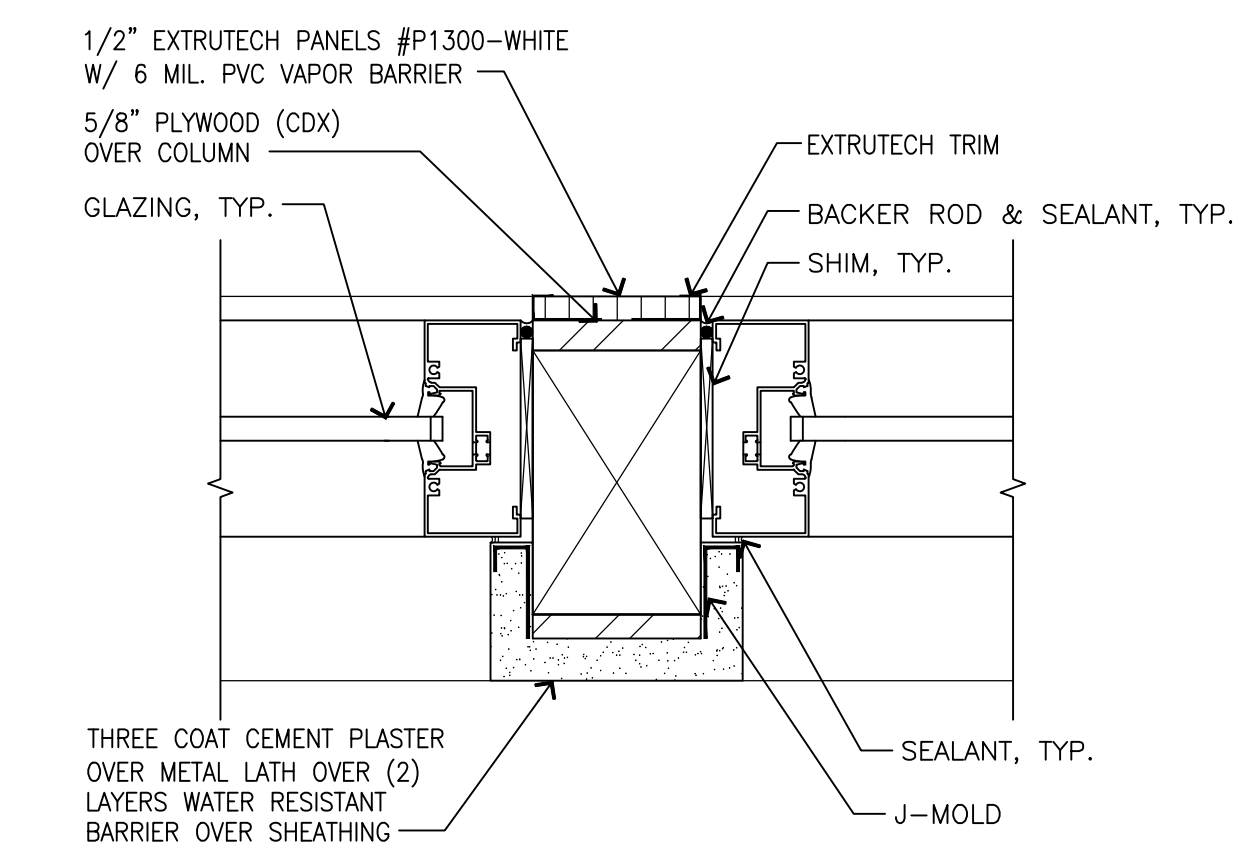
01 WINDOW HEADER  
SCALE: 3"=1'-0"



02 WINDOW SILL  
SCALE: 3"=1'-0"

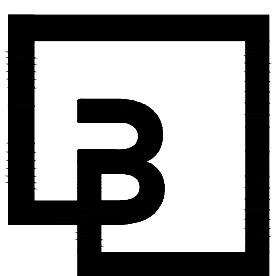
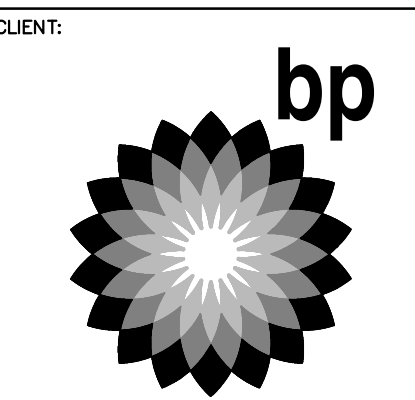


03 WINDOW JAMB  
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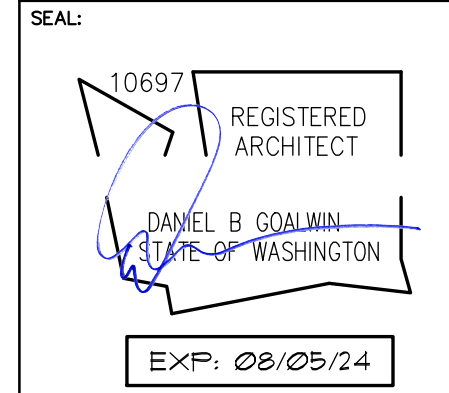
04 WINDOW COLUMN/MULLION DETAIL  
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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98571

FACILITY #7184  
DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REP:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

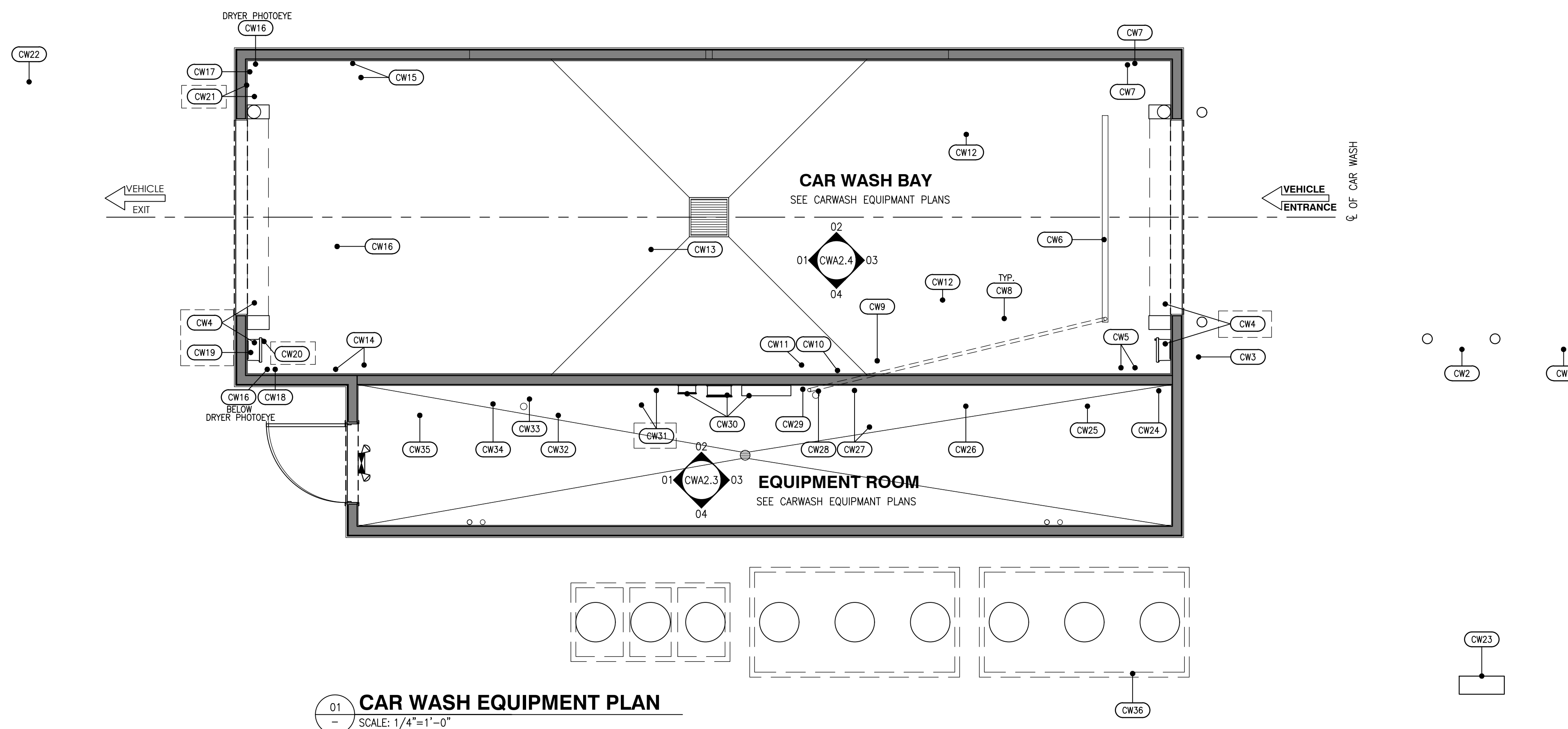
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**WINDOW DETAILS (OPTIONAL)**

SHEET NO:  
**CWA5.1**

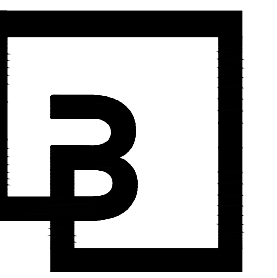
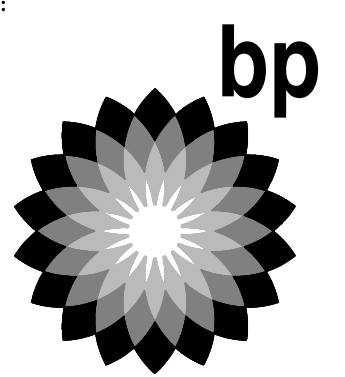
# EQUIPMENT SCHEDULE

NO.	ITEM / DESCRIPTION	REMARKS	NO.	ITEM / DESCRIPTION	REMARKS
CW1	ENTRANCE ARCH WITH CLEARANCE BAR	REFER TO SITE PLAN FOR LOCATION	CW18	COMMUNICATION INTERFACE BOX (WITH TOUCH SCREEN AND E-STOP)	
CW2	UNITEC PORTAL TI ACTIVATION		CW19	AUTO DOOR RELAY BOX	
CW3	3 MESSAGE LIGHTED ENTRANCE SIGN	J-BOX FURNISHED AND INSTALLED BY G.C.	CW20	AUTO DOOR PHOTOEYE W/ BRACKET	
CW4	AIRLIFT AIR PREMIUM PLUS VINYL ROLL UP DOOR WITH CONTROL BOX (2 PLACES)	ELECTRIC OPERATOR, COLOR: BEIGE IF REQUIRED	CW21	AUTO DOOR PHOTOEYE W/ BRACKET	J-BOX FURNISHED AND INSTALLED BY G.C.
CW5	UNDERCAR ENTRANCE ACTIVATION WALL MOUNT PHOTOEYE AND RELAY BOX	J-BOX FURNISHED AND INSTALLED BY G.C.	CW22	SUMLINE DRYER COUNT DOWN TIMER SIGN	
CW6	HIGH PRESSURE TRENCH MOUNTED UNDERCAR MANIFOLD (Z1000)	REFER TO SHEET CWA1.1 FOR TRENCH LOCATION AND SIZE	CW23	UNITEC P.O.S. INTERFACE	ACTUAL LOCATION OF ITEM WILL BE NEAR POINT OF SALE IN C-STORE.
CW7	UNDERCAR ENTRANCE ACTIVATION BOX WITH WALL MOUNT PHOTOEYE		CW24	FRESH WATER BACKUP VALVE ASSY	J-BOX FURNISHED AND INSTALLED BY G.C.
CW8	SOFTGLOSS FLOOR TRACKS		CW25	EV ULTRACLEAR RECLAIM SYSTEM 40 GPM W/ OZONE	
CW9	SOFTGLOSS FLOOR MOUNT BOOM STAND		CW26	OFFBOARD CHEMICAL INJECTION PUMP/ WITH CHEMICAL CONTAINERS	
CW10	SOFTGLOSS CABLE MOUNT BRACKET		CW27	ONBOARD HP PUMP W/ CONTROL BOX	
CW11	WASH BAY TERMINAL BOX WITH REMOTE BAY BUZZER KIT		CW28	HP DIVERTER VALVES	
CW12	LOW PROFILE GUIDE RAILS (2 PLCS)		CW29	OFFBOARD RINSE VALVE/R.O.	J-BOX FURNISHED AND INSTALLED BY G.C.
CW13	SOFTGLOSS WASH MACHINE		CW30	TSS DMX CONTROLLER-LED DRIVER-POWER SUPPLY LED LIGHTS	POSITIONED NEAR CENTER OF BAY FOR CABLE REACH
CW14	AIR KNIFE DRYER CONTROL CABINET	J-BOX FOR DRYER CONNECTION BE FURNISHED AND INSTALLED BY G.C.	CW31	BOOST PUMP SYSTEM	IF REQUIRED
CW15	WALL MOUNTED 8 SEGMENT LIGHTED SIGN	J-BOX FURNISHED AND INSTALLED BY G.C.	CW32	165 GALLON R.O. STORAGE TANK	
CW16	AIR KNIFE DRYER (30HP) WITH WALL MOUNT PHOTOEYE	J-BOX FACTORY INSTALLED AT CENTER DRYER FACING DOOR	CW33	CARBON FILTER	
CW17	DUAL THERMOSTAT ASSY	LOCATE THE THERMOSTAT BULBS ON THE OUTSIDE OF THE NORTH WALL OUT OF DIRECT SUNLIGHT. THIS WILL THEN LOCATE THE POSITION OF THE THERMOSTAT ASSY APPROXIMATELY 4 FT AWAY. TAKE CARE NOT TO CRIMP CAPILLARY TUBES LEADING TO THE THERMOSTAT BULBS.	CW34	RAINMAKER III R.O. SYSTEM	
			CW35	AIR COMPRESSOR, 5 HP, 3 PH	
			CW36	UNDERGROUND RECLAIM TANKS	REFER TO SITE PLAN FOR LOCATION

- CONTRACTOR SHALL RESPONSIBLE TO HARD PIPE PLUMBING AND ELECTRICAL TO ALL CAR WASH EQUIPMENT. ALL CONDUITS AND PIPING SHALL BE CONCEALED IN THE WALLS AND ALL PENETRATIONS IN CAR WASH BAY SHALL BE SEALED. VERIFY SCOPE OF WORK WITH RYKO PRIOR TO CONSTRUCTION.
- VINYL ROLL UP DOORS NOT REQUIRED IN CALIFORNIA, UNLESS REQUIRED BY THE AUTHORITY HAVING JURISDICTION OR, IF NEEDED FOR SECURITY PURPOSES.
- BOOSTER PUMP IS ONLY REQUIRED WHEN THE WATER PRESSURE TO THE SITE IS LESS THAN 40 PSI. CONFIRM WATER PRESSURE WITH WATER DISTRICT PRIOR TO REQUESTING PLANS FROM RYKO. REFER TO THE WATER REQUIREMENTS NOTED ON THIS SHEET AND PLUMBING SHEET CWP2.0



WATER REQUIREMENTS	
MINIMUM 1" SERVICE AT 40 PSI WITH 35 GPM FLOW RATE.	
MAXIMUM 1" SERVICE AT 150 PSI WITH 40 GPM FLOW RATE.	



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10697 REGISTERED ARCHITECT  
 DANIEL B. COLVIN  
 STATE OF WASHINGTON  
 EXP: 08/05/24

DEVELOPMENT INFORMATION:  
**ARCO NTI**  
 3400 am/pm  
 FUEL CANOPY w/ 6 MPD's

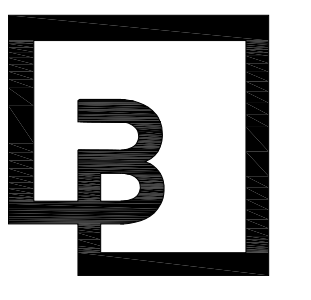
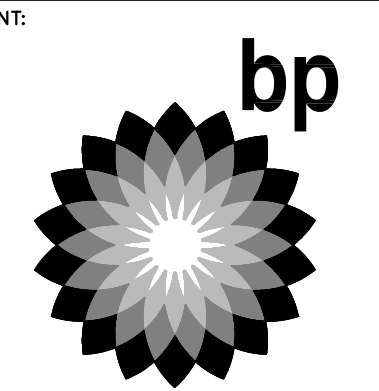
SITE ADDRESS:  
 1402 S MERIDIAN  
 PUYALLUP, WA 98711

FACILITY #7184  
 DESIGNED BY: ALLIANCE ZADM:  
 CHECKED BY: BP REPM:  
 DRAWN BY: ALLIANCE PM:  
 VERSION: PROJECT NO:  
 - 21730

DRAWING TITLE:  
**CAR WASH EQUIPMENT PLAN**

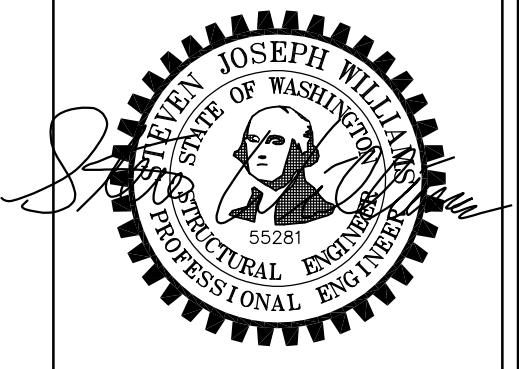
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**CWQ1.1**

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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
 3400 am/pm  
 FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
 1402 S MERIDIAN  
 PUYALLUP, WA 98371

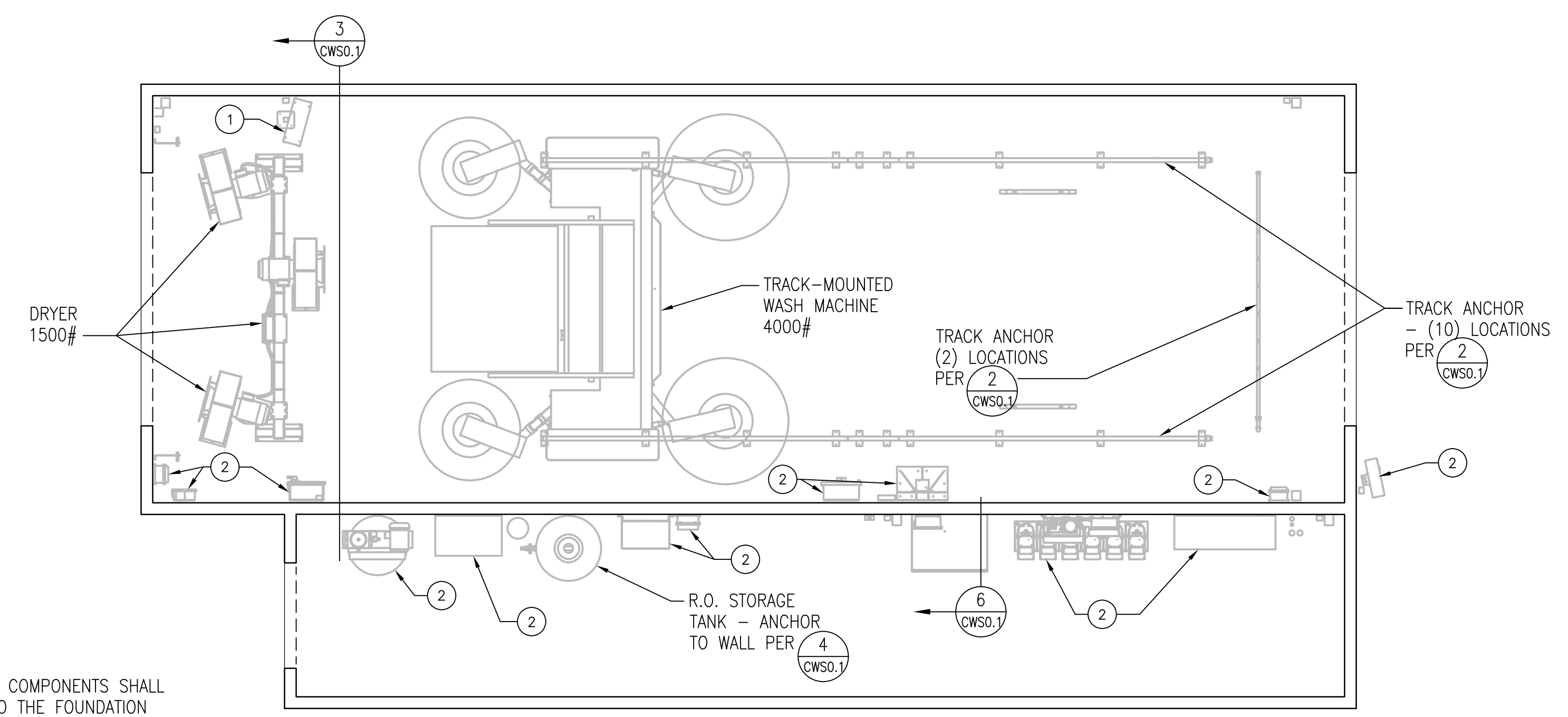
**FACILITY #7184**

DESIGNED BY: JJP ALLIANCE ZADM:  
 CHECKED BY: JJP BP REPM:  
 DRAWN BY: MCS ALLIANCE PM:  
 VERSION: - PROJECT NO.:  
 - 21730

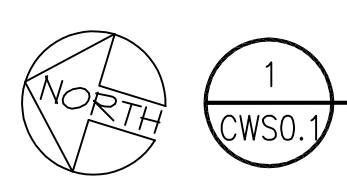
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**CAR WASH EQUIPMENT ANCHORAGE**

SHEET NO:

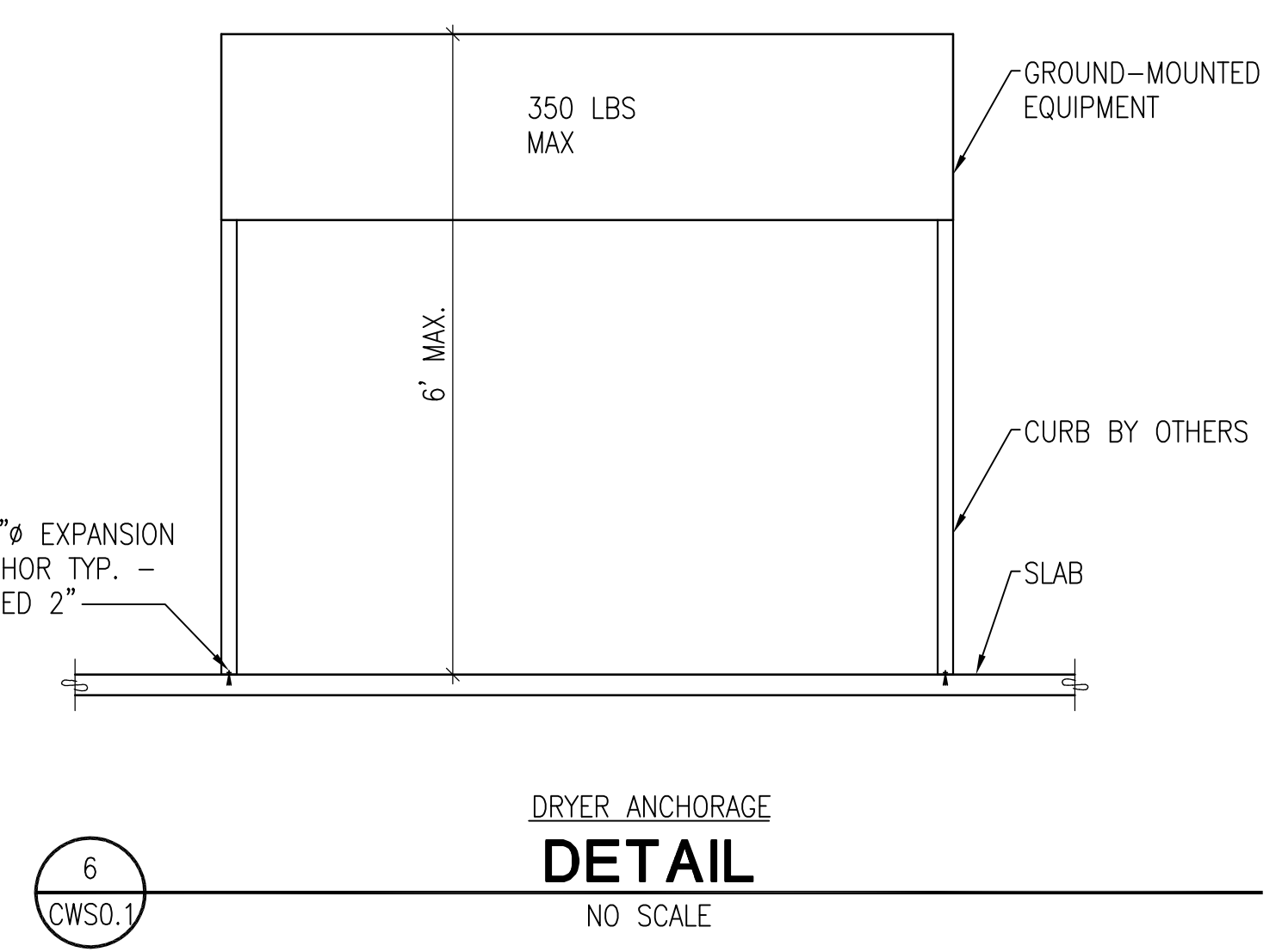
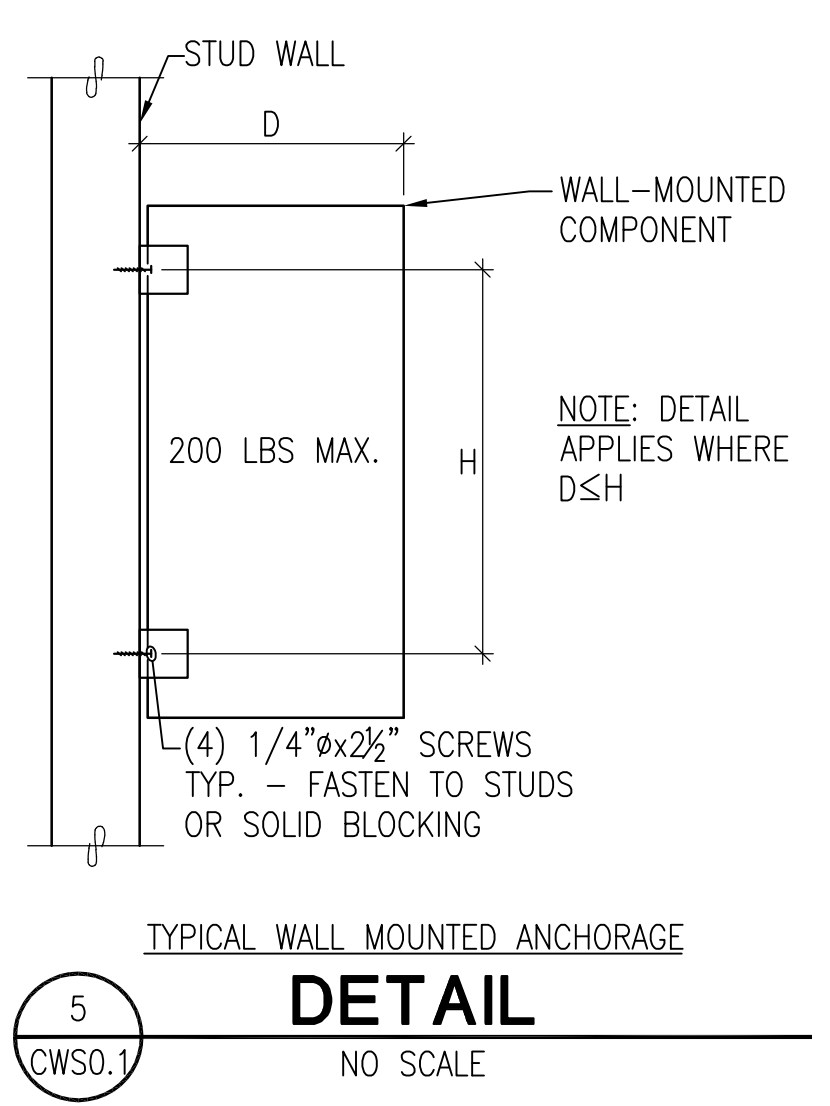
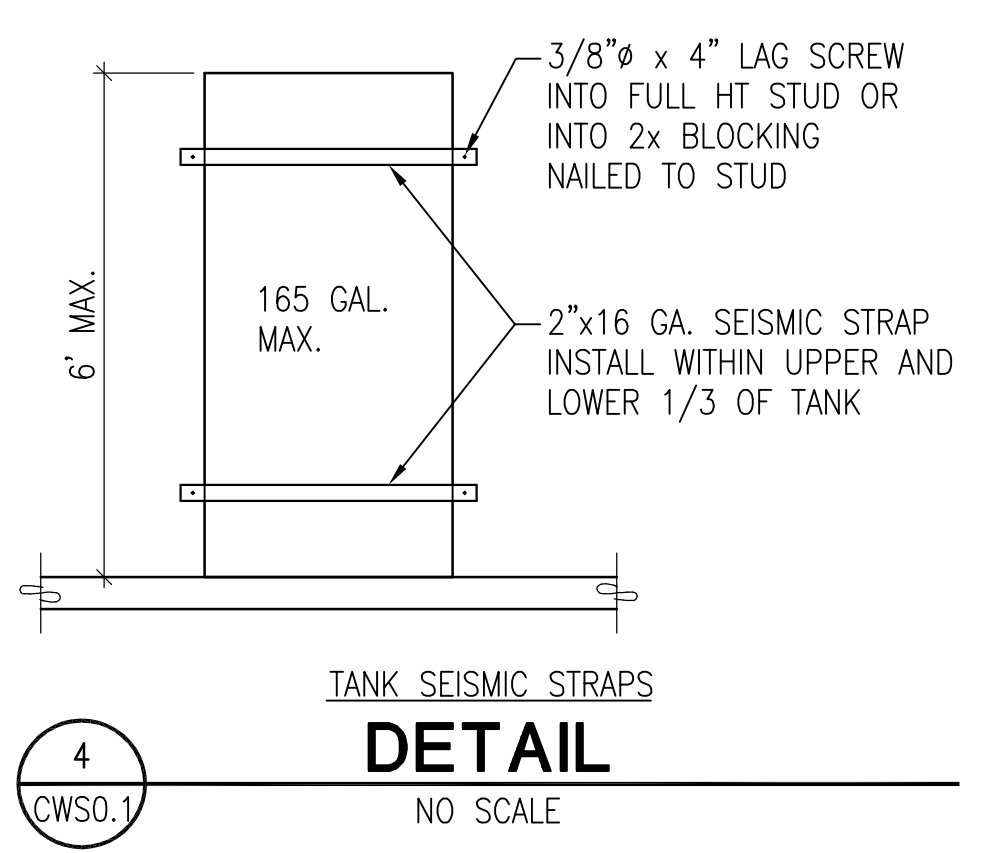
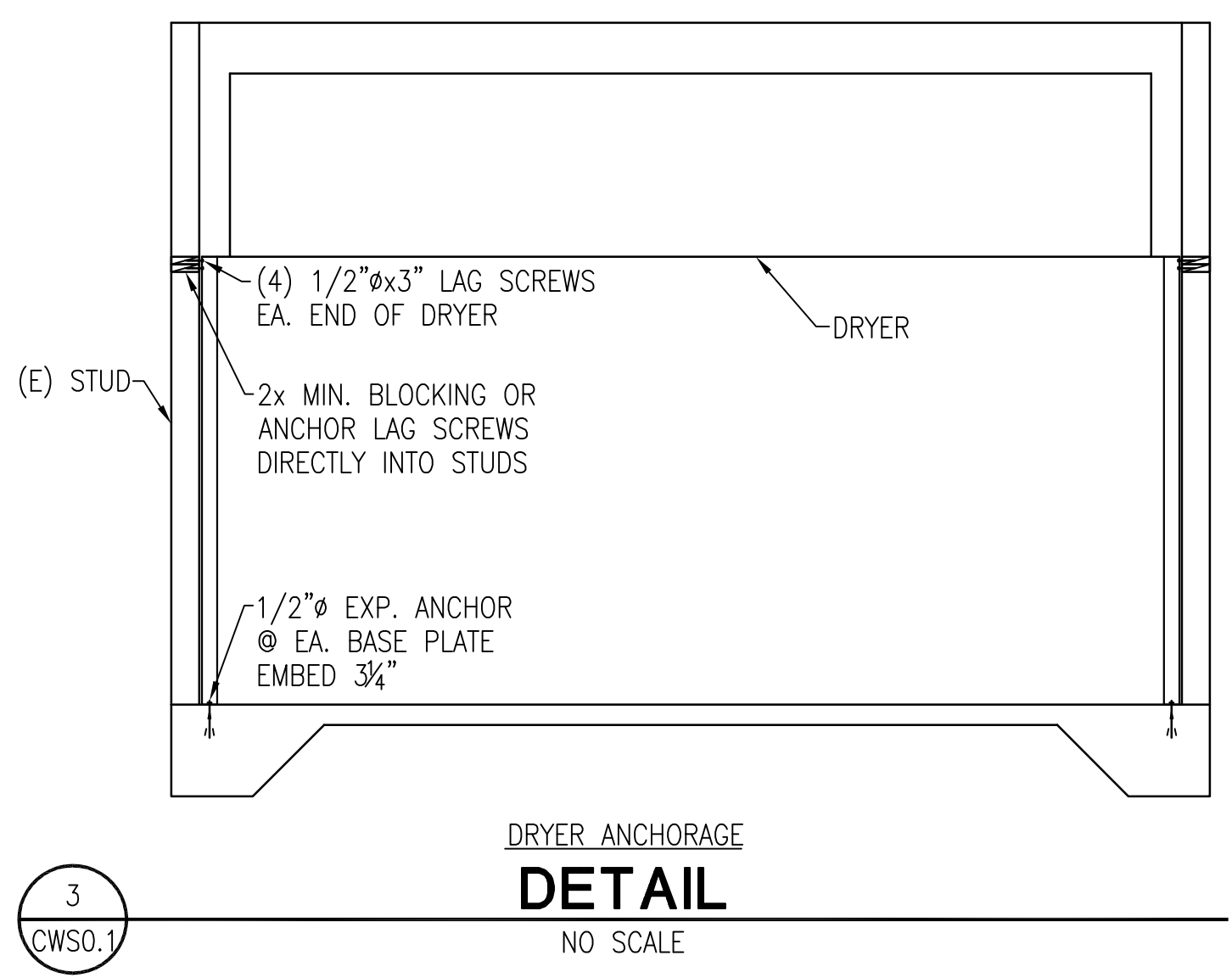
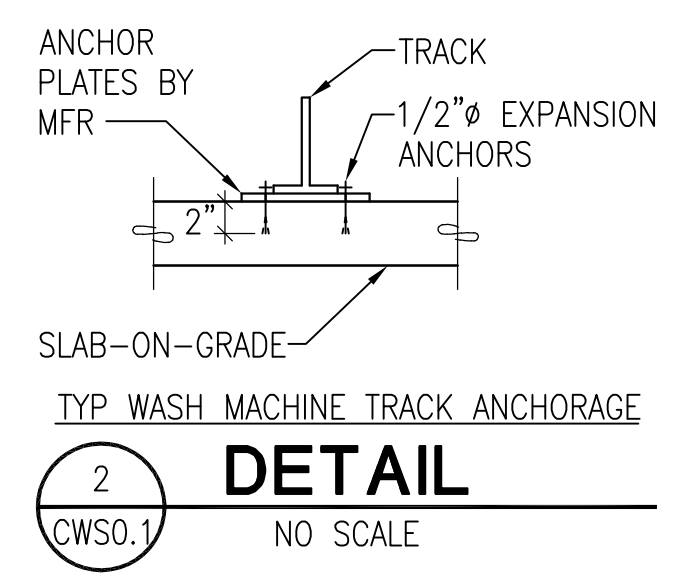
**CWS0.1**



- NOTES:**
- 1 FLOOR MOUNTED COMPONENTS SHALL BE ANCHORED TO THE FOUNDATION THROUGH MANUFACTURER PROVIDED BASE PLATES. USE ALL HOLES AND ANCHOR WITH 1/2" EXPANSION ANCHORS - EMBED 2".
  - 2 WALL MOUNTED COMPONENTS SHALL BE ANCHORED TO THE STUD WALLS PER 5 CWS0.1



**CAR WASH EQUIPMENT ANCHORAGE PLAN**  
 1/4"=1'-0"



DRAWING INDEX		
1	CWS0.1	CAR WASH EQUIPMENT ANCHORAGE
2	CWS0.2	GENERAL NOTES AND HEIGHT BAR FOUNDATION DETAIL
3	CWS1.1	CAR WASH PLANS
4	CWS2.1	DETAILS
5	CWS2.2	DETAILS
6	CWS2.3	DETAILS
7	CWS2.4	DETAILS
8	CWS3.1	GENERAL NOTES
9	CWS3.2	GENERAL NOTES
10	CWS3.3	GENERAL NOTES
11	CWS3.4	GENERAL NOTES

PRCNC20240007

**GENERAL NOTES**

THE FOUNDATION HAS BEEN DESIGNED TO RESIST CODE REQUIRED VERTICAL AND LATERAL FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY; ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY SHORING, FORMWORK, AND BRACING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES. PROVIDE ADEQUATE RESISTANCE TO LOADS ON THE STRUCTURES DURING CONSTRUCTION PER SEI/ASCE STANDARD NO. 37-02 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION." ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK. THE GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION.

**STANDARDS**

ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION.

**DESIGN CRITERIA**

**VERTICAL LOADS:** ACTUAL DEAD LOAD OF COMPONENT

**LATERAL FORCES**

**WIND:** 97 MPH EXP. B

$F = qzGC_fA_f$

- VELOCITY PRESSURE,  $qz = 18.4$  psf
- GUST EFFECT FACTOR,  $G = 0.9$
- EXTERNAL PRESSURE COEFFICIENT,  $C_f = 1.75$
- $A_f$  = AREA OF COMPONENT

**SEISMIC:**  $V = C_sW$

$$C_s = 0.14 S_{ps} I_e \leq \frac{S_{ps}}{\left(\frac{R}{I_e}\right)} \leq \frac{S_{p1}}{\left(\frac{R}{I_e}\right)^T}$$

- $C_s$  MIN. FROM SEI/ASCE 7-10 SECTION 15.4
- SEISMIC IMPORTANCE FACTOR,  $I_e = 1.0$
- OCCUPANCY CATEGORY = I
- SPECTRAL RESPONSE ACCELERATIONS  $S_s = 1.27$  &  $S_1 = 0.44$
- SITE CLASS PER TABLE 1615.1 = D
- SPECTRAL RESPONSE COEFFICIENTS  $S_{ps} = 0.85$  &  $S_{p1} = 0.54$  - SEISMIC DESIGN CATEGORY = D
- $W$  = DEAD LOAD OF COMPONENT
- ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE ANALYSIS
- RESPONSE MODIFICATION FACTOR PER SEI/ASCE 7-16 TABLE 15.4-2  $R = 2.0$
- $C_s = 0.42$

**CONCRETE**

**CONCRETE:** SHALL BE MADE WITH PORTLAND CEMENT ASTM C-150 TYPE II OR TYPE I AND SHALL BE READY MIXED PER ASTM C-94.

**MIX DESIGNS:** THE CONTRACTOR SHALL DESIGN CONCRETE MIXES THAT, MEET OR EXCEED THE REQUIREMENTS OF THE CONCRETE MIX TABLE. THE MIX DESIGNS SHALL FACILITATE ANTICIPATED PLACEMENT METHODS, WEATHER, REBAR CONGESTION, ARCHITECTURAL FINISHES, CONSTRUCTION SEQUENCING, STRUCTURAL DETAILS, AND ALL OTHER FACTORS REQUIRED TO PROVIDE A STRUCTURALLY SOUND, AESTHETICALLY ACCEPTABLE FINISHED PRODUCT. WATER REDUCING ADMIXTURES MAY BE USED TO MEET THESE REQUIREMENTS. MAXIMUM SLUMP SHALL BE 5".

**ADMIXTURES:** ADMIXTURES SHALL BE BY MASTER BUILDERS, W.R. GRACE, OR PRE-APPROVED EQUAL. ALL MANUFACTURERS RECOMMENDATIONS SHALL BE FOLLOWED.

**WATER:** SHALL BE CLEAN AND POTABLE.

ITEM	DESIGN f'c (PSI) (1)	MAX. W/C RATIO	MIN. (3) FLYASH (PCY)	MAX. AGGREGATE SIZE (IN)	NOTES	MIN. CEMENTITIOUS (2) MATERIAL (SACKS/YARD)
FOUNDATIONS	2500 @ 28 DAYS	0.45	--	3/4	--	5-1/2"

**CONCRETE MIX NOTES:**

1. CONCRETE SHALL BE AIR ENTRAINED. TOTAL AIR CONTENT (PERCENT BY VOLUME OF CONCRETE) SHALL NO BE LESS THAN 5% OR MORE THAN 7%.
2. TOTAL CEMENTITIOUS MATERIAL IS THE SUM OF ALL CEMENT PLUS FLYASH.
3. AT THE CONTRACTORS OPTION FLYASH MAY BE SUBSTITUTED FOR CEMENT BUT SHALL NOT EXCEED 25% BY WEIGHT OF TOTAL CEMENTITIOUS MATERIAL.

**NON-SHRINK GROUT:** MASTER BUILDERS "MASTERFLOW 555" OR PRE-APPROVED EQUAL. GROUT SHALL CONFORM TO CRD-C621 AND ASTM C1107 GRADE B WHEN TESTED AT A FLUID CONSISTENCY PER CRD- C611-85 FOR 30 MINUTES. GROUT MAY BE PLACED FROM A 25 SECOND FLOW TO A STIFF PACKING CONSISTENCY. FILL OR PACK ENTIRE SPACE UNDER PLATES OR SHAPES. NO GROUTING SHALL BE DONE BELOW 40' F.

**METAL REINFORCEMENT (CONCRETE):**

REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 40 OR 60. PLACE PER ACI 315 AND ACI 318. LAP SPLICES SHALL BE 48 BAR DIAMETERS UNLESS NOTED OTHERWISE.

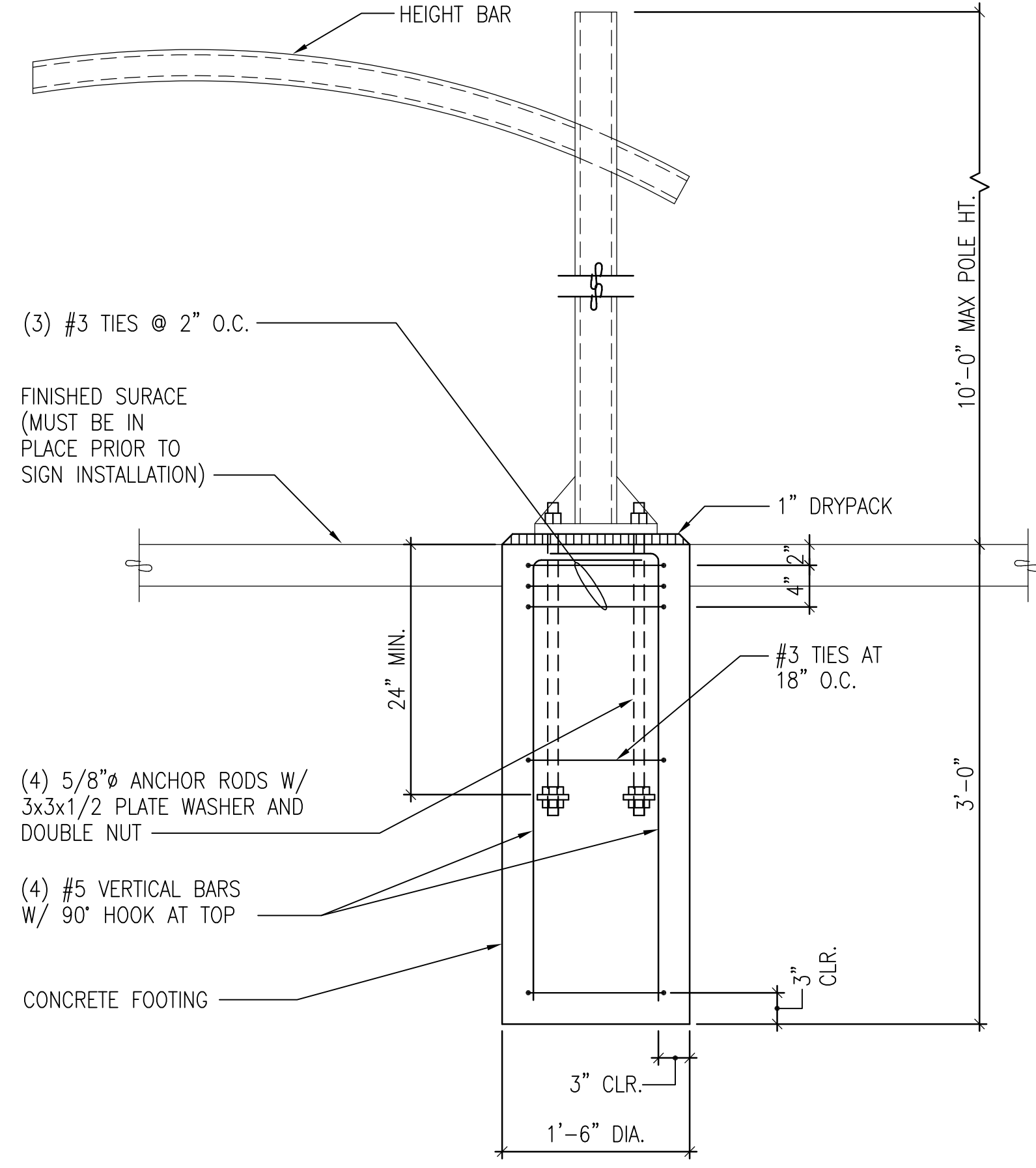
**STRUCTURAL STEEL**

**DETAILING, FABRICATION AND ERECTION**

**MATERIAL PROPERTIES**

**OTHER SHAPES AND PLATES:** ASTM A36 ( $F_y = 36$  KSI)

**ANCHOR RODS (A.B.):** ASTM F1554, GRADE 36, CLASS 2A



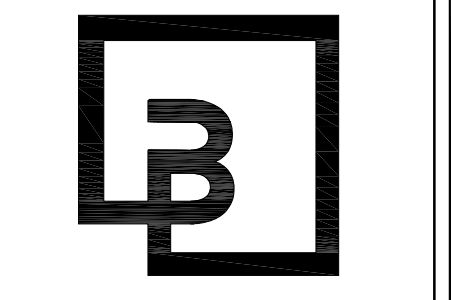
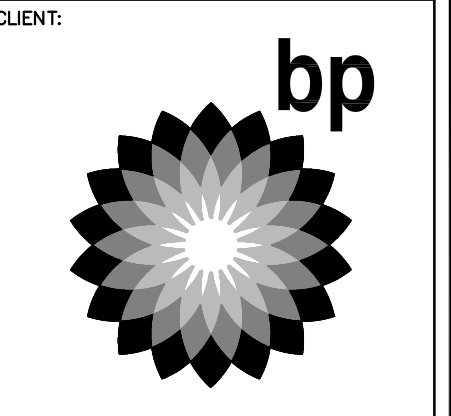
HEIGHT BAR FOUNDATION

**SECTION**  
NO SCALE

1  
CWS0.2

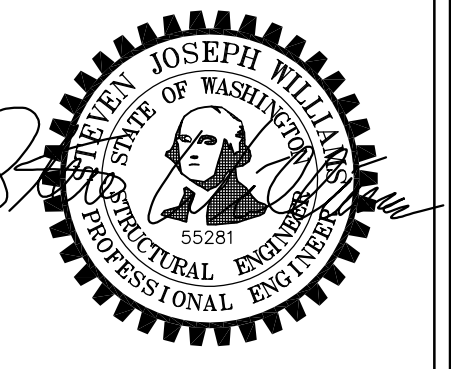
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SEE PERMIT PRCNC20231424 FOR ENERGY REPORT FOR EXTERIOR LIGHTING COMPLIANCE.



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**DEVELOPMENT INFORMATION:**  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

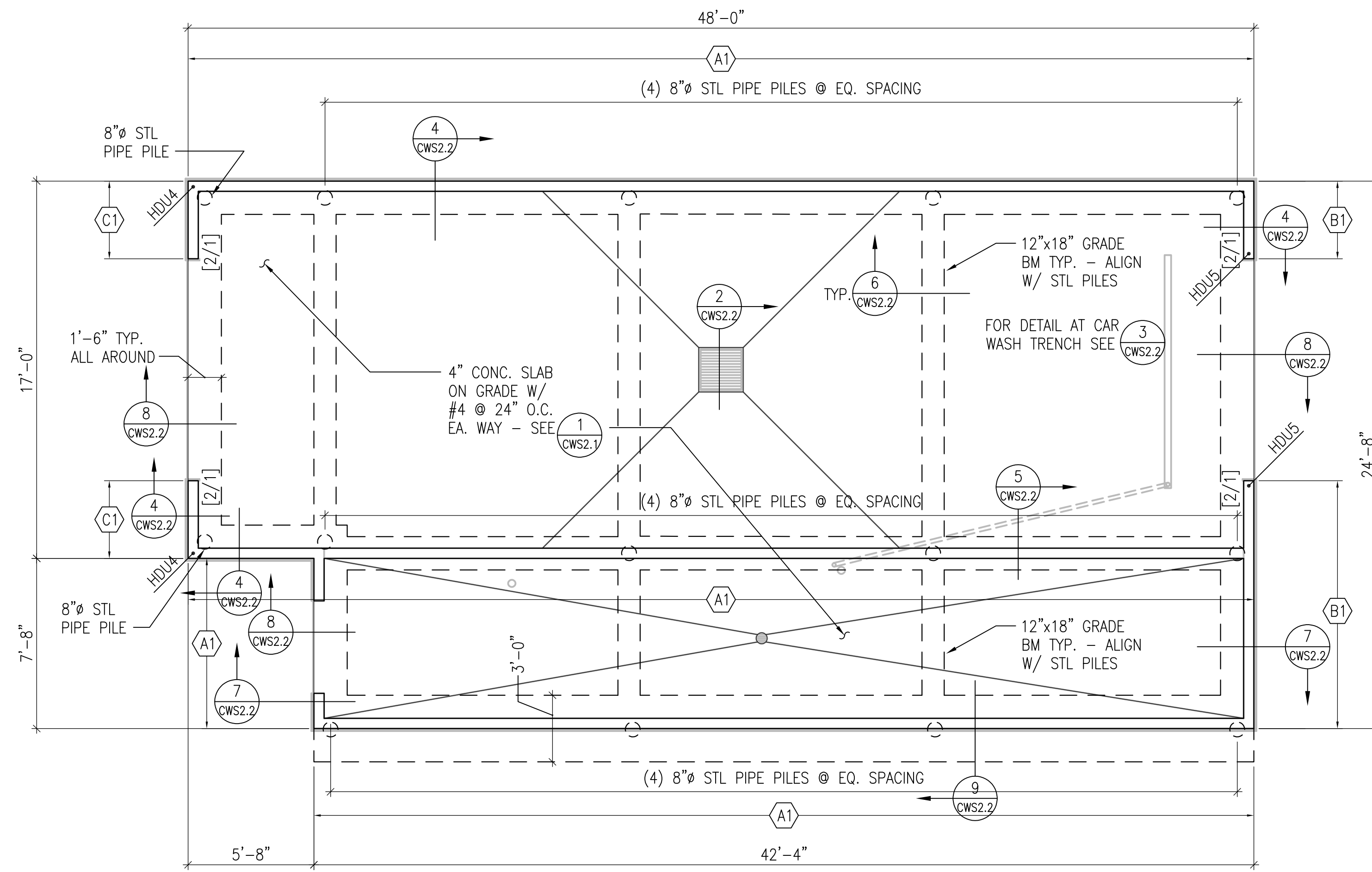
**SITE ADDRESS:**  
1402 S MERIDIAN  
PUYALLUP, WA 98371

**FACILITY #7184**

DESIGNED BY: JPP ALLIANCE ZADM:  
CHECKED BY: BAM BP REPM:  
DRAWN BY: MCS ALLIANCE PM:  
VERSION: - PROJECT NO:  
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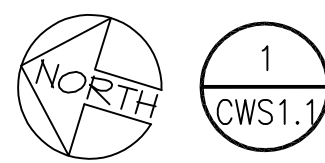
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GENERAL NOTES  
AND HEIGHT BAR  
FOUNDATION DETAIL

SHEET NO:  
**CWS0.2**



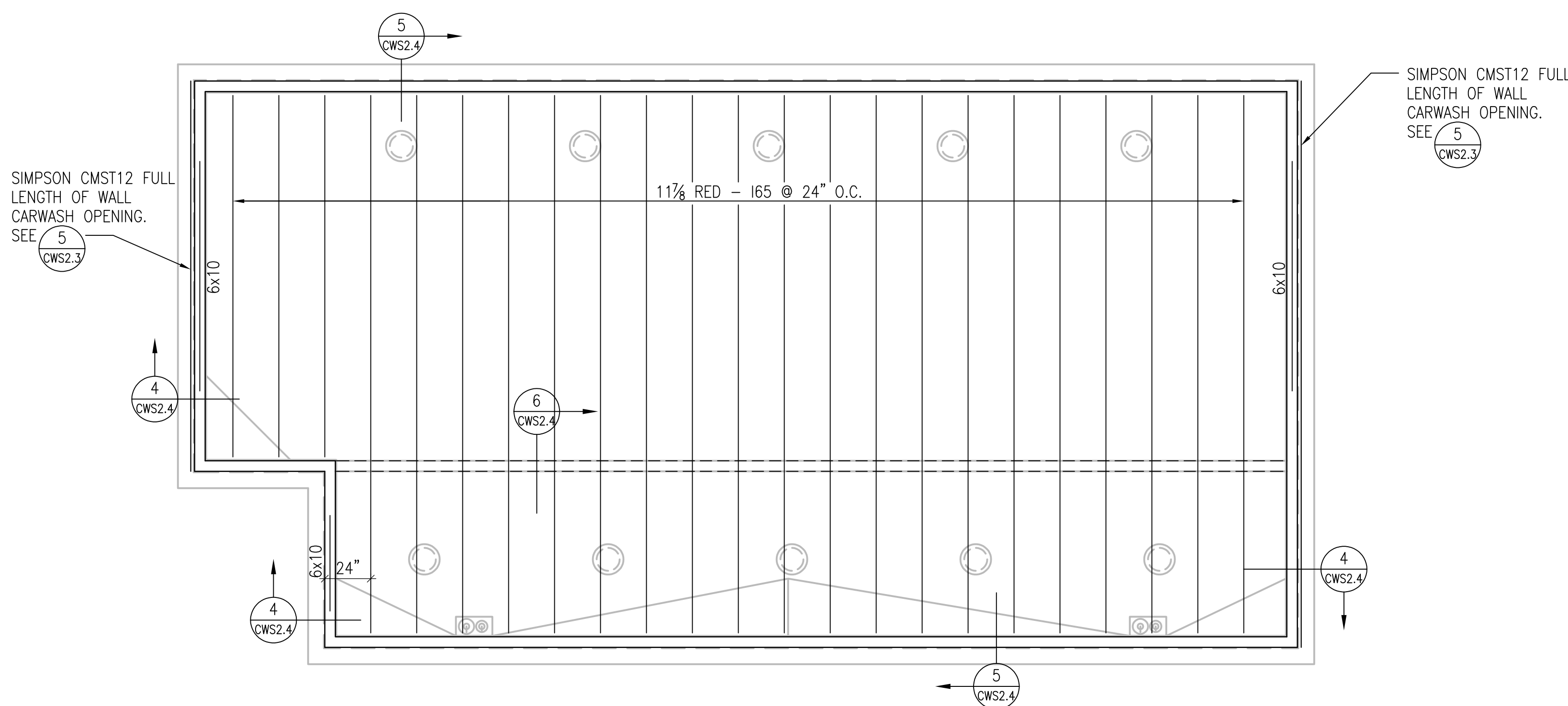
**CAR WASH FOUNDATION PLAN**

1/4"=1'-0"



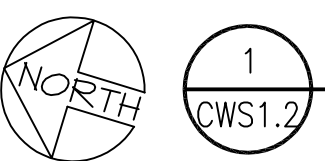
**FOUNDATION NOTES**

- COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. FINISH FLOOR = 0'-0" A.F.F. UNLESS NOTED OTHERWISE.
- INDICATES WOOD STUD WALL. WOOD STUDS SHOULD BE SPACED @ 16" O.C. MAXIMUM UNLESS NOTED OTHERWISE. PROVIDE 1 5/32" WOOD SHEATHING AT ALL EXTERIOR WALLS NAILED WITH 10d @ 6" O.C. AT ALL PANEL EDGES (PROVIDE 2x BLOCKING AT UNSUPPORTED PANEL EDGES) AND 10d @ 12" O.C. AT INTERMEDIATE FRAMING TYPICAL UNLESS NOTED OTHERWISE. SEE NOTE 11 FOR ADDITIONAL SHEAR WALL NAILING.
- INDICATES CONCRETE WALL GRADE BEAM 1'-6" UNLESS NOTED OTHERWISE. SEE CWS2.1 FOR TYPICAL FOUNDATION DETAILS.
- INDICATES HOLDDOWN. SEE 1/CWS2.2, AND 4/CWS2.3.
- INDICATES DEPRESSED OR SLOPED SLABS. FOR SLOPE AND EXACT LOCATION SEE ARCHITECTURAL DRAWINGS.
- FOR TYPICAL CONCRETE SLAB-ON-GRADE DETAILS SEE CWS2.1.
- FOR TYPICAL STEPS IN FOOTING AND FOUNDATION CONSTRUCTION JOINTS SEE DETAILS 4/CWS2.1 AND 1/CWS2.1.
- FOR TYPICAL EXCAVATION LIMITATIONS IN THE PROXIMITY OF FOUNDATIONS SEE 5/CWS2.1.
- A1 INDICATES SPECIAL WOOD STUD SHEAR WALL. SEE 6/CWS2.3 FOR SCHEDULE.
- INDICATES 8" STEEL PIPE PILE BELOW. SEE GENERAL NOTES FOR PILE DETAILS AND INSTALLATION REQUIREMENTS.



**CAR WASH ROOF FRAMING PLAN**

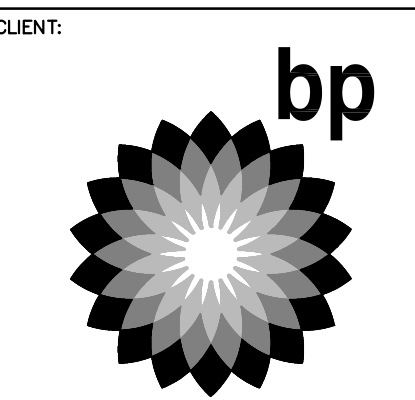
1/4"=1'-0"



**ROOF FRAMING NOTES**

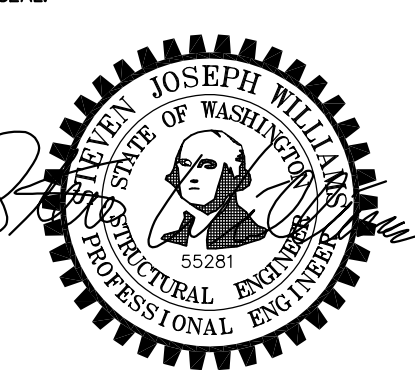
- COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. FINISH FLOOR = 0'-0" A.F.F. UNLESS NOTED OTHERWISE.
- INDICATES STRUCTURAL WALL EXTENDING TO ROOF STRUCTURE.
- INDICATES HEADER IN WALL BELOW SEE 5/CWS2.3.
- INDICATES PENETRATION IN ROOF STRUCTURE.
- PROVIDE 23/32" T&G WOOD SHEATHING OVER ENTIRE ROOF STRUCTURE. NAIL WOOD ROOF SHEATHING WITH 10d @ 6" O.C. AT ALL SUPPORTED PANEL EDGES AND 10d @ 10" O.C. AT INTERMEDIATE FRAMING. TYPICAL UNLESS NOTED OTHERWISE.
- FOR SUPPORT OF MISCELLANEOUS MECHANICAL EQUIPMENT AND PIPES FROM ROOF STRUCTURE SEE CWS2.4.
- ROOF TRUSSES ARE A DEFERRED SUBMITTAL ITEM, SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROJECT STATE, AND THE PACKAGE SHALL BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. SEE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

PRCNC20240007



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**ARCO NTI**  
 3400 am/pm  
 FUEL CANOPY w/ 6 MPD's

1402 S MERIDIAN  
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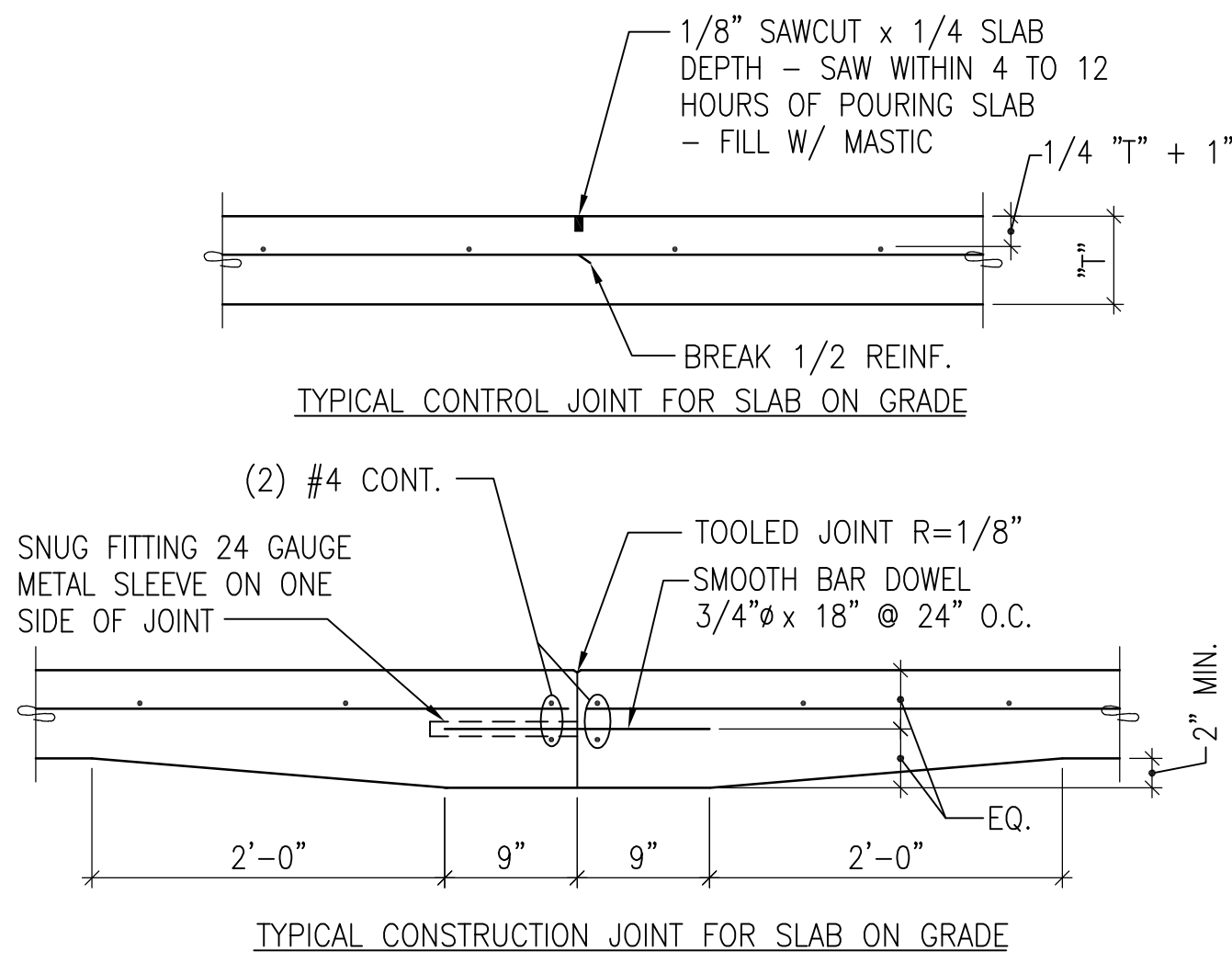
**FACILITY #7184**

DESIGNED BY: JJP ALLIANCE ZADM:  
 CHECKED BY: JJP BP REPM:  
 DRAWN BY: RSC ALLIANCE PM:  
 VERSION: - PROJECT NO:  
 - 21730

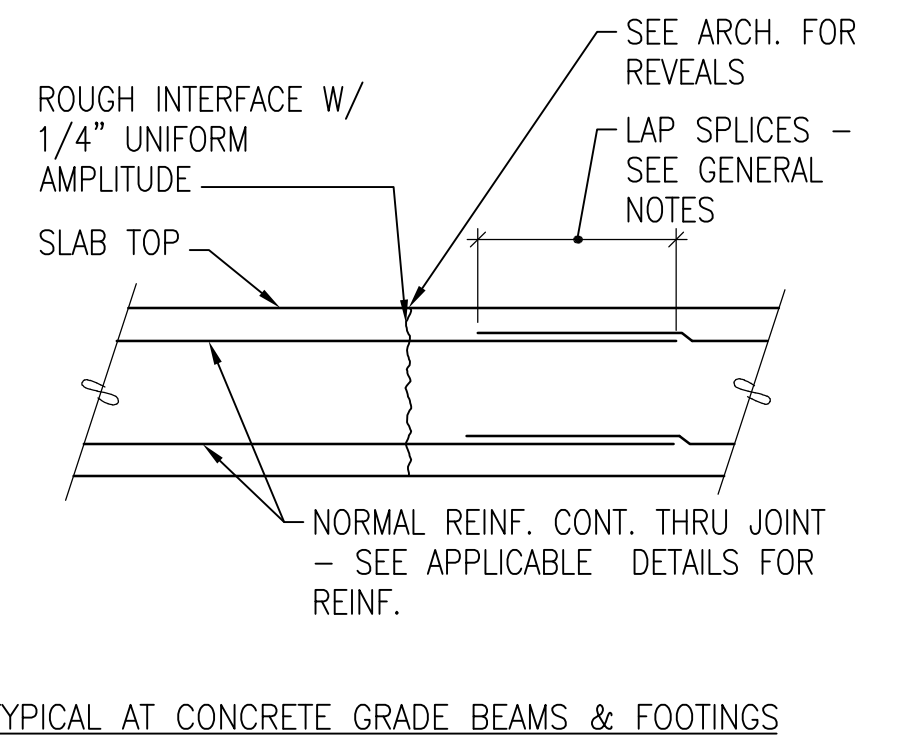
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SHEET NO:

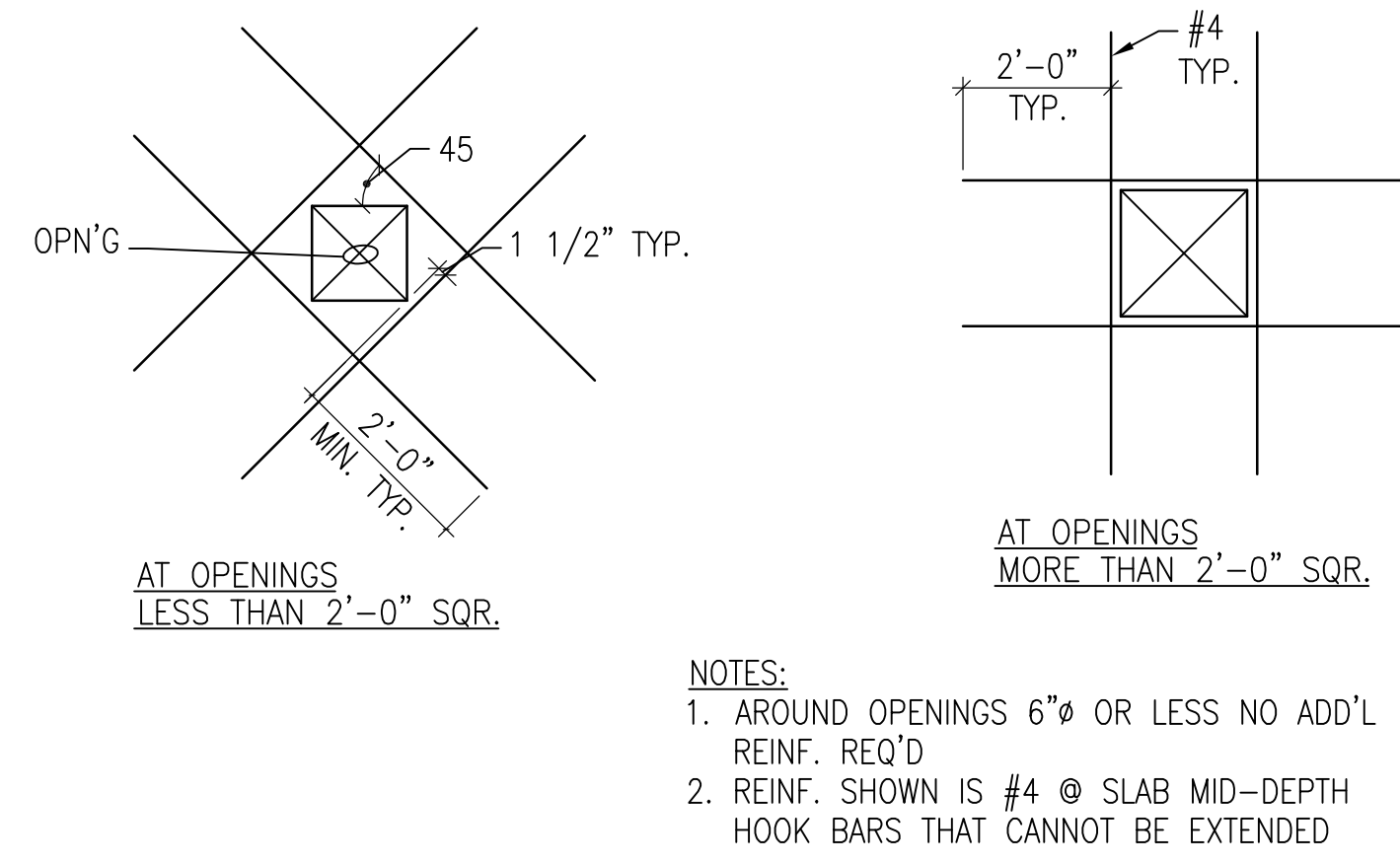
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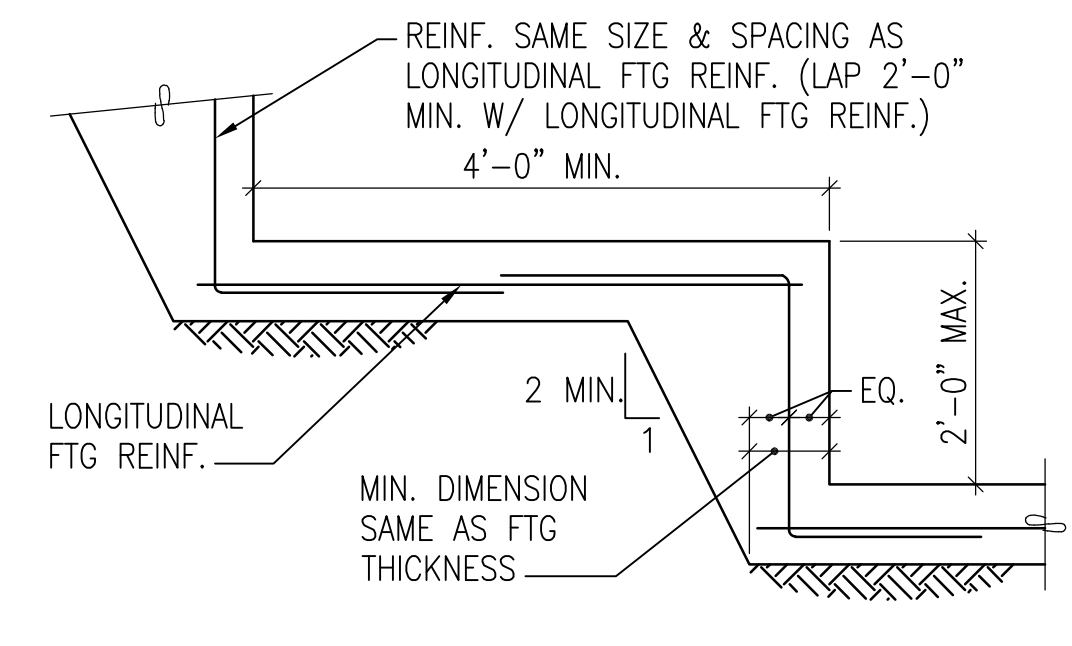
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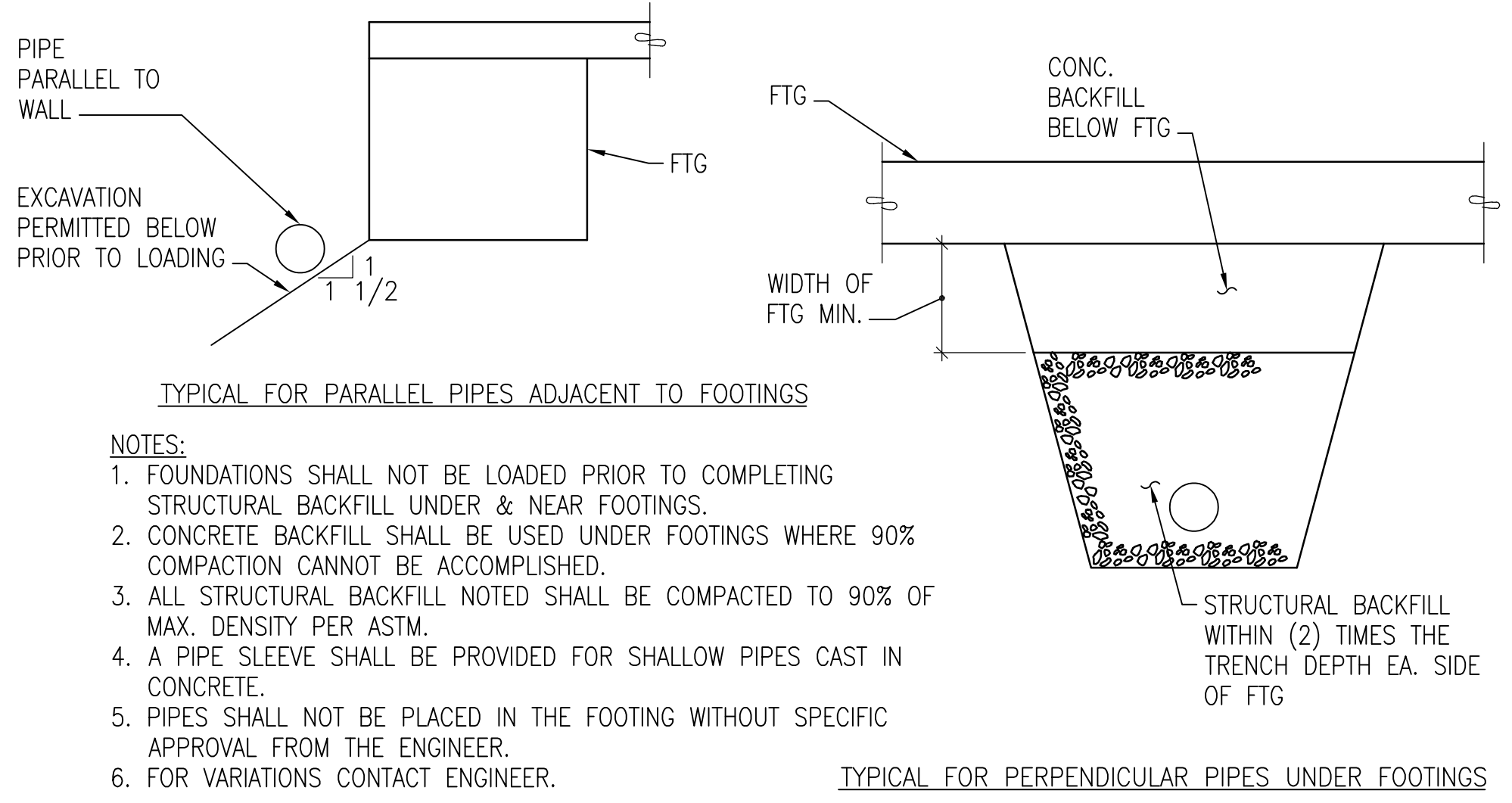
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**3 PLAN DETAILS**  
NO SCALE



**4 DETAIL**  
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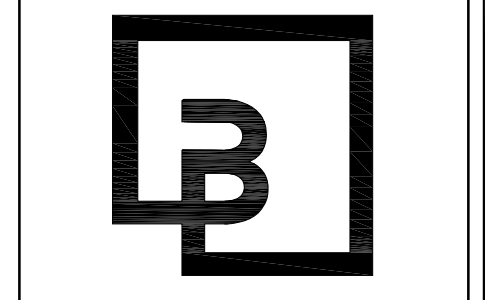


**5 SECTION**  
NO SCALE

NOTES:  
1. AROUND OPENINGS 6"Ø OR LESS NO ADD'L REINF. REQ'D  
2. REINF. SHOWN IS #4 @ SLAB MID-DEPTH HOOK BARS THAT CANNOT BE EXTENDED

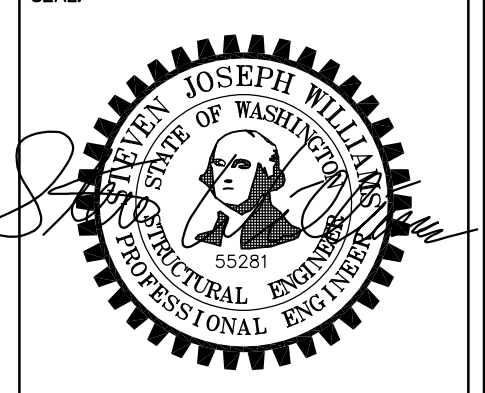
NOTES:  
1. FOUNDATIONS SHALL NOT BE LOADED PRIOR TO COMPLETING STRUCTURAL BACKFILL UNDER & NEAR FOOTINGS.  
2. CONCRETE BACKFILL SHALL BE USED UNDER FOOTINGS WHERE 90% COMPACTION CANNOT BE ACCOMPLISHED.  
3. ALL STRUCTURAL BACKFILL NOTED SHALL BE COMPACTED TO 90% OF MAX. DENSITY PER ASTM.  
4. A PIPE SLEEVE SHALL BE PROVIDED FOR SHALLOW PIPES CAST IN CONCRETE.  
5. PIPES SHALL NOT BE PLACED IN THE FOOTING WITHOUT SPECIFIC APPROVAL FROM THE ENGINEER.  
6. FOR VARIATIONS CONTACT ENGINEER.

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18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

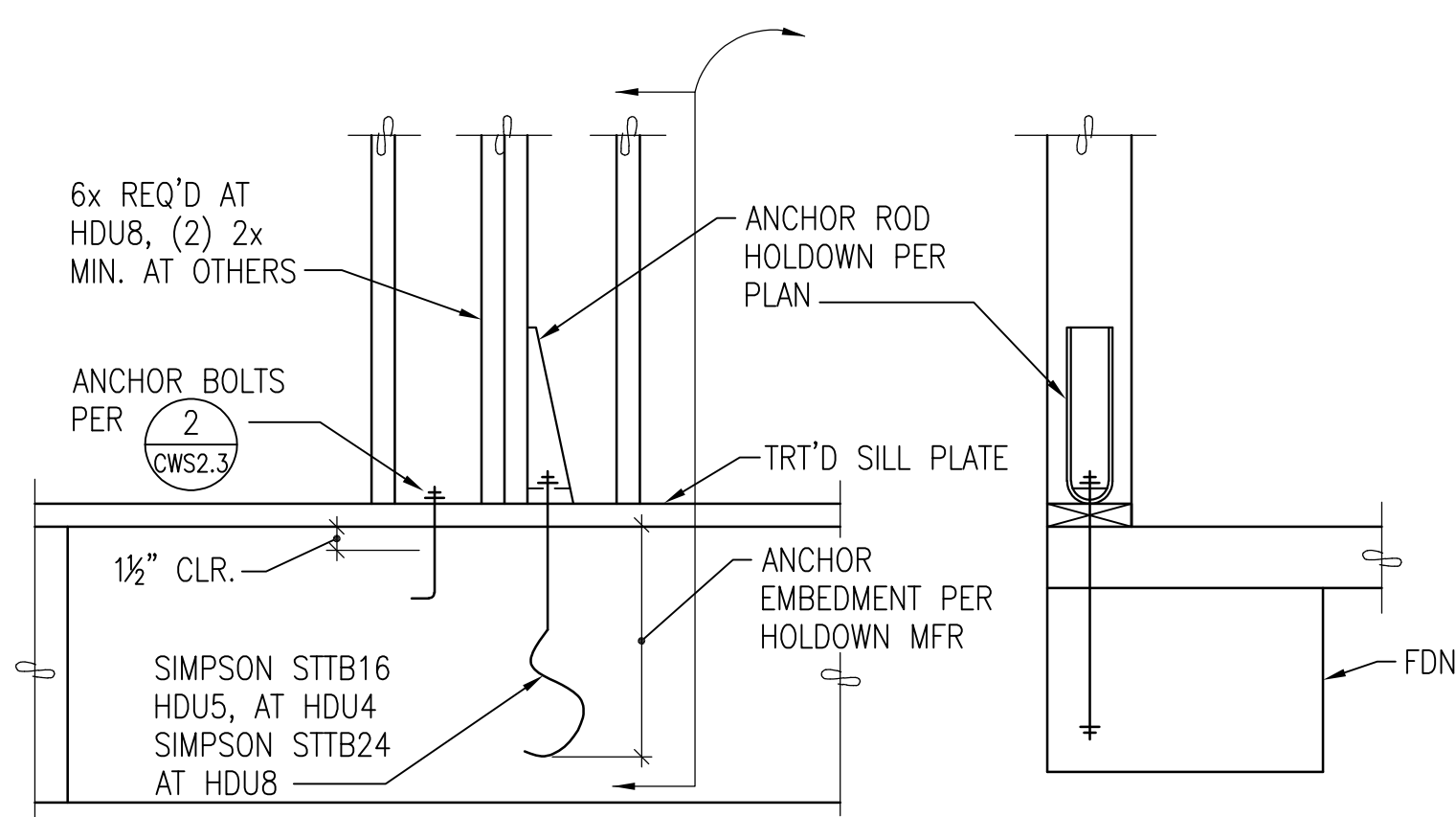
SITE ADDRESS:  
**1402 S MERIDIAN**  
PUYALLUP, WA 98371

**FACILITY #7184**

DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REPM:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
- 21730

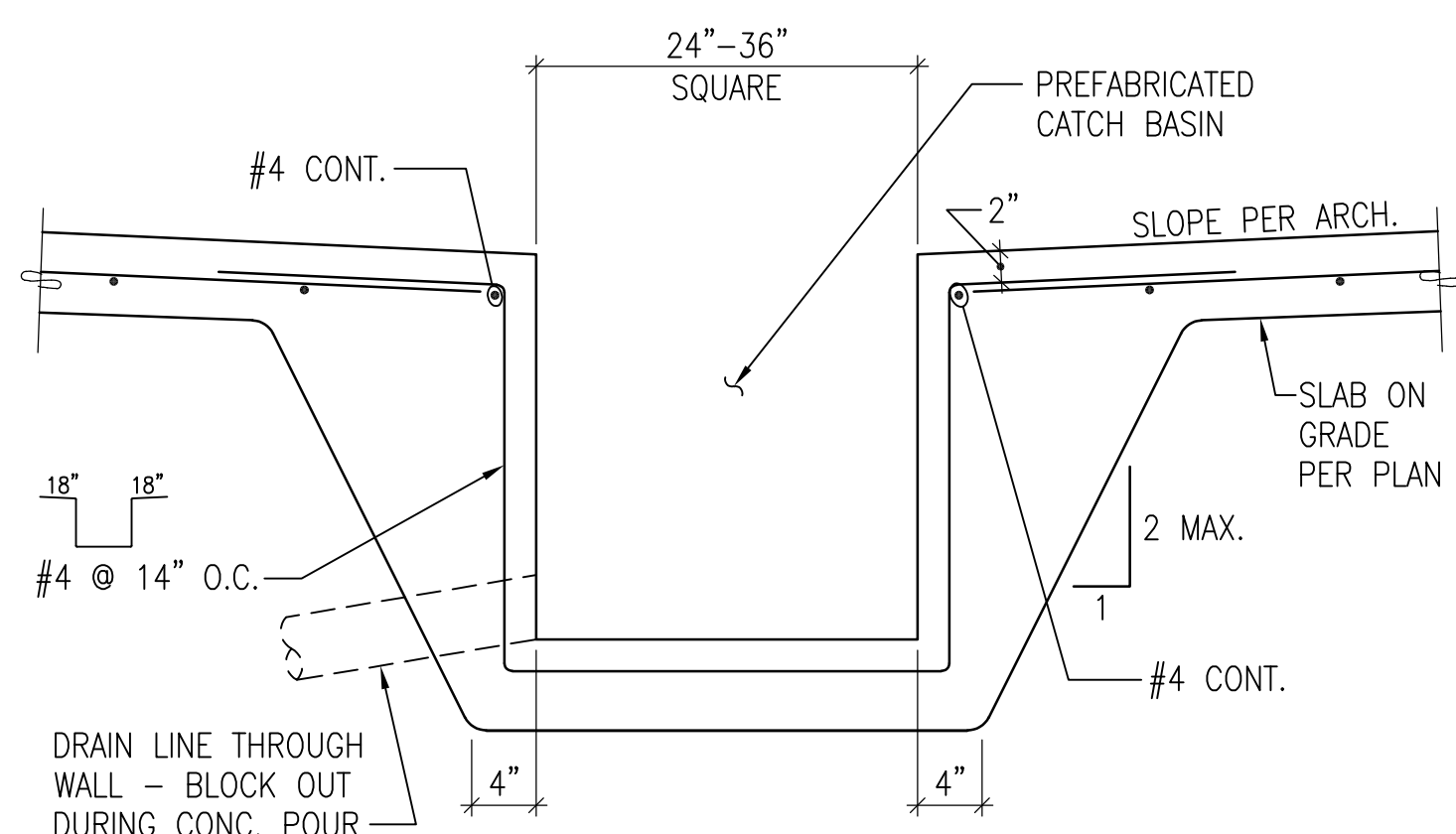
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SHEET NO:  
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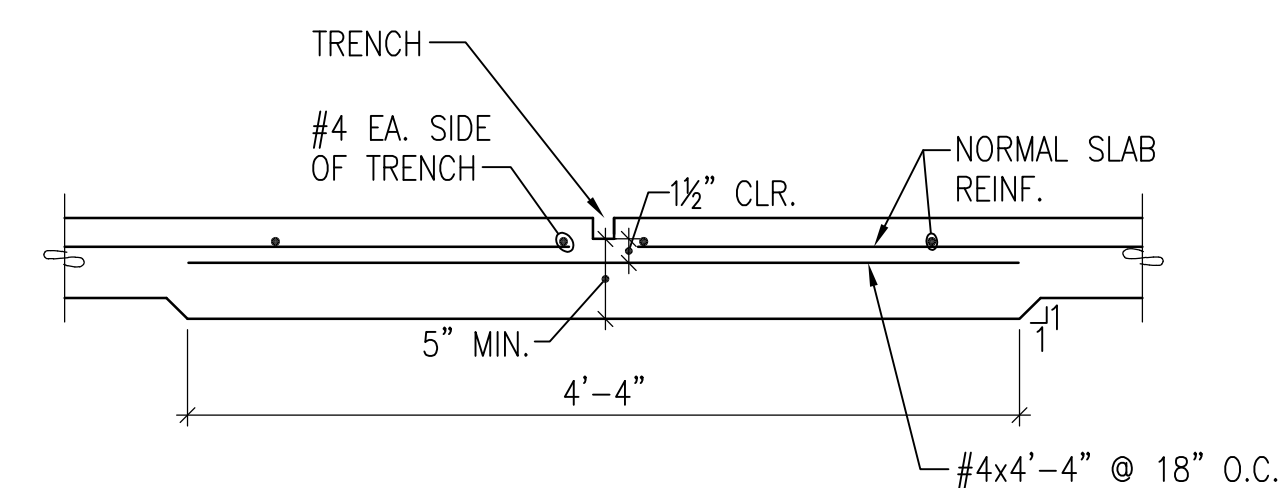


TYPICAL FOUNDATION ANCHOR ROD HOLDOWN

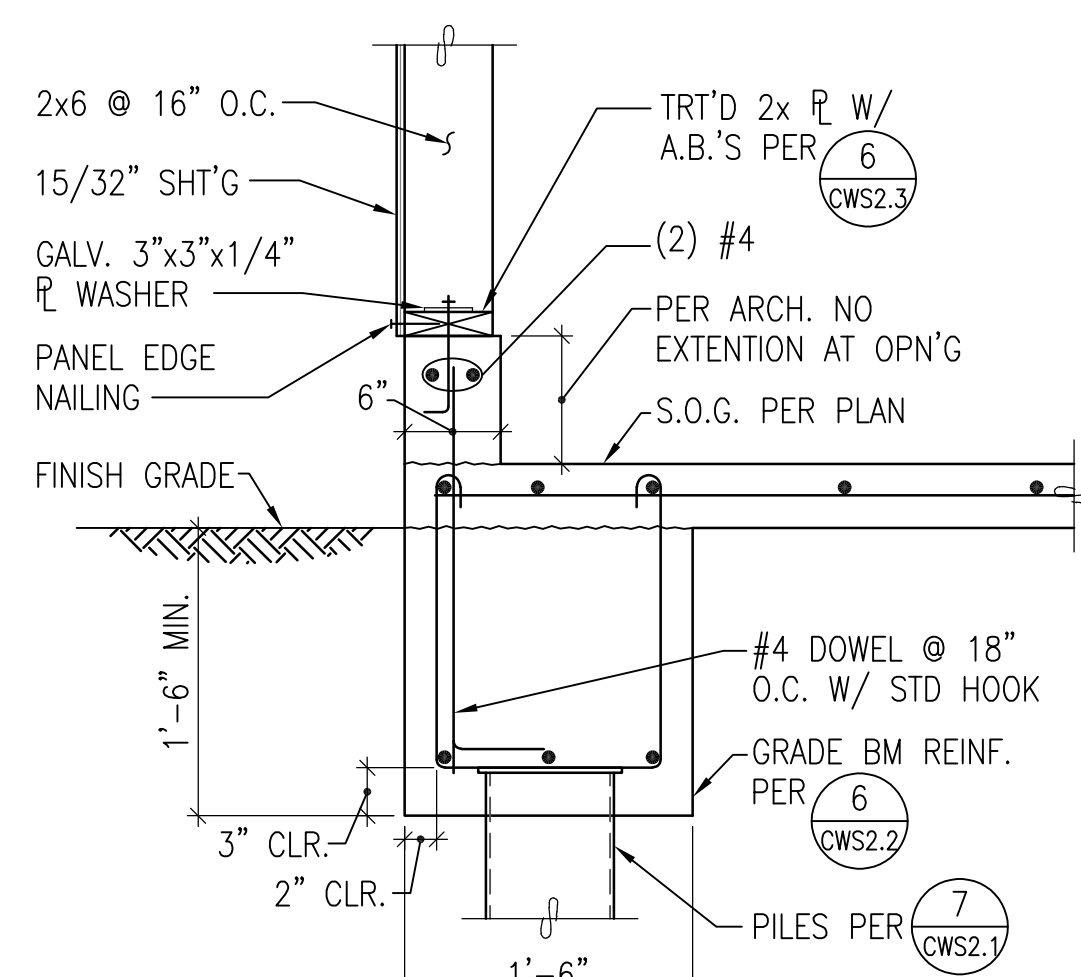
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CWS2.2  
**DETAIL**  
NO SCALE



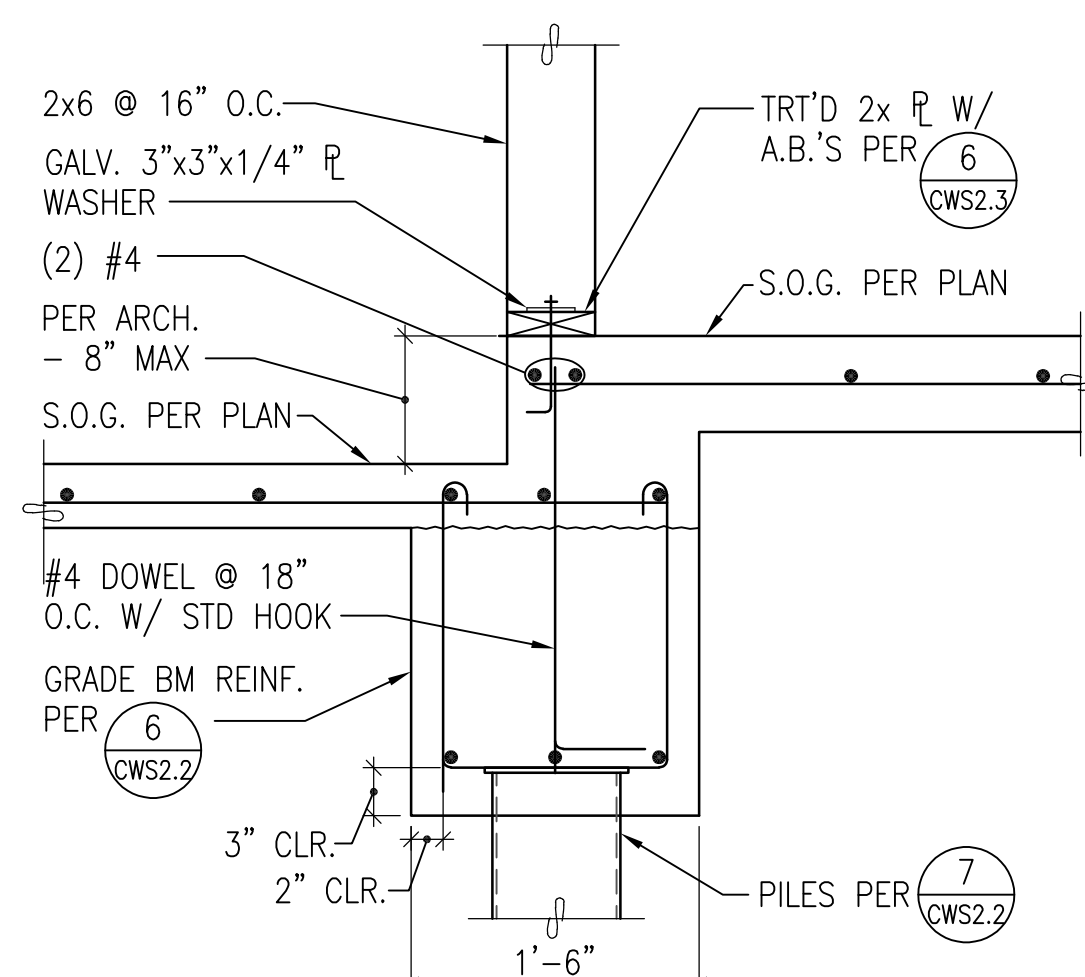
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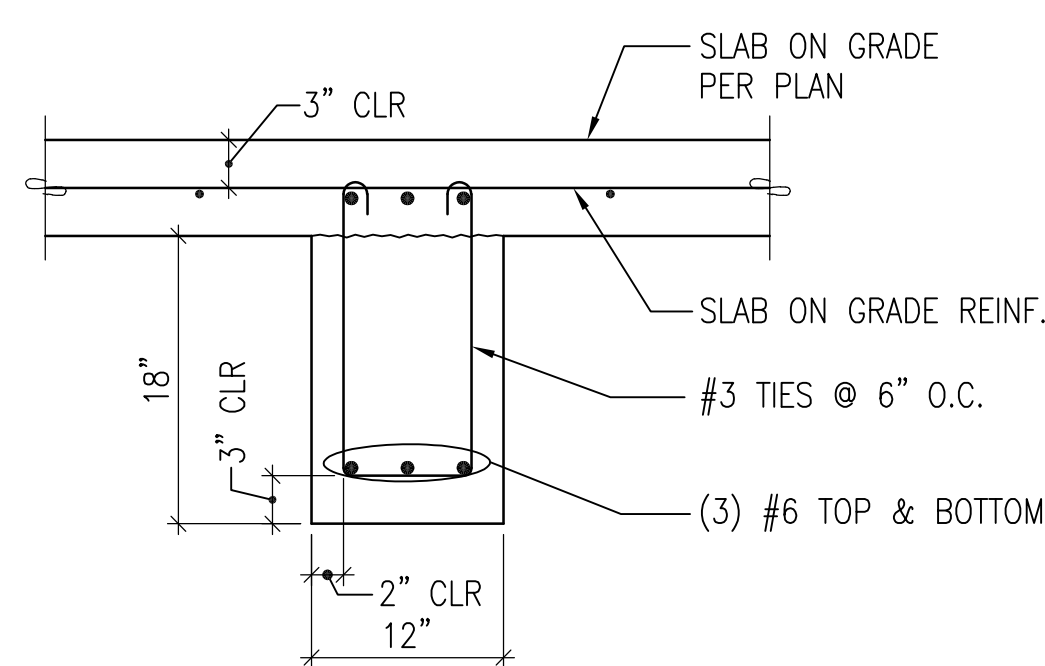
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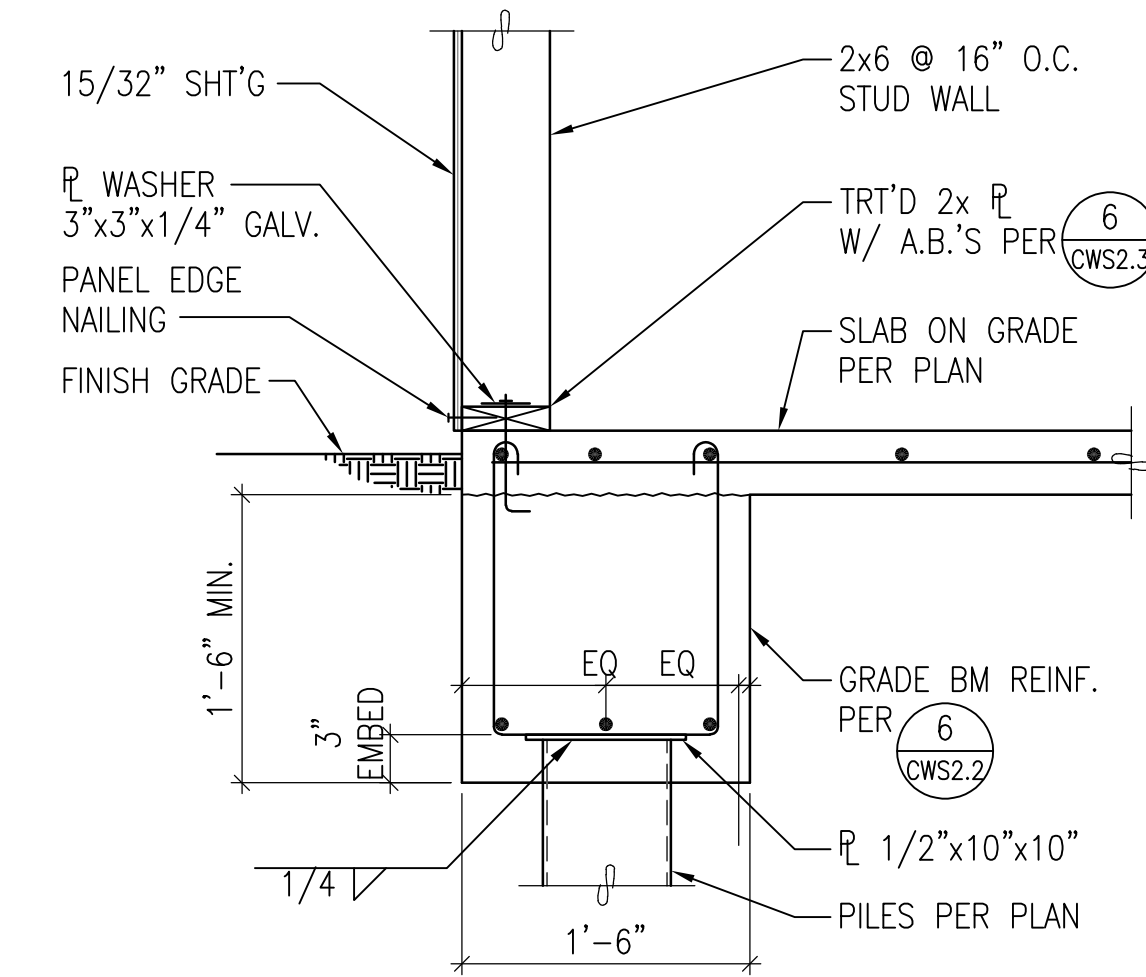
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CWS2.2  
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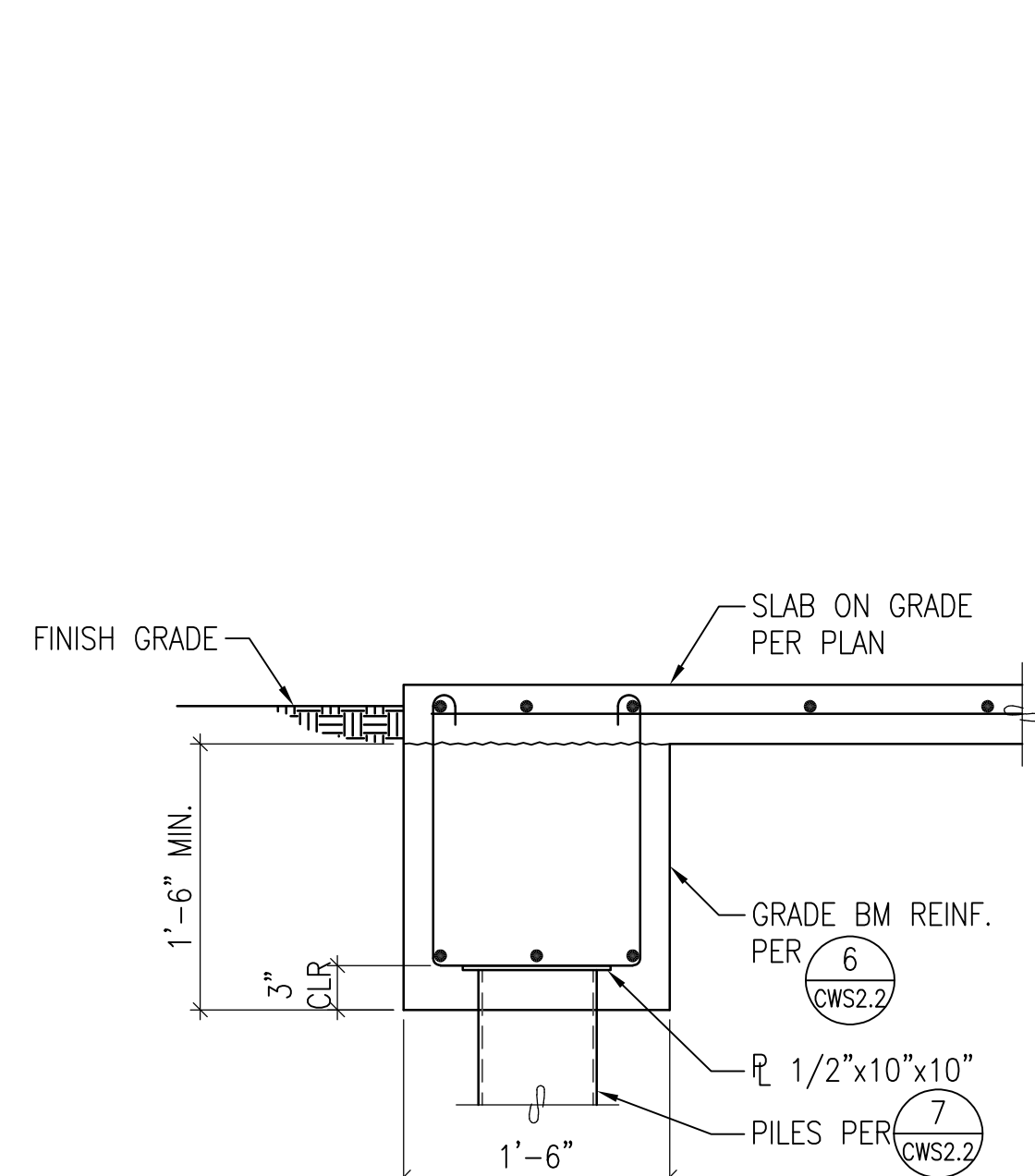
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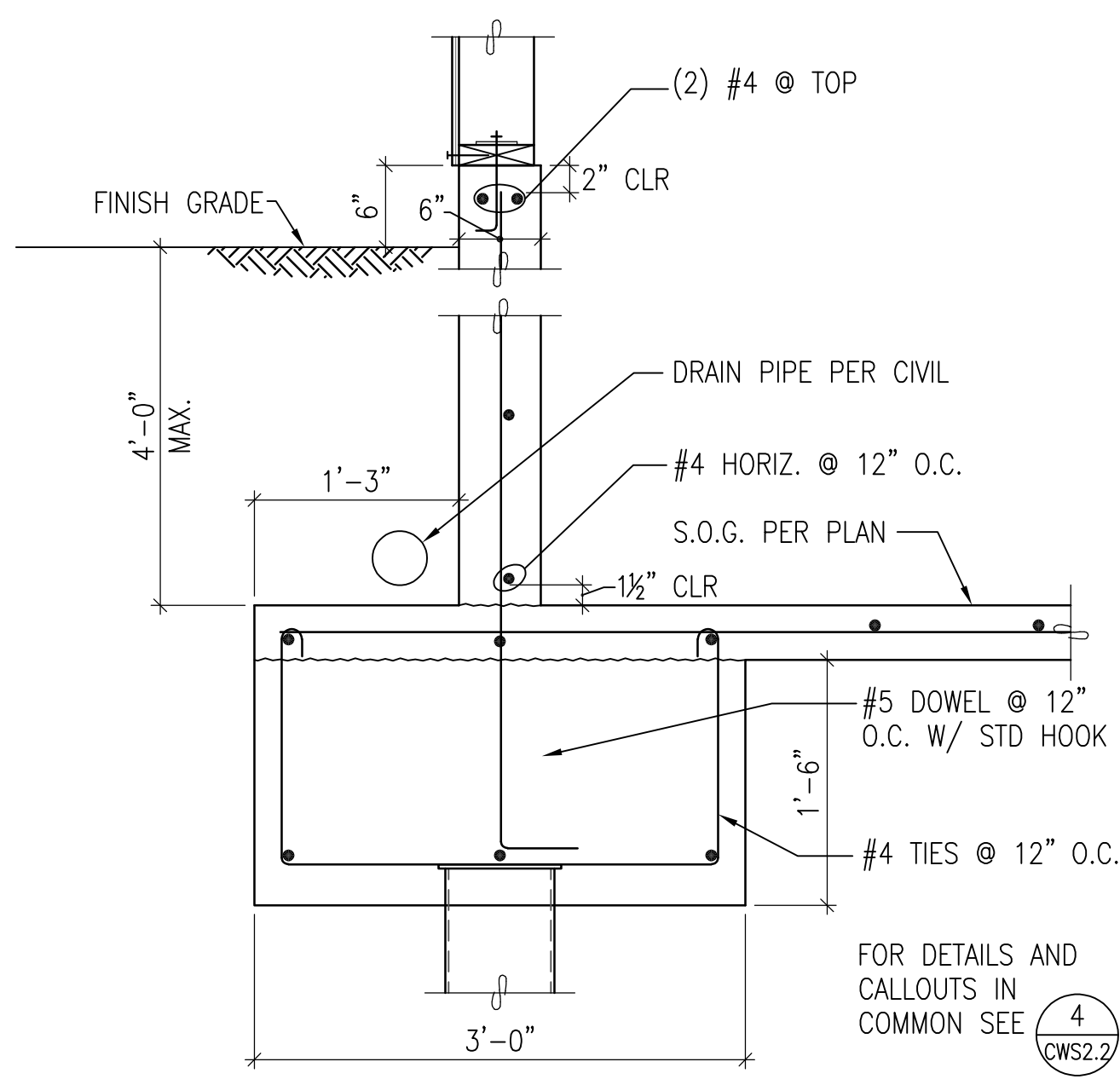
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**7**  
CWS2.2  
**SECTION**  
1\"/>



**8**  
CWS2.2  
**SECTION**  
1\"/>



**9**  
CWS2.2  
**SECTION**  
NO SCALE

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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

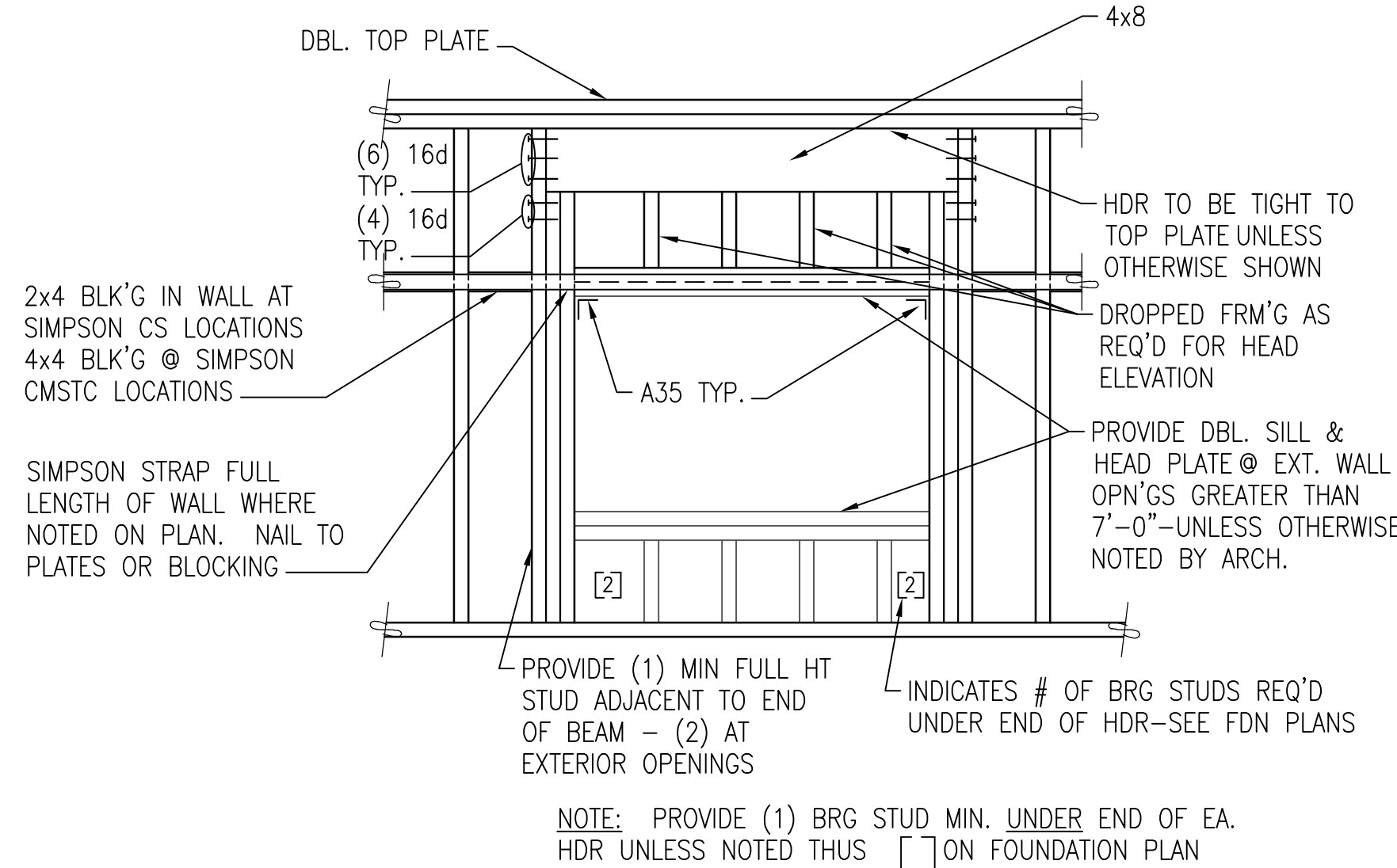
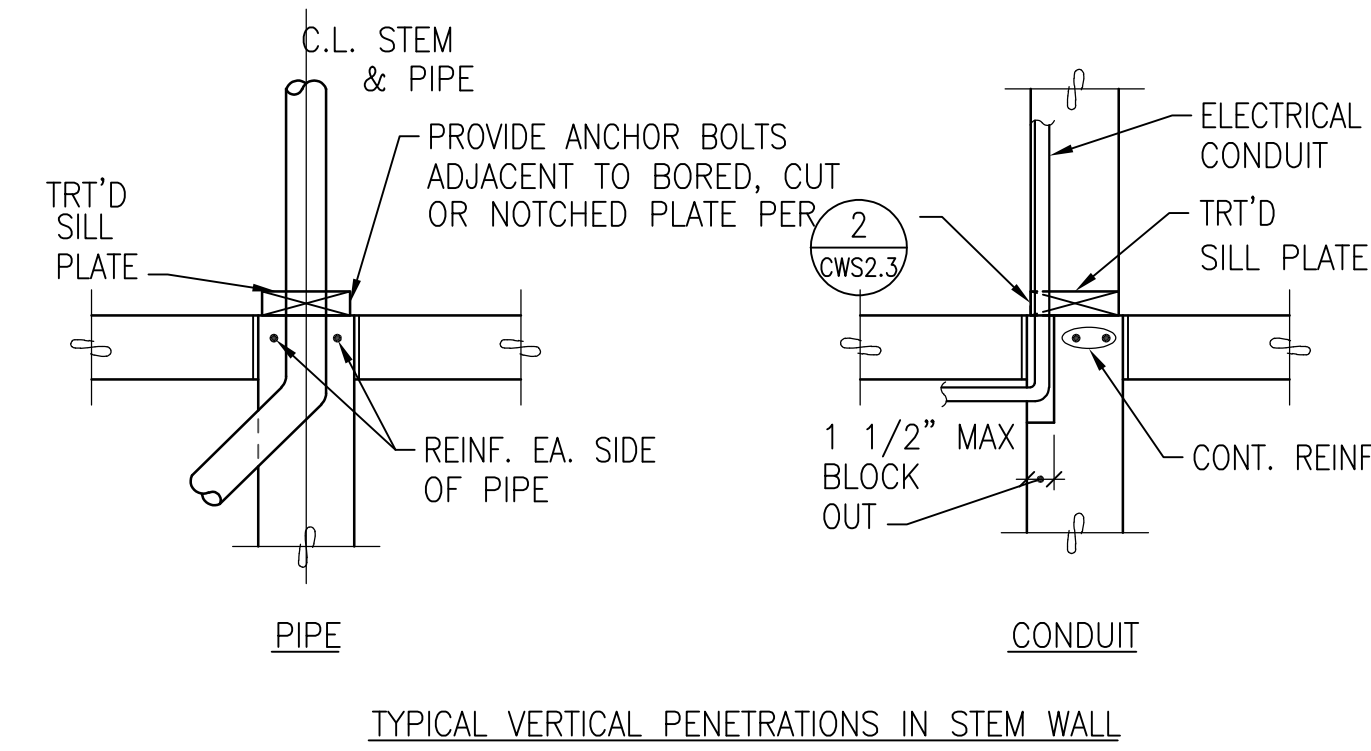
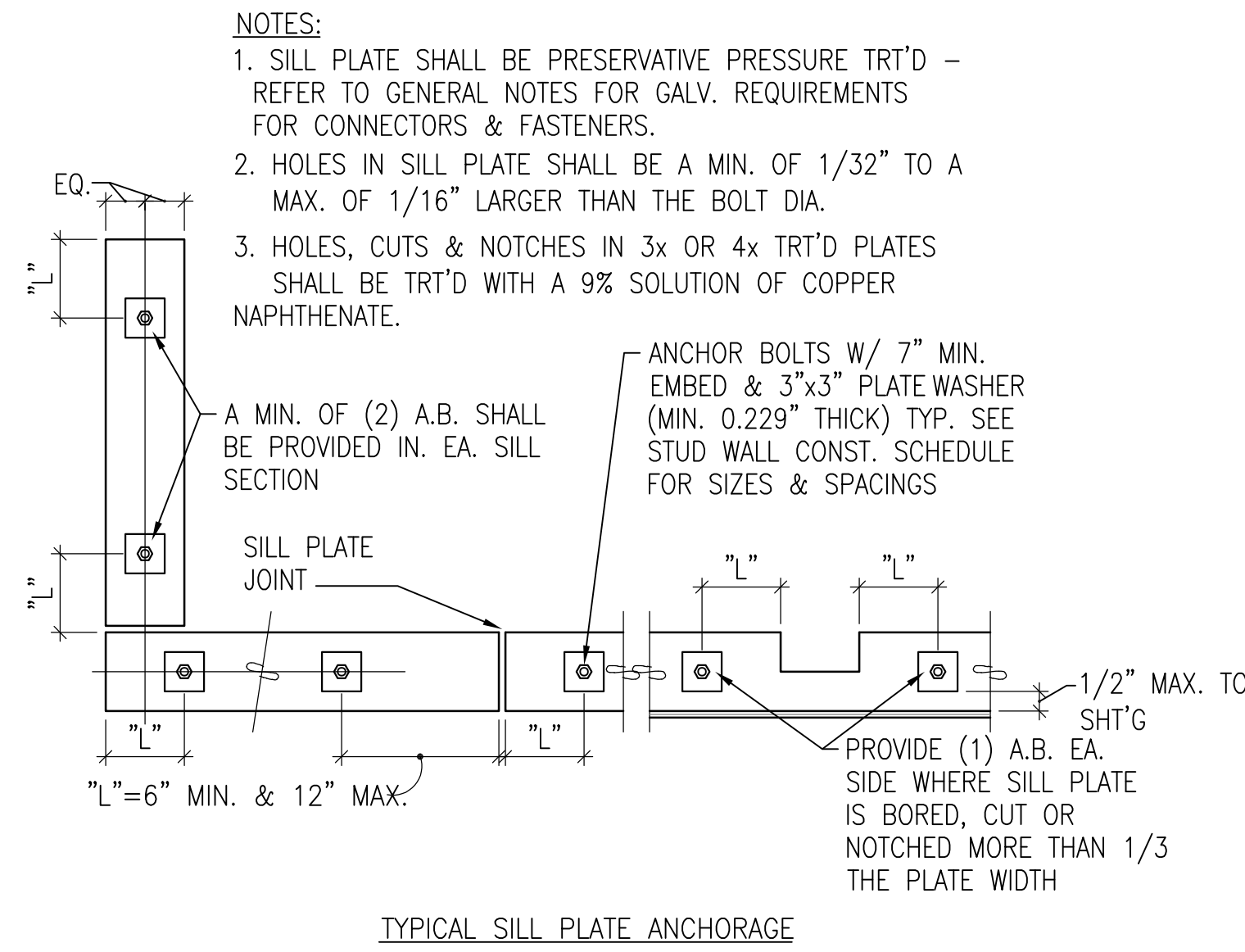
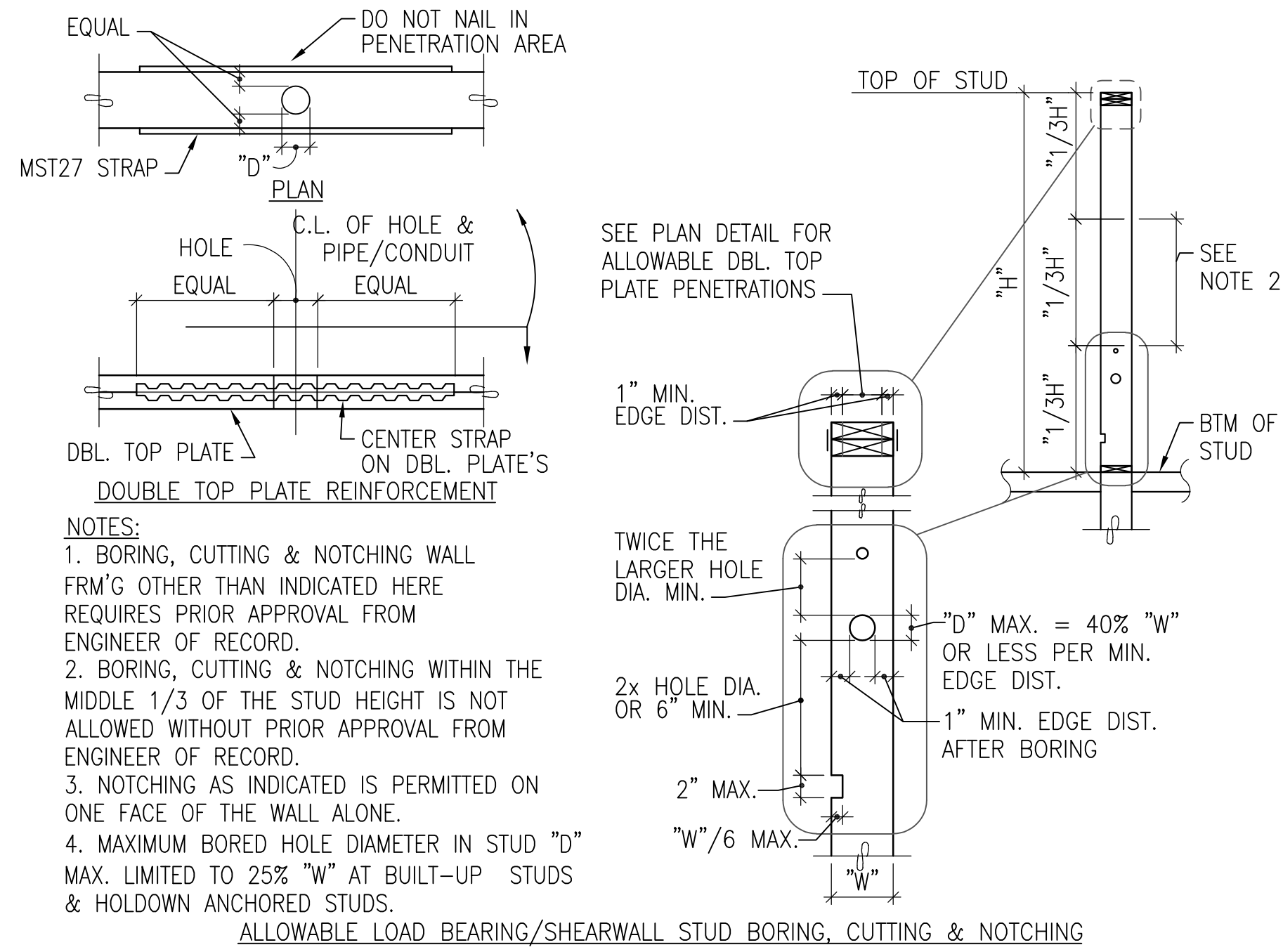
SITE ADDRESS:  
**1402 S MERIDIAN**  
PUYALLUP, WA 98371

**FACILITY #7184**

DESIGNED BY: ALLIANCE ZADM;  
CHECKED BY: BP REPA;  
DRAWN BY: ALLIANCE PM;  
VERSION: PROJECT NO:  
- 21730

DRAWING TITLE:  
**DETAILS**

SHEET NO:  
**CWS2.2**



**SPECIAL SHEAR WALL CONSTRUCTION SCHEDULE**

TABLE 1 - SHEAR WALL REQUIREMENTS

MARK	SHEATHING REQUIREMENTS	EDGE NAILING	FIELD NAILING	SOLE NAILING	5/8" ANCHOR BOLT SPACING (7" EMBED)
A	15/32"	10d @ 6" O.C.	10d @ 12" O.C.	16d @ 6" O.C.	48" O.C.
B	15/32"	10d @ 4" O.C.	10d @ 12" O.C.	1/4" SDS SCREWS @ 3" O.C.	16" O.C.
C	15/32"	10d @ 3" O.C.	10d @ 12" O.C.	1/4" SDS SCREWS @ 3" O.C.	16" O.C.

TABLE 2 - STUD SPACING REQUIREMENTS

MARK	STUD SIZE & SPACING	# STUDS REQ'D AT MEMBER BRG
1	2x6 @ 16" O.C.	(1)

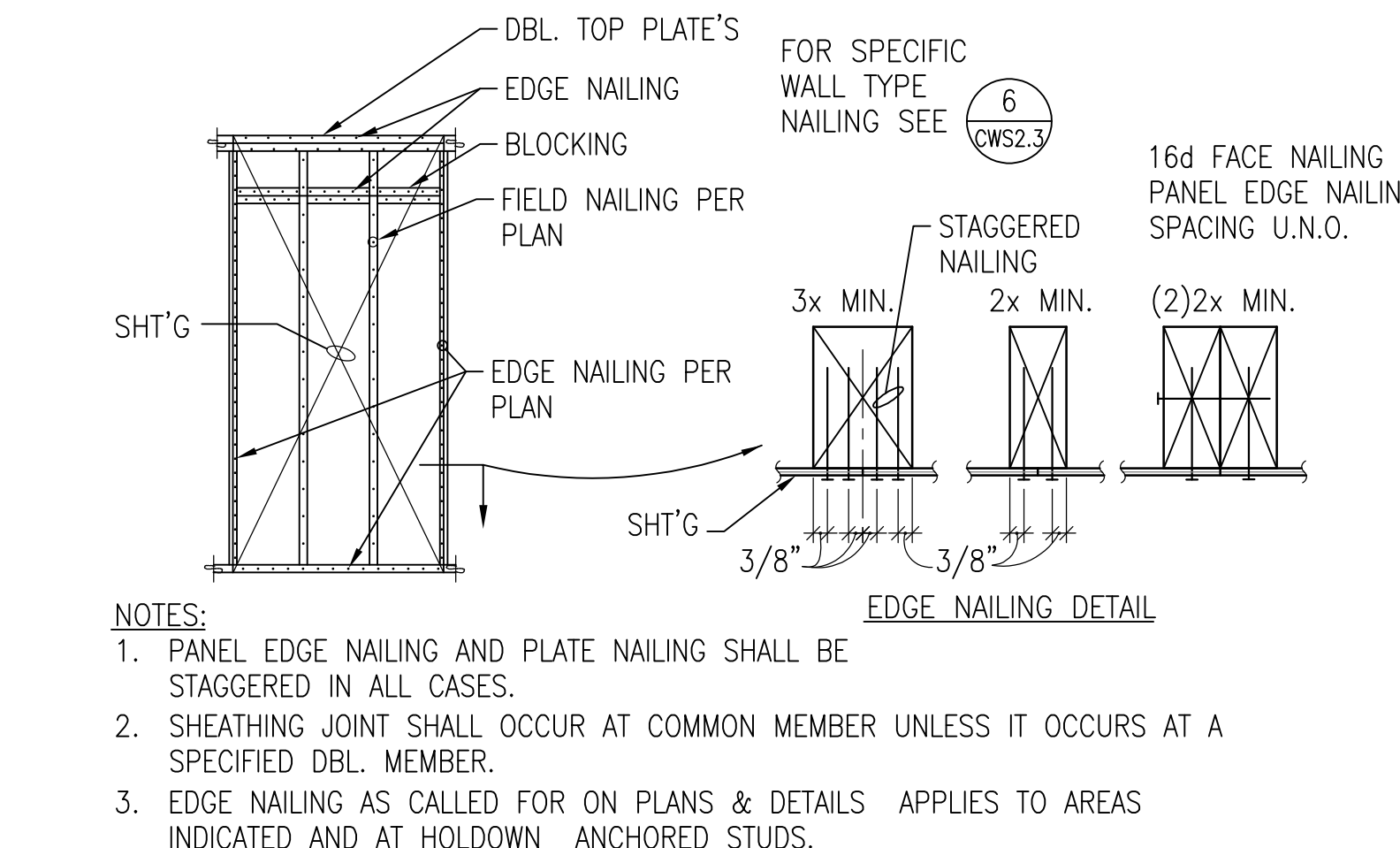
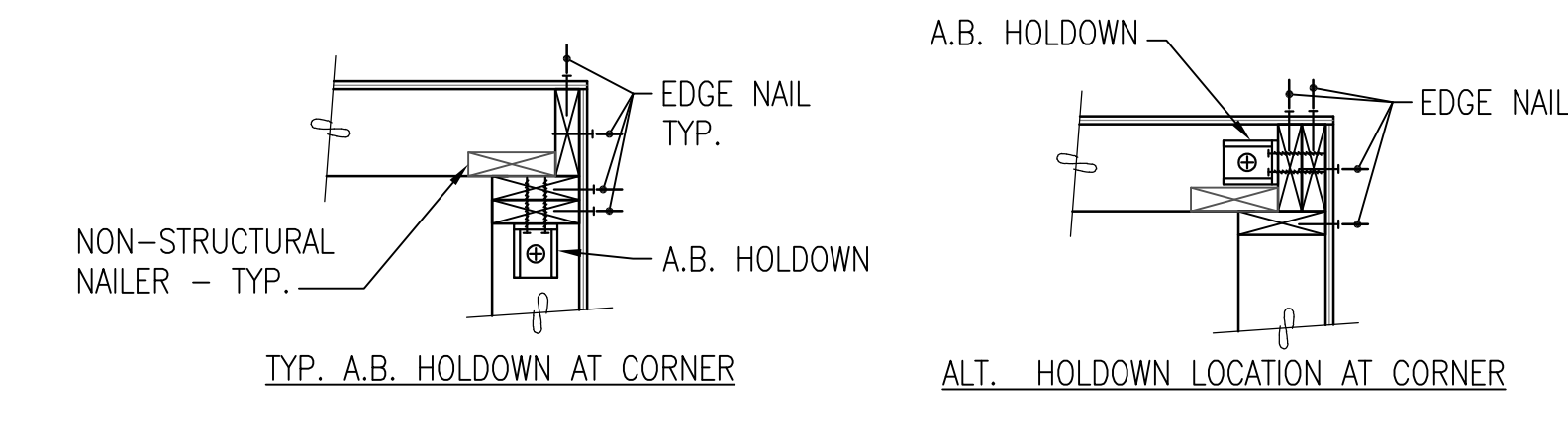
NOTES:  
1. (XX) INDICATES SPECIAL STRUCTURAL WALL TYPE. ALL WALLS SHOWN ON STRUCTURAL DRAWINGS ARE 2x6 AT 16" O.C. UNLESS DESIGNATED SPECIAL. STUD LAYOUT SHALL MATCH FRM'G MEMBER LAYOUT ABOVE WHERE APPLICABLE. ALL EXTERIOR WALLS SHALL HAVE 15/32" WOOD SHEATHING AND BE NAILED WITH 10d AT 6" O.C. AT EDGES AND 12" O.C. IN FIELD UNLESS DESIGNATED SPECIAL.

2. ALL EXTERIOR WALLS AND ALL DESIGNATED SHEAR WALLS SHALL BE BLOCKED AT ALL SHEATHING EDGES, EDGE NAILING APPLIES TO ALL TOP AND BOTTOM PLATES, VERTICAL JOINTS, HORIZONTAL BLOCKED JOINTS, WALL CORNERS, AND HOLDOWN ANCHORED STUDS.

3. WHERE BEAMS OR HEADERS FRAME INTO WALLS AND A COLUMN IS NOT CALLED OUT, PROVIDE BUILT-UP COLUMN

4. PROVIDE 3x OR DOUBLE 2x MEMBERS FACE NAILED PER 7/CWS2.3 AT ALL ABUTTING PANEL EDGES WHERE INDICATED.

5. WHERE SOLID SAWN STUD LENGTH CANNOT BE OBTAINED, SCL STUDS MAY BE SUBSTITUTED. SOLID SAWN FRAMING MAY NOT BE SUBSTITUTED FOR SPECIFIED SCL FRAMING.



CLIENT:

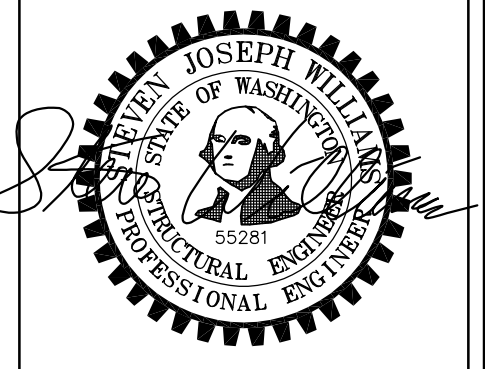
BP WEST COAST PRODUCTS, LLC

**Barghausen Consulting Engineers, Inc.**

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Kent, WA 98032  
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DEVELOPMENT INFORMATION:

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DEVELOPMENT INFORMATION:

**ARCO NTI**

**3400 am/pm FUEL CANOPY w/ 6 MPD'S**

SITE ADDRESS:  
**1402 S MERIDIAN**  
PUYALLUP, WA 98371

**FACILITY #7184**

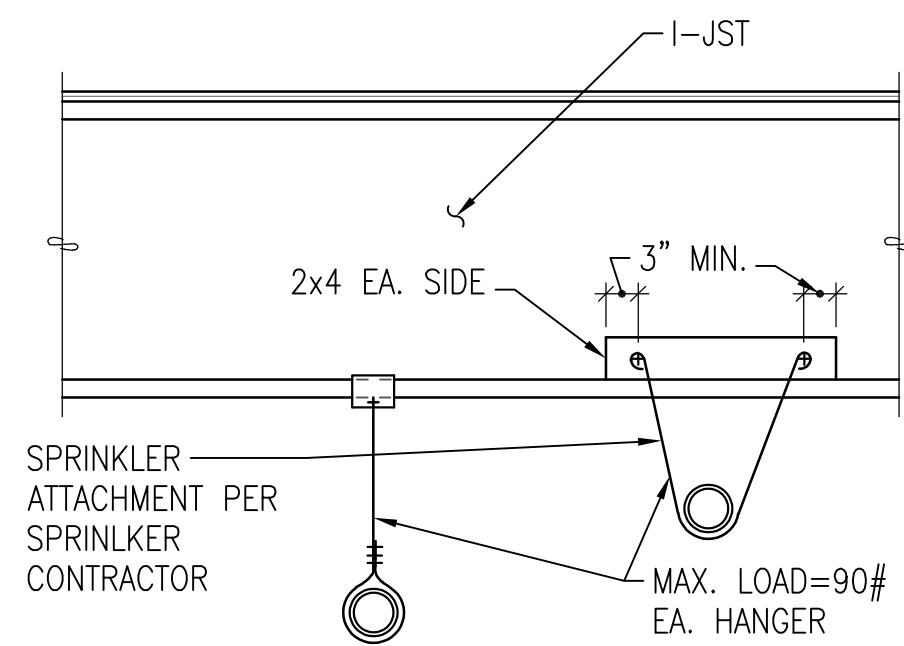
DESIGNED BY: ALLIANCE TAMM  
CHECKED BY: BP REPM  
DRAWN BY: ALLIANCE PM  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**DETAILS**

SHEET NO:  
**CWS2.3**

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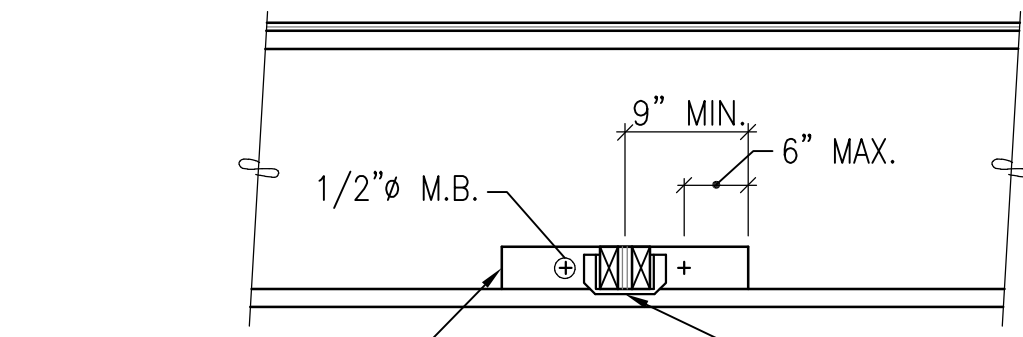




NOTE: FOR LINES GREATER THAN 3" HANG FROM GLULAM BEAMS OR STUD WALL OR HANG PER DETAIL OR SUPPORT OFF WALLS WHEN SPECIFICALLY APPROVED BY STRUCTURAL ENGINEER.

TYPICAL SPRINKLER LINE ATTACHMENT FOR LINES 3" OR SMALLER

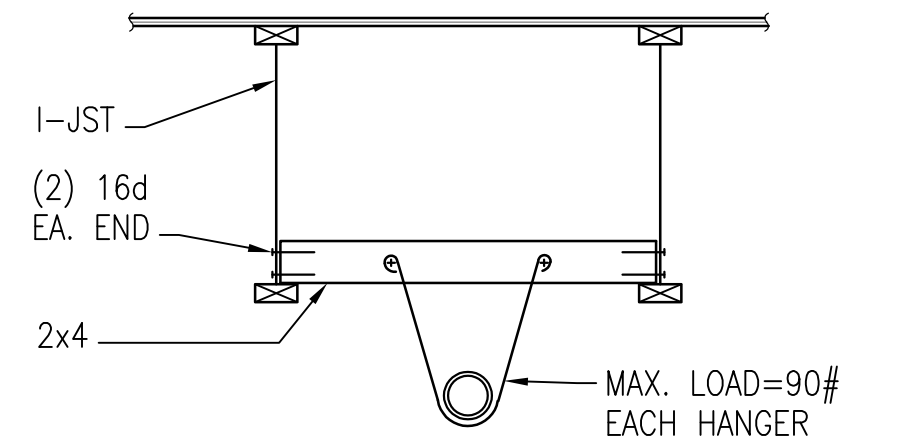
SECTION 1 NO SCALE



NOTES:  
 1. ALL FRAMING SHOWN BY GENERAL CONTRACTOR (EXCEPT BY SPRINKLER CONTRACTOR IF USED FOR SPRINKLER LINES.)  
 2. DO NOT CUT OR DRILL THRU JOIST.  
 3. MAX. SUPPORT LOAD = 500#.

TYPICAL DETAIL FOR HANGING LOADS FROM I-JOIST (ALL HEAT PUMPS, R FANS OR F FANS OVER 90#)

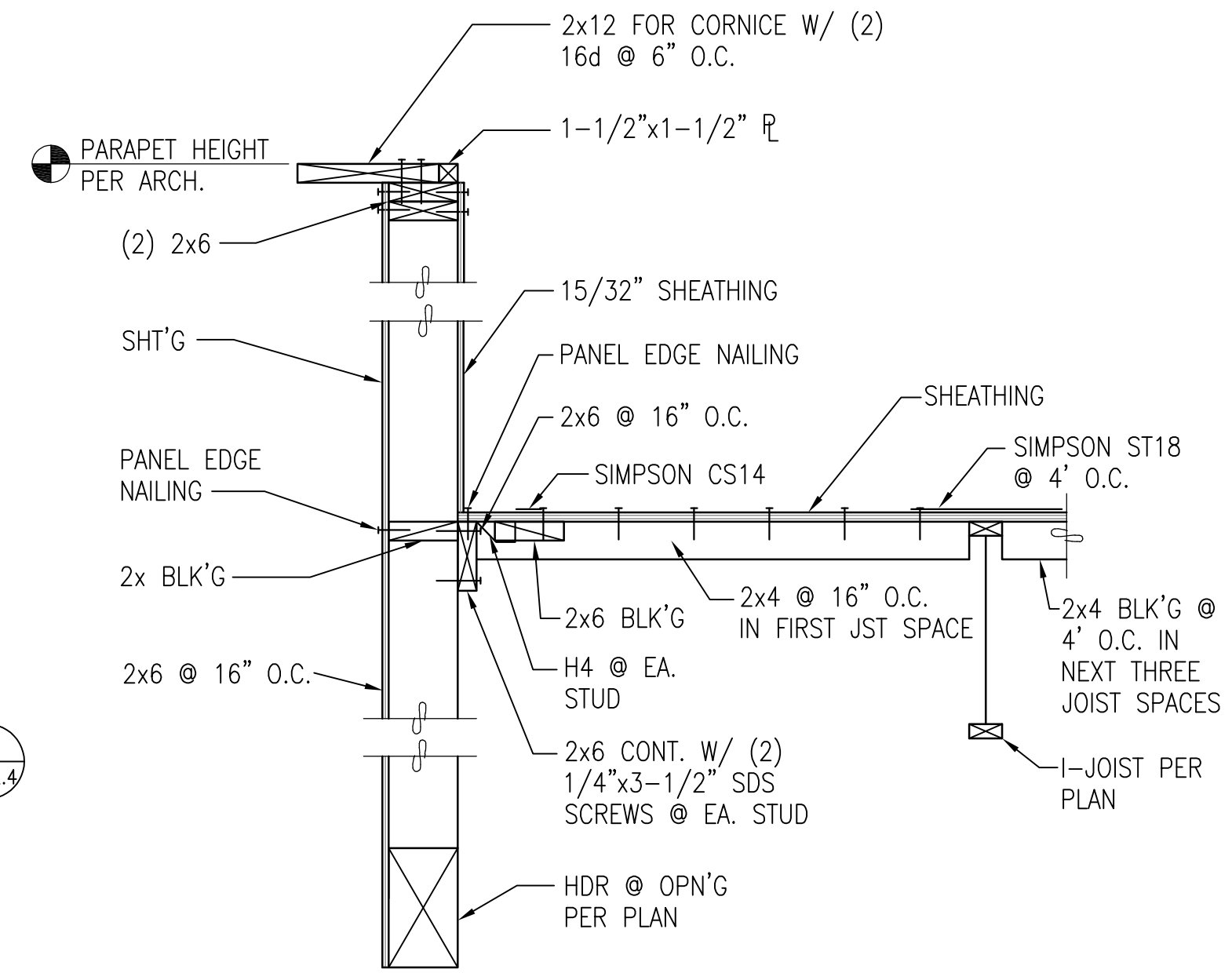
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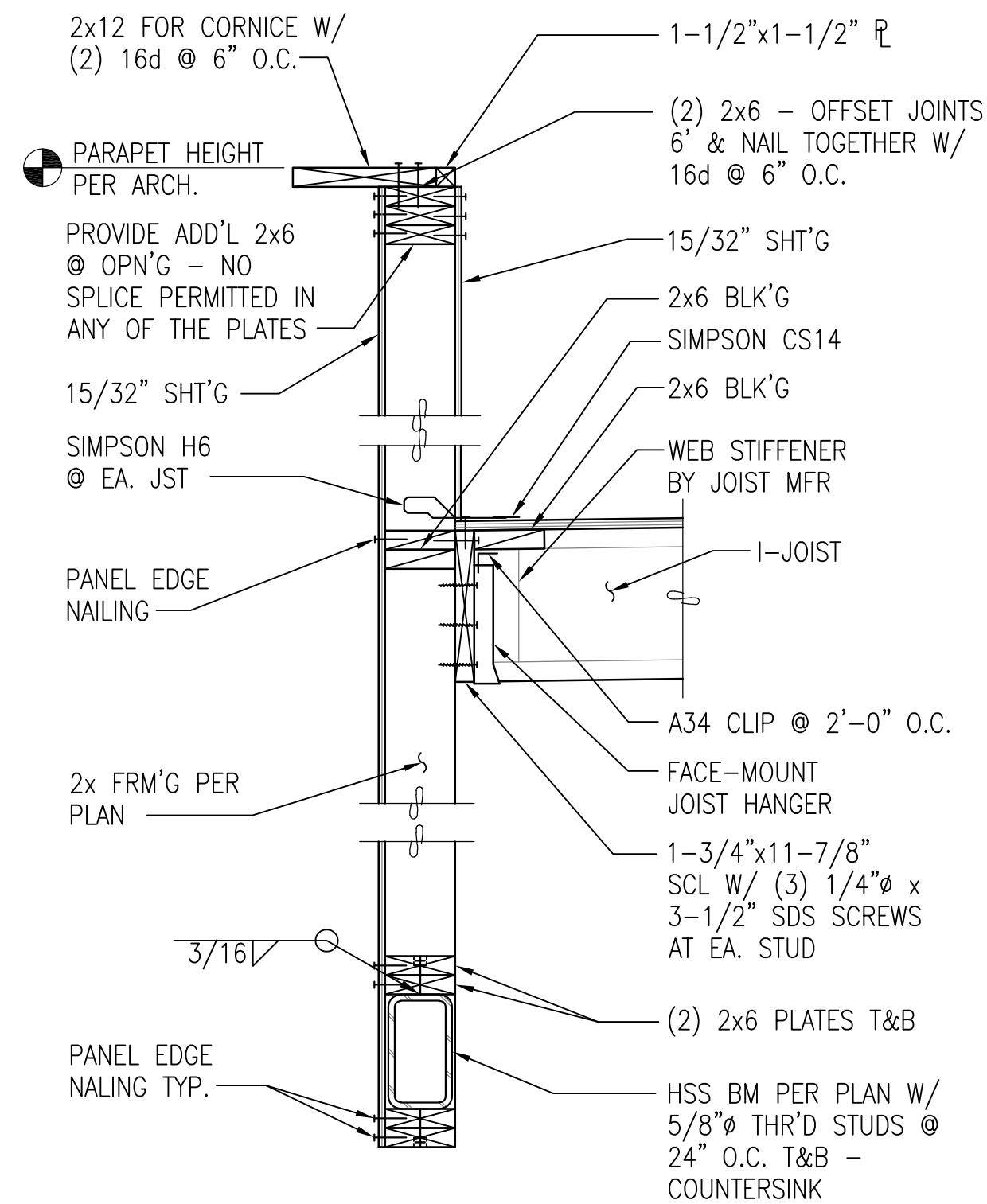
NOTE: FOR LINES GREATER THAN 3" HANG FROM GLULAM BEAMS OR STUD WALL OR HANG PER DETAIL OR SUPPORT OFF WALLS WHEN SPECIFICALLY APPROVED BY STRUCTURAL ENGINEER.

TYPICAL SPRINKLER LINE ATTACHMENT FOR LINES 3" OR SMALLER

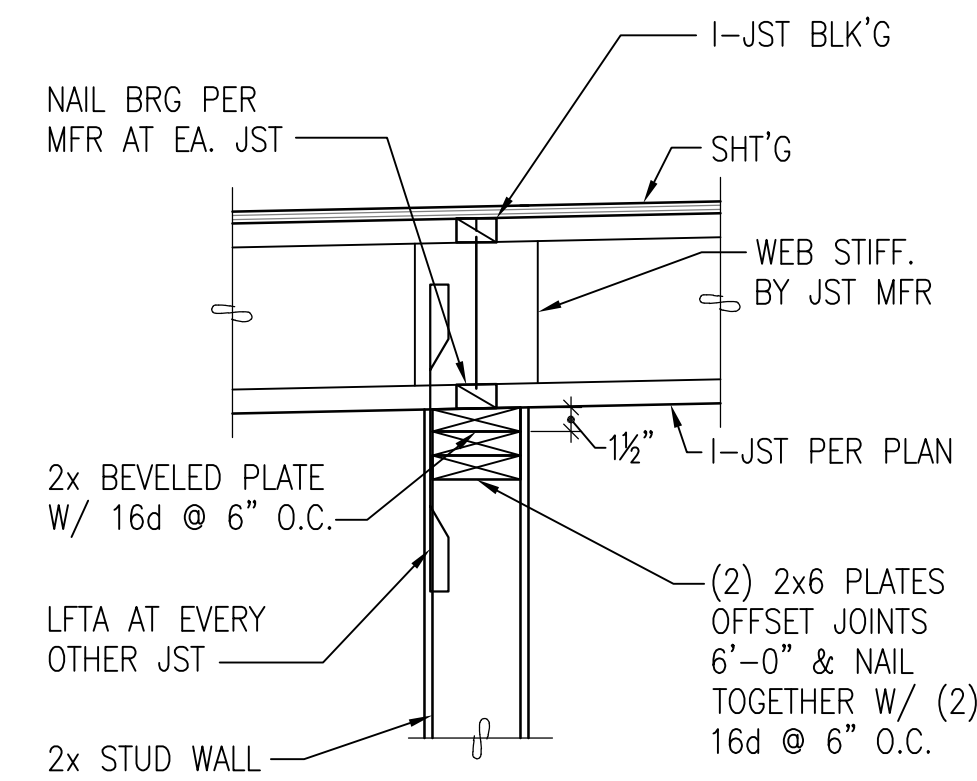
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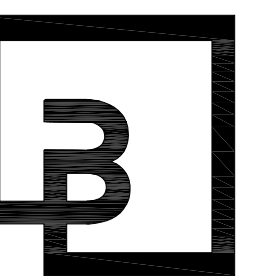
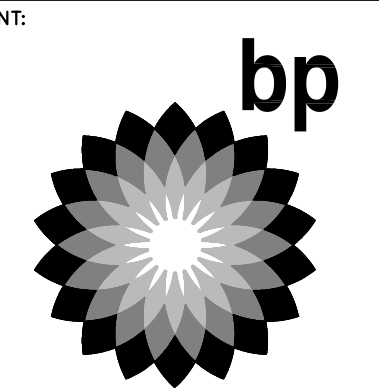
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SECTION 5 NO SCALE

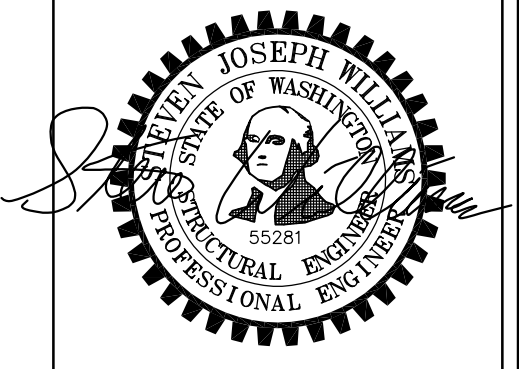


SECTION 6 NO SCALE



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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
 3400 am/pm  
 FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
 1402 S MERIDIAN  
 PUYALLUP, WA 98371

FACILITY #7184

DESIGNED BY: ALLIANCE ZADM:  
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DRAWING TITLE:  
**DETAILS**

SHEET NO:

PRCNC20240007

**CWS2.4**





**WOOD SHEATHING (STRUCTURAL):** SHEATHING ON ROOF SURFACES SHALL BE PLYWOOD ONLY. SHEATHING ON FLOOR AND WALLS SHALL BE PLYWOOD OR ORIENTED STRAND BOARD (OSB). PLYWOOD SHEATHING SHALL BE 5-PLY MINIMUM WHERE INDICATED AS PERFORMANCE CATEGORY 3/4" OR THICKER. WOOD SHEATHING SHALL BE "STRUCTURAL 1" CONFORMING TO PS1-09 AND/OR PS2-10. ALL PANELS SHALL BEAR THE STAMP OF AN APPROVED GRADING AGENCY. SPAN RATING SHALL BE PROVIDED AS FOLLOWS: ROOF FRAMING AT 48" O.C. (48/24); ROOF FRAMING AT 24"O.C. (32/16); WALLS (32/16); ALL WOOD SHEATHED WALLS SHALL BE BLOCKED AT ALL PANEL EDGES UNLESS NOTED OTHERWISE.

**GLUE-LAMINATED MEMBERS:** CONFORM TO ANSI/AITC A190.1. MEMBERS SHALL BE COMBINATION 24F-V4 DOUGLAS FIR (DF) FOR SIMPLE SPANS; AND 24F-V8 DF FOR CANTILEVERED AND/OR CONTINUOUS SPANS (Fb=2400 PSI, Fv=265 PSI, E=1.8X10<sup>6</sup> PSI); AND DF COMBINATION 2 FOR COLUMNS.

ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED TO VIEW; INDUSTRIAL APPEARANCE WHERE NOT EXPOSED TO VIEW. ALL MEMBERS TO HAVE EXTERIOR GLUE AND HAVE AN APPROVED GRADE STAMP. CAMBER AS SHOWN ON STRUCTURAL DRAWINGS.

**FRAMING LUMBER: STANDARDS.** EACH PIECE SHALL BEAR THE GRADE TRADEMARK OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB), WESTERN WOOD PRODUCTS ASSOCIATION (WWPA), OR OTHER AGENCY ACCREDITED BY THE AMERICAN LUMBER STANDARD COMMITTEE (ALSC) TO GRADE UNDER ALSC CERTIFIED GRADING RULES.

**SPECIES AND GRADE (BASE DESIGN VALUE)**

- 6x BEAMS AND HEADERS. "DOUG FIR-LARCH" NO. 1 (Fb=1350 PSI, Fv=170 PSI)
- 2x TO 4x JOISTS, PURLINS AND HEADERS. "DOUG FIR-LARCH" NO. 2 (Fb=900 PSI, Fv=180 PSI) OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fv=150 PSI)
- 6x POSTS AND COLUMNS. "DOUG FIR-LARCH" NO. 1 (Fc=1000 PSI)
- EXTERIOR STUDS, INTERIOR BEARING WALLS AND 4x COLUMNS. "DOUG FIR-LARCH" NO. 2 (Fb= 900 PSI, Fc=1350 PSI) OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fc=1350 PSI).
- INTERIOR NON-BEARING STUD WALLS. "DOUG FIR-LARCH" NO. 2 (Fb=900 PSI, Fc=1350 PSI) OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fc=1350 PSI)
- 2x & 3x T&G DECKING: "DOUG FIR-LARCH" COMMERCIAL (Fb=1450 PSI, E=1700 KSI)
- THE MINIMUM GRADE OF ALL OTHER STRUCTURAL FRAMING. "DOUG FIR-LARCH" NO. 2 (Fb= 900 PSI, Fc=1350 PSI), OR "HEM-FIR" NO. 1 (Fb=975 PSI, Fc=1350 PSI).
- UTILITY & STANDARD GRADES NOT PERMITTED.

**STRUCTURAL COMPOSITE LUMBER (SCL):** SHALL BE MANUFACTURED BY REDBUILT LLC., OR PRE-APPROVED EQUAL IN ACCORDANCE WITH APPROVED SHOP AND INSTALLATION DRAWINGS CONFORMING TO A CURRENT EVALUATION REPORT.

**MINIMUM DESIGN VALUES:**

- 2x SCL: Fb = 1700 PSI, Fv = 285 PSI, E = 1300 KSI
- 1-3/4" SCL: Fb = 2600 PSI, Fv = 285 PSI, E = 1800 KSI
- 3-1/2" SCL: Fb = 2900 PSI, Fv = 285 PSI, E = 2000 KSI
- 5-1/4" SCL: Fb = 2900 PSI, Fv = 285 PSI, E = 2000 KSI
- RIMBOARD: APA/EWS PERFORMANCE RATED RIM (PRR-401)

MEMBERS HAVE BEEN DESIGNED TO SERVICEABILITY AND OTHER PERFORMANCE BASED REQUIREMENTS, WHICH MAY EXCEED MINIMUM DESIGN LOADS AND CODE REQUIREMENTS. SUBSTITUTIONS MUST MEET OR EXCEED MOMENT, SHEAR, AND STIFFNESS OF THOSE MEMBERS SPECIFIED AT THE SAME DEPTH AND SPACING.

**PRESERVATIVE TREATED WOOD REQUIREMENTS:**

TREATMENTS OTHER THAN THOSE LISTED BELOW ARE NOT PERMITTED.

		APPLICATION	SPECIFIED MATERIAL	PRESERVATIVE TREATMENT (1)	CONNECTORS & FASTENERS (2)(3)
EXPOSURE	DRY	FOUNDATION SILL PLATES, TOP PLATES & LEDGERS ON CONCRETE OR MASONRY WALLS (4)	2x, 4x, 6x (FIR), OR GLULAM (SP)	SBX	GALV (G60)
	ACQ, CBA, CA			GALV (G185)	
WET	FRAMING, DECKING, POSTS & LEDGERS	2x, & 4x (FIR)	2x, & 4x (CEDAR)	ACQ, CBA, CA	GALV (G185)
				NONE	GALV (G90)
	BEAMS & COLUMNS	6x (FIR), OR GLULAM (SP)	6x OR GLULAM (CEDAR)	ACQ, CBA, CA	GALV (G185)
				NONE	GALV (G90)

- CCA: CHROMATED COPPER ARSENATE NOT PERMITTED  
SBX: DOT SODIUM BORATE  
ACQ: ALKALINE COPPER QUAT  
CBA & CA: COPPER AZOLE  
FIR: DOUG-FIR OR HEM-FIR  
SP: SOUTHERN PINE
- CONNECTORS: JOIST HANGERS, STRAPS, FRAMING CONNECTORS, COLUMN CAPS AND BASES, ETC. FASTENERS: MACHINE BOLTS, ANCHOR BOLTS AND LAG SCREWS WITH ASSOCIATED PLATE WASHERS AND NUTS. NAILS, SPIKES, WOOD SCREWS, ETC.
- G60, G90 & G185 PER ASTM A653 FOR COLD-FORMED STEEL CONNECTORS. BATCH/POST HOT-DIP GALVANIZED PER ASTM A123 FOR CONNECTORS AND ASTM A153 STRUCTURAL STEEL CONNECTORS. HOT-DIP GALVANIZED PER ASTM A153 FOR FASTENERS OR MECHANICALLY GALVANIZED FASTENERS PER ASTM B695, CLASS 55 OR GREATER.
- AT CONTRACTORS OPTION, LEDGERS AND TOP PLATES A MINIMUM OF 8 FEET ABOVE GRADE ON CONCRETE OR MASONRY WALLS MAY BE UN-TREATED IF COMPLETELY SEPARATED FROM THE WALL BY A SELF ADHERING ICE & WATER SHIELD BARRIER (40 MIL MINIMUM).

**GENERAL REQUIREMENTS:** PROVIDE MINIMUM NAILING PER IBC TABLE 2304.10.1 OR MORE, AS OTHERWISE SHOWN. STAGGER ALL NAILING TO PREVENT SPLITTING OF WOOD MEMBERS. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED WITH THE EXCEPTION OF INTERIOR CONCRETE TOPPING ON WOOD FLOOR SYSTEMS. HOLES AND CUTS IN 3x OR 4x PLATES SHOULD BE TREATED WITH A 9% SOLUTION OF COPPER NAPHTHENATE. BOLT HOLES IN WOOD MEMBERS SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. PROVIDE CUT WASHERS WHERE BOLT HEADS, NUTS AND LAG SCREW HEADS BEAR ON WOOD. PROVIDE A MINIMUM 3"x3"x0.229" PLATE WASHER ON ALL ANCHOR BOLTS WHICH CONNECT MUD SILLS TO FOUNDATION. DO NOT NOTCH OR DRILL STRUCTURAL MEMBERS, EXCEPT AS ALLOWED BY IBC SECTIONS 2308.4.2.4, 2308.5.9, 2308.5.10 AND 2308.7.4 OR AS RESTRICTED BY PLANS OR DETAILS, OR AS APPROVED PRIOR TO INSTALLATION. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

**WOOD SHRINKAGE AND CONSOLIDATION:** SHRINKAGE OF WOOD MEMBERS AND CONSOLIDATION OF BEARING WALLS IS EXPECTED FROM TIME OF FRAMING UNTIL AFTER BUILDING IS PUT IN SERVICE. MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS SHALL BE CONSTRUCTED TO ACCOMMODATE 1/4" OF TOTAL SETTLEMENT PER STORY.

**FRAMING CONNECTORS:** SHALL CONFORM TO CURRENT EVALUATION REPORT AND BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, SAN LEANDRO, CA., OR PRE-APPROVED EQUAL. PROVIDE MAXIMUM SIZE AND QUANTITY OF NAILS OR BOLTS PER MANUFACTURER, EXCEPT AS NOTED OTHERWISE. PROVIDE LEAD HOLES AS REQUIRED TO PREVENT SPLITTING OF WOOD MEMBERS. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

**LAG SCREWS:** SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1. LAG SCREWS SHALL BE OF A DIAMETER INDICATED ON DRAWINGS WITH A MINIMUM OF 8x DIA. EMBEDMENT IN SUPPORTING MEMBER UNLESS NOTED OTHERWISE. CLEARANCE HOLE FOR THE SHANK SHALL BE THE SAME DIAMETER AS THE SHANK AND THE SAME DEPTH OF PENETRATION AS THE UNTHREADED PORTION OF THE SHANK. THE LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 60 TO 75 PERCENT OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION. THE THREADED PORTION OF THE SCREW SHALL BE INSERTED IN ITS LEAD HOLE BY TURNING WITH A WRENCH. SOAP OR OTHER LUBRICANT SHALL BE USED ON THE SCREWS OR IN THE LEAD HOLE TO FACILITATE INSERTION AND PREVENT DAMAGE TO THE SCREW. LAG SCREWS SHALL NOT BE DRIVEN WITH A HAMMER. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

**OPEN-WEB TRUSSES:** SHALL BE MANUFACTURED BY REDBUILT LLC, OR PRE-APPROVED EQUAL IN ACCORDANCE WITH APPROVED SHOP AND INSTALLATION DRAWINGS. MEMBERS SHALL BE DESIGNED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PROJECT. THE ENTIRE OPEN-WEB TRUSS ASSEMBLY SHALL BE AS APPROVED BY CURRENT EVALUATION REPORT. MEMBERS SHALL BE DESIGNED TO CARRY THE LOADS LISTED IN THE DESIGN CRITERION AND ANY ADDITIONAL LOADS INDICATED ON THE FRAMING PLANS AND DETAILS. THE TRUSS ENGINEER SHALL ASSUME ALL RESPONSIBILITY FOR THE WORK OF ALL SUBORDINATES INVOLVED IN THE PREPARATION OF THE TRUSS PLACEMENT PLANS AND TRUSS DESIGN DRAWINGS. TRUSSES SHALL BE PROVIDED TO COMPLETE THE ROOF AND/OR FLOOR FRAMING FROM THE SHEATHING TO THE SUPPORTING MEMBERS BELOW. MEMBER DESIGNATIONS ON PLANS ARE FOR TYPICAL UNIFORMLY LOADED CONDITIONS. MANUFACTURER SHALL PROVIDE ADDITIONAL MEMBERS AS REQUIRED TO SUPPORT SPECIAL LOADING CONDITIONS INDICATED ON DRAWINGS.

PROVIDE INSTALLATION DRAWINGS AND CALCULATIONS PRODUCED UNDER THE SUPERVISION OF AND BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PROJECT. DETAIL DRAWINGS TO INDICATE MEMBER TYPES, SIZE, SPACING, BRIDGING, BLOCKING, CONNECTIONS, ANCHORING, BEARING PLATE AND OTHER PERTINENT DETAILS.

MEMBER DESIGN CALCULATIONS SHALL BE PROVIDED FOR STANDARD LOADING ALONG WITH DESIGN CHECKS FOR SPECIAL LOADING CONDITIONS WHICH INCLUDE FREE BODY DIAGRAMS, LOADING BREAK DOWN, DESCRIPTION OF LOADS (I.E. MECH UNIT, SUSPENDED WALL, ETC.) AND THE RATIONALE FOR LOADING DISTRIBUTION ON MULTIPLE MEMBERS. SUBMITTAL SHALL ALSO PROVIDE ANY DOCUMENTATION NECESSARY TO INTERPRET DATA INDICATED ON CALCULATIONS.

MEMBERS HAVE BEEN DESIGNED TO MEET SERVICEABILITY AND OTHER PERFORMANCE BASED REQUIREMENTS, WHICH MAY EXCEED MINIMUM DESIGN LOADS AND CODE REQUIREMENTS. SUBSTITUTIONS MUST MEET OR EXCEED MOMENT, SHEAR, AND STIFFNESS OF THOSE MEMBERS SPECIFIED AT THE SAME DEPTH AND SPACING.

REFER TO THE FRAMING CONNECTORS SECTION OF THESE GENERAL NOTES FOR REQUIREMENTS PLACED UPON CONNECTOR HARDWARE SPECIFIED BY TRUSS ENGINEER AND/OR PROVIDED BY TRUSS MANUFACTURER.

SPRINKLER LINE ATTACHMENTS SHALL CONFORM TO NFPA 13 AND COMMERCIAL PUBLICATION "SPRINKLER SYSTEM INSTALLATION WITH GUIDELINES FOR REDBUILT OPEN-WEB TRUSSES AND I-JOISTS". LOADS HUNG FROM JOIST NOT SPECIFICALLY IDENTIFIED ON STRUCTURAL DRAWINGS SHALL NOT EXCEED 30 POUNDS AT ANY ONE POINT, NOR SHALL TOTAL LOADS IN POUNDS ON ANY ONE JOIST EXCEED 8 TIMES THE JOIST SPAN IN FEET, UNLESS DETAILED OTHERWISE ON THE DRAWINGS. ATTACHMENT OF LOADS EXCEEDING 90 POUNDS SHALL BE APPROVED PRIOR TO INSTALLATION. DO NOT NOTCH OR DRILL THRU TRUSS MEMBERS.

**MISCELLANEOUS:**

**PRE-APPROVED SUBSTITUTIONS:** SUBSTITUTIONS MAY BE ALLOWED ONLY IF THEY MEET THE REQUIREMENTS OF THESE GENERAL NOTES AND THE SPECIFICATIONS, AND IF COMPLETE WRITTEN ENGINEERING DATA FOR EACH CONDITION REQUIRED FOR THIS PROJECT IS PROVIDED TO THE STRUCTURAL ENGINEER TWO WEEKS PRIOR TO BID DATE AND APPROVED IN WRITTEN ADDENDA BY THE ARCHITECT. DATA IS TO INDICATE CODE BASIS BY YEAR, AUTHORITY FOR STRESSES AND STRESS INCREASES, IF ANY, AND AMOUNT OF EXPECTED DEFLECTION FOR FLEXURAL MEMBERS UNDER (1) TOTAL LOAD AND (2) LIVE LOAD ONLY. ALL INCREASED COSTS IN MECHANICAL, SPRINKLER, ELECTRICAL OR GENERAL INSTALLATION AND ANY ARCHITECTURAL OR STRUCTURAL REDESIGN RESULTING FROM SUBSTITUTION SHALL BE BORNE BY THE GENERAL CONTRACTOR.

**SHOP DRAWINGS/SUBMITTALS**

THE FOLLOWING SHOP DRAWINGS/SUBMITTALS SHALL BE PROVIDED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION OR DELIVERY.

	STRUCTURAL ENGR.	BLDG. DEPT.
1. CONCRETE MIX DESIGNS	X	X
2. REINFORCING STEEL SHOP DRAWINGS	X	
3. STRUCTURAL STEEL	X	X
4. GLU-LAMINATED MEMBERS	X	X
5. WOOD OPEN WEB TRUSSES	X	X
6. CONTRACTOR'S STATEMENT OF RESPONSIBILITY	X	X

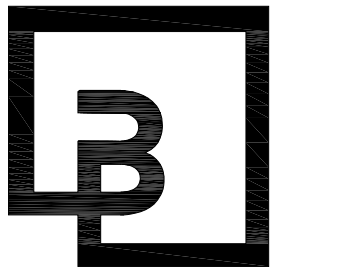
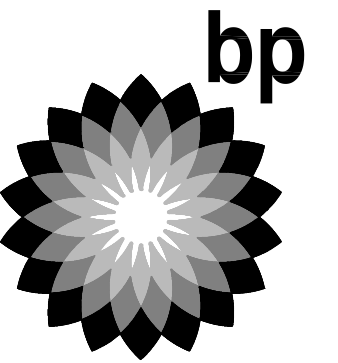
**DEFERRED SUBMITTALS**

THE FOLLOWING ARE NOT INCLUDED WITH THE BUILDING PERMIT DRAWINGS AND SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL AS A DEFERRED SUBMITTAL. SUBMITTALS SHALL BE STAMPED BY AN ENGINEER LICENSED IN THE STATE OF THE PROJECT AS NOTED.

	ENGINEER STAMP REQUIRED
1. WOOD OPEN-WEB TRUSSES AND I-JOISTS	PE

**SPECIAL INSPECTION:** SPECIAL INSPECTION SHALL BE PROVIDED BY AN INDEPENDENT TESTING LABORATORY PER THE REQUIREMENTS OF IBC CHAPTER 17 AND THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION AND THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SUBMIT INSPECTION REPORTS AND A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL FOR THE ITEMS LISTED IN THE QUALITY ASSURANCE/SPECIAL INSPECTION SECTION:

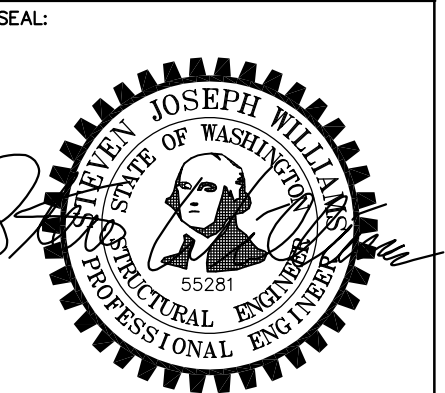
CLIENT:



**Barghausen Consulting Engineers, Inc.**

18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION DESCRIPTION
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**DEVELOPMENT INFORMATION:**

**ARCO NTI**  
**3400 am/pm**  
**FUEL CANOPY w/ 6 MPD'S**

**SITE ADDRESS:**

**1402 S MERIDIAN**  
PUYALLUP, WA 98371

**FACILITY #7184**

DESIGNED BY:	ALLIANCE ZADM:
CHECKED BY:	BP REPA:
DRAWN BY:	ALLIANCE PM:
VERSION:	PROJECT NO: - 21730

**DRAWING TITLE:**

**GENERAL NOTES**

**SHEET NO:**

**CWS3.3**

**PRCNC20240007**

STATEMENT OF SPECIAL INSPECTIONS:

SPECIAL INSPECTION: SPECIAL INSPECTION SHALL BE PROVIDED PER THE REQUIREMENTS OF IBC SECTION 1704 AND 1705 AND AS NOTED HEREIN.

STRUCTURAL SYSTEM	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	REFERENCES	
SOILS	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		X		IBC 1705.6	
	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X			
	PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		X			
	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X				
	PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X			
STRUCTURAL STEEL	MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS		X		AISC 360 CHAPTER N5	
	HIGH-STRENGTH BOLTING A. SNUG-TIGHT JOINTS		X		AISC 360 CHAPTER N5	
	MATERIAL VERIFICATION OF STRUCTURAL STEEL A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 B. MANUFACTURER'S CERTIFIED MILL TEST REPORTS		X	MANUFACTURER TO PROVIDE CERTIFIED MILL TEST REPORTS	AISC 360 CHAPTER N5 AISC 341 CHAPTER J6	
	MATERIAL VERIFICATION OF WELD FILLER MATERIALS A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATIONS LISTED IN GENERAL NOTES B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE		X	MANUFACTURER TO PROVIDE CERTIFICATE OF COMPLIANCE	AISC 360 CHAPTER N5	
	INSPECTION OF WELDING A. COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS B. MULTI-PASS FILLET WELDS C. SINGLE-PASS FILLET WELDS > 5/16" D. PLUG AND SLOT WELDS E. SINGLE-PASS FILLET WELDS ≤ 5/16" F. FIELD-INSTALLED WELDED STUDS G. WELDING OF STAIRS AND RAILING SYSTEMS	X X X X		X X X	SPECIAL INSPECTIONS IN THIS SECTION ARE WAIVED WHERE FABRICATION IS PERFORMED ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED IN ACCORDANCE WITH IBC SECTION 1704.2.5	AISC 360 CHAPTER N5 AISC 341 CHAPTER J6 AWS D1.1
	INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS			X		
	STEEL PIPE PILES	GEOTECHNICAL ENGINEER TO MONITOR INSTALLATION AND LOAD TESTING.	X			
CONCRETE	INSPECT REINFORCEMENT, INCLUDING PRE-STRESSING TENDONS, AND VERIFY PLACEMENT		X		ACI 318: CH 20, 25.2, 25.3, 26.6-1 TO 26.6-3, IBC 1908.4	
	ANCHORS CAST IN CONCRETE-PRIOR TO AND DURING PLACEMENT OF CONCRETE		X		ACI 318: 17.8.2 AISC 360 SECTION N7	
	VERIFY USE OF REQUIRED DESIGN MIX		X		ACI 318, CH 19	
	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X			ASTM C172, C31 ACI 318: 26.4, 26.12 IBC 1908.10	
	MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X		ACI 318: 26.5.3 TO 26.5.5 IBC 1908.9	
	MATERIAL VERIFICATION OF REINFORCEMENT STEEL FOR ASTM A615 REINFORCING		X		MANUFACTURER SHALL PROVIDE MILL TEST REPORTS. CONTINUOUS INSPECTION FOR ALL WELDS GREATER THAN 5/16" FILLET. PERIODIC INSPECTION FOR FILLET WELD 5/16" AND SMALLER	ACI 318: 26.6.4 AWS D1.4 IBC 1705.3.1
	ANCHORS POST-INSTALLED IN HARDENED CONCRETE (MECHANICAL ANCHORS INSTALLED IN ANY DIRECTION AND ADHESIVE ANCHORS INSTALLED DOWNWARD)		X		PERIODIC INSPECTION TO INCLUDE A QUANTITY OF 10% WITH A MINIMUM OF (5) ANCHORS INSPECTED PER INSTALLER ON A DAILY BASIS	ACI 318: 17.8.2 MFR EVAL REPORT MFR PUBLISHED INSTALLATION INSTRUCTIONS
	ANCHORS POST-INSTALLED IN HARDENED CONCRETE (ADHESIVE ANCHORS INSTALLED HORIZONTAL OR UPWARDLY INCLINED)	X				ACI 318: 17.8.2 MFR EVAL REPORT MFR PUBLISHED INSTALLATION INSTRUCTIONS
TESTING OF MATERIALS		X			IBC 1705.3.2	
WOOD FRAMING	SHEAR WALL NAILING		X	SPECIAL INSPECTION NOT REQUIRED FOR FASTENER SPACING > 4" O.C.	IBC 1705.11.1, 1705.12.2, 1705.5	
	DIAPHRAGM NAILING		X	SPECIAL INSPECTION NOT REQUIRED FOR FASTENER SPACING > 4" O.C.	IBC 1705.11.1, 1705.12.2, 1705.5	
	NAILING, BOLTING, AND ANCHORAGE OF COMPONENTS THAT ARE PART OF DRAG STRUTS, BRACES AND HOLD-DOWNS THAT ARE PART OF THE SEISMIC RESISTING SYSTEM		X		IBC 1705.11.1, 1705.12.2	

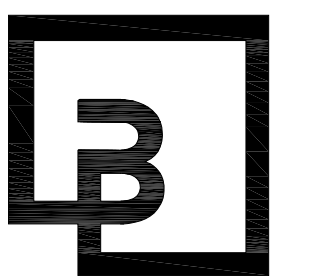
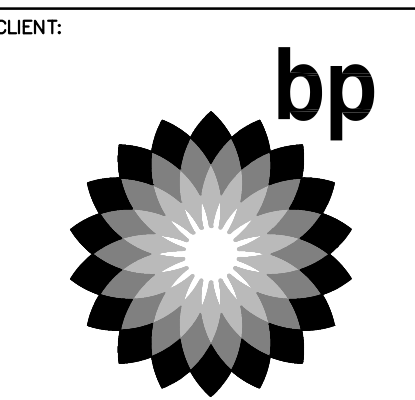
TESTING AND SPECIAL INSPECTION REPORTS SHALL BE PREPARED FOR EACH INSPECTION ITEM ON A DAILY BASIS WHENEVER WORK IS PERFORMED ON THAT ITEM. REPORTS SHALL BE DISTRIBUTED TO OWNER, CONTRACTOR, BUILDING OFFICIAL, ARCHITECT AND STRUCTURAL ENGINEER.

STRUCTURAL OBSERVATIONS SHALL BE PERFORMED BY THE STRUCTURAL ENGINEER OF RECORD OR DESIGNATED REPRESENTATIVE IN ACCORDANCE WITH IBC 1704.6. STRUCTURAL OBSERVATION SHALL BE PERFORMED AS FOLLOWS:

- ▶ PERIODIC VISUAL OBSERVATION OF STRUCTURAL SYSTEMS FOR GENERAL CONFORMANCE TO CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES.
- ▶ REVIEW OF TESTING AND INSPECTION REPORTS.
- ▶ REPORTS SHALL BE PREPARED FOR EACH SITE VISIT AND SHALL BE DISTRIBUTED TO ARCHITECT.

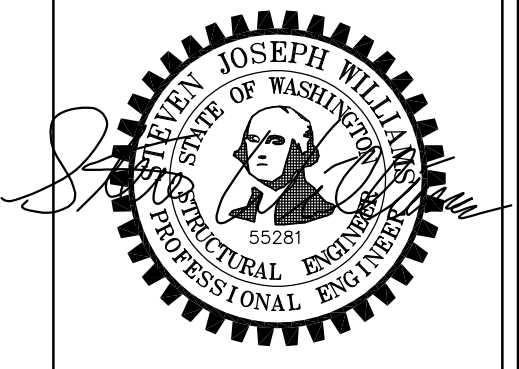
GENERAL CONTRACTOR SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL INCLUDE ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

ABBREVIATION LIST					
@	AT	ELEV.	ELEVATOR	MTL	METAL
A.B.	ANCHOR BOLT	ENGR.	ENGINEER	N.F.	NEAR FACE
ADD'L	ADDITIONAL	EQ.	EQUAL	N.S.	NEAR SIDE
A.F.F.	ABOVE FINISH FLOOR	E.W.	EACH WAY	NTS	NOT TO SCALE
ALT.	ALTERNATE	EXP.	EXPANSION	O.C.	ON CENTER
ARCH.	ARCHITECTURAL	EXT.	EXTERIOR	OPN'G	OPENING
BLD'G	BUILDING	FDN	FOUNDATION	OPP.	OPPOSITE
BLK'G	BLOCKING	F.F.	FAR FACE	P.A.F.	POWDER ACTUATED FASTENER
BM	BEAM	FLR	FLOOR	PERP.	PERPENDICULAR
B.O.F.	BOTTOM OF FOOTING	F.O.M.	FACE OF MASONRY	PL	PLATE
B.O.T.	BOTTOM	F.O.S.	FACE OF STUD	P.P.	PARTIAL PENETRATION
BRG	BEARING	FRM'G	FRAMING	P.P.T.	PRESERVATIVE PRESSURE TREATED
BTWN	BETWEEN	F.R.T.	FIRE RETARDANT TREATED	P.S.F.	POUNDS PER SQUARE FOOT
B.U.	BUILT UP	F.S.	FAR SIDE	PSL	PARALLAM
(C= )	CAMBER	FTG	FOOTING	P.T.	POST TENSION
CANT.	CANTILEVER	GA.	GAGE/GAUGE	PW.	PLYWOOD
C.F.S.	COLD-FORMED STEEL	GALV.	GALVANIZED	REINF.	REINFORCING
C.J.	CONTROL/CONSTRUCTION JOINT	GL.	GLULAM	REQ'D	REQUIRED
CL	CENTERLINE	GR.	GRADE	SCHED.	SCHEDULE
CLR.	CLEARANCE	GWB	GYPSPUM WALL BOARD	S.C.L.	STRUCTURAL COMPOSITE LUMBER
CMU	CONCRETE MASONRY UNIT	HDR	HEADER	SHT'G	SHEATHING
COL.	COLUMN	HGR	HANGER	SIM.	SIMILAR
CONC.	CONCRETE	HORIZ.	HORIZONTAL	S.O.G.	SLAB ON GRADE
CONN.	CONNECTION	HSS	HOLLOW STRUCTURAL SECTION	SQ.	SQUARE
CONST.	CONSTRUCTION	HT	HEIGHT	STD	STANDARD
CONT.	CONTINUOUS	INT.	INTERIOR	STIFF.	STIFFENER
CONTR.	CONTRACTOR	JST	JOIST	STL	STEEL
COORD.	COORDINATE	JT	JOINT	STRUCT.	STRUCTURAL
C.P.	COMPLETE PENETRATION	L	ANGLE	T&B	TOP & BOTTOM
CTR'D	CENTERED	L.L.	LIVE LOAD	T&G	TONGUE AND GROOVE
C.Y.	CUBIC YARD	LLH	LONG LEG HORIZONTAL	THR'D	THREADED
DBL.	DOUBLE	LLV	LONG LEG VERTICAL	T.O.F.	TOP OF FOOTING
D.F.	DOUGLAS FIR	LOC.	LOCATION	T.O.S.	TOP OF STEEL
DIA. OR Ø	DIAMETER	LSL	LAMINATED STRAND LUMBER	TRT'D	TREATED
DIAG.	DIAGONAL	LVL	LAMINATED VENEER LUMBER	TYP.	TYPICAL
DIM.	DIMENSION	MAX.	MAXIMUM	U.N.O.	UNLESS NOTED OTHERWISE
D.L.	DEAD LOAD	M.B.	MACHINE BOLT	U.T.	ULTRASONIC TESTED
DWG	DRAWING	MECH.	MECHANICAL	VERT.	VERTICAL
DWL	DOWEL	MEZZ.	MEZZANINE	W/	WITH
(E)	EXISTING	MFR	MANUFACTURER	W.P.	WORK POINT
EA.	EACH	MIN.	MINIMUM	WT	WEIGHT
E.F.	EACH FACE	MISC.	MISCELLANEOUS	W.W.R.	WELDED WIRE REINFORCING
EL.	ELEVATION				



**Barghausen Consulting Engineers, Inc.**  
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Kent, WA 98032  
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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98371

FACILITY #7184

DESIGNED BY: ALLIANCE ZADM;  
CHECKED BY: BP REPA;  
DRAWN BY: ALLIANCE PM;  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**GENERAL NOTES**

SHEET NO:

PRCNC20240007

CWS3.4



**GENERAL NOTES:**

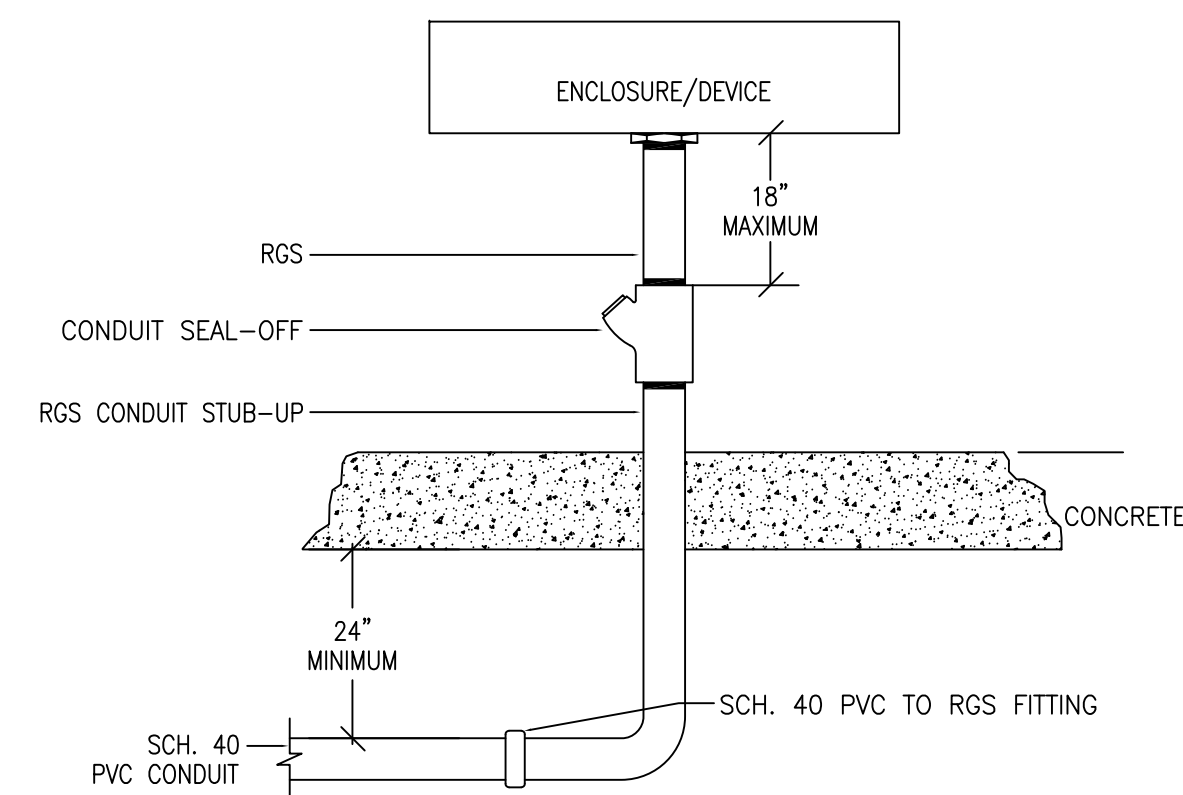
1. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH POWER COMPANY FOR EXACT SERVICE CONNECTION REQUIREMENTS AND INCLUDE ALL NECESSARY COST IN BID.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH TELEPHONE COMPANY FOR EXACT SERVICE CONNECTION REQUIREMENTS AND INCLUDE ALL NECESSARY COST IN BID.
3. ALL ELECTRICAL EQUIPMENT SHALL HAVE AIC RATINGS EQUIVALENT OR HIGHER THAN AVAILABLE FAULT CURRENTS PROVIDED BY POWER COMPANY.
4. A UTILITY LOCATE SHALL BE PERFORMED PRIOR TO COMMENCEMENT OF TRENCHING.
5. LIGHTING CONTACTOR (INTERIOR LIGHTING ONLY) IS LOCATED WITHIN CPI CABINET.
6. ALL LIGHTING FIXTURES TO BE FURNISHED AND INSTALLED BY CONTRACTOR.
7. "EM" AT LIGHT FIXTURE INDICATES LIGHT FIXTURE WITH EMERGENCY BACK UP. ALL EMERGENCY LIGHT FIXTURES SHALL BE SERVED FROM BATTERY BACKUP. EMERGENCY AND EXIT LIGHTS SHALL BE INSTALLED AND CIRCUITED PER THE LATEST CALIFORNIA ELECTRICAL CODE AND ALL LOCAL CODES (INSTALL A CENTRAL BATTERY SYSTEM WHERE THE USE OF INDIVIDUAL BATTERY UNITS ARE PROHIBITED BY LOCAL CODES). ALL EMERGENCY FIXTURES AND EXIT SIGNS SHALL BE CONNECTED TO UN-SWITCHED HOT LEG OF THE LOCAL LIGHTING CIRCUIT.
8. ALL EXTERIOR LIGHT FIXTURES TO BE CONTROLLED THROUGH THE LSI AIRLINK BLUE COMPLETE OUTDOOR LIGHTING WIRELESS MESH SYSTEM. AIRLINK BLUE SYSTEM INCLUDES DAYLIGHT AND MOTION SENSORS WITH DIMMING CONTROL CAPABLE OF AUTOMATICALLY SHUTTING OFF OUTDOOR LIGHTING WHEN DAYLIGHT IS AVAILABLE. EMPLOY AUTO FUNCTIONALITY WHEN AREA BECOMES OCCUPIED, AND CAPABLE OF PROVIDING CONTINUOUS DIMMING THROUGH A 50%-90% RANGE PER 2018 WSEC REQUIREMENTS. AIRLINK BLUE SYSTEM TO INCLUDE ASTRONOMICAL CLOCK AND TIME KEEPER AIRLINK BLUE COMPONENT FOR SCHEDULING CONTROLS SET PER 2018 WSEC REQUIREMENTS. ALL EXTERIOR LUMINAIRES TO INCLUDE FACTORY INTEGRATED BLUETOOTH RADIO/SENSOR CONTROLLERS. AIRLINK BLUE SYSTEM TO BE INITIALIZED VIA WEB APP AND FIELD COMMISSIONED VIA MOBILE APP TO THE OWNER'S REQUIREMENTS. ANY CHANGES OR UPDATES TO BE ACCOMPLISHED ON SITE VIA MOBILE APP.

**SHEET NOTES:**

- ① PROVIDE NEW LIGHT FIXTURE. INSTALL 3/4" PVC UNDERGROUND CONDUIT CONTAINING: (2) #10 THWN CU. AND (1) #10 CU EGC. FOR PARKING LOT LIGHTING. EXTEND CONDUIT BACK TO AIRLINK BLUE CONTROLS.
- ② PROVIDE AND INSTALL ESO SWITCH. INCLUDE ALL ASSOCIATED CONDUIT AND WIRE FOR COMPLETE INSTALLATION PER CEC 514.11 AND NFPA 30A SECTION 6.7. RUN WIRE IN 1" PVC-COATED RGS CONDUIT AND STUB UP WITH RGS. SEE DETAIL 3/E2.3. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION. SEE DETAIL IN TANK DRAWINGS FOR ELEVATION.
- ③ PROVIDE AND INSTALL ESO SWITCH. COORDINATE EXACT LOCATION(S) WITH OWNER PRIOR TO INSTALLATION.
- ④ PROVIDE 3/4" PVC UNDERGROUND CONDUIT AND (3) #10 THHN CU. WIRE (U.O.N.) FOR NEW AIR STATION. MAKE CONNECTION WITH WATER TIGHT FLEX, BOXES AND COVERS AS REQUIRED BY MANUFACTURER. FIELD VERIFY EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- ⑤ PROVIDE (1) 3" PVC CONDUIT WITH 1/4" PULL STRING FOR TELEPHONE. FIELD VERIFY EXACT VAULT LOCATION WITH SERVICE PROVIDER PRIOR TO INSTALLATION.
- ⑥ PROVIDE (1) 1-1/2" CONDUIT FOR INSTALLATION OF ELECTRIC VEHICLE CHARGING STATION. 100A 208 VOLT 3Ø MIN. CAP AND MARK CONDUIT AS REQUIRED FOR ACCESS.
- ⑦ PROVIDE (2) 1" PVC-COATED RGS SPARE UNDERGROUND CONDUITS TO FOR FUTURE VENT DIAGNOSTICS TO INTRINSICALLY SAFE AND POWER WIREWAYS INSIDE STORE (NEXT TO EPC CABINET).
- ⑧ ALL SITE LIGHT POLE FIXTURES TO INCLUDE LSI AIRLINK BLUE LIGHTING SYSTEM MOTION DETECTOR MOUNTED ON LIGHT POLE. UPON ACTIVATION OF EITHER MOTION DETECTOR, ALL SITE POLE LIGHTS TO TRIGGER AT FULL BRIGHTNESS AND RETURN TO 50% BRIGHTNESS AFTER 15 MINUTES OF VACANCY.
- ⑨ 60W HEAT TRACER LOCATED IN RPBA HOT BOX, REFER TO CIVIL UTILITY PLANS FOR EXACT LOCATION.
- ⑩ PROPOSED SOLAR ZONE PER 2018 WSEC REQUIREMENTS.
- ⑪ PROVIDE (1) 3/4" CONDUIT AND CONTROL WIRE TO CLOSEST EMERGENCY STOP BUTTON FOR CONNECTION TO VEHICLE CHARGING STATION.
- ⑫ PROPOSED UTILITY TRANSFORMER EXACT LOCATION TO BE VERIFIED.

**N.E.C HAZARDOUS AREA NOTES**

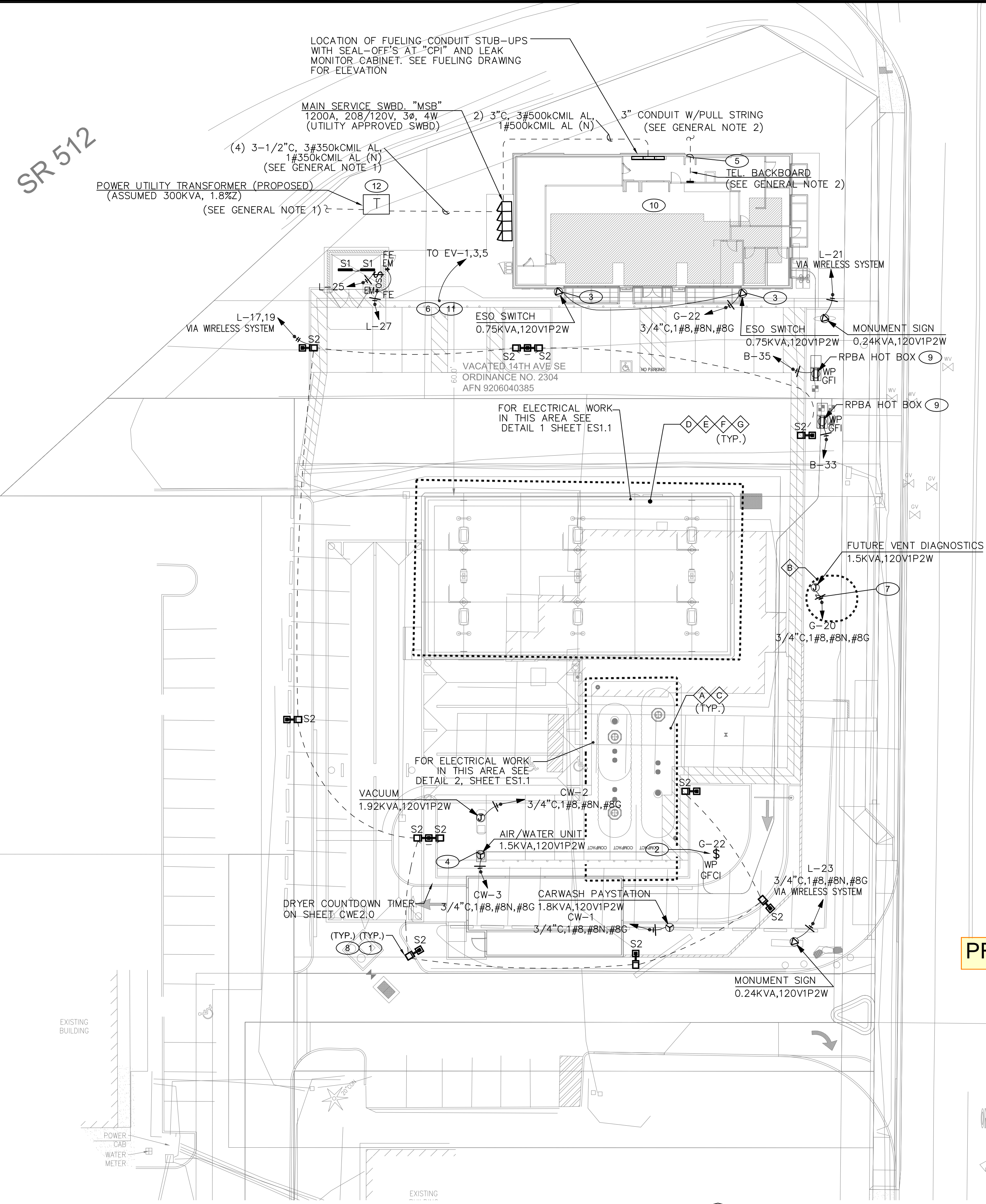
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (UNDERGROUND TANK - FILL OPENING)  
EXTENT OF CLASS 1, GROUP D, DIVISION 1 LOCATION:  
Any pit, box, or space below grade level, any part of which is within the Division 1 or 2 classified location.  
EXTENT OF CLASS 1, GROUP D, DIVISION 2 LOCATION:  
Up to 18 inches above grade level within a horizontal radius of 10 feet from a loose fill connection and within a horizontal radius of 5 feet from a tight fill connection.
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (UNDERGROUND TANK VENT DISCHARGING UPWARD)  
EXTENT OF CLASS 1, GROUP D, DIVISION 1 LOCATION:  
Within 3 feet of open end of vent, extending in all directions.  
EXTENT OF CLASS 1, GROUP D, DIVISION 2 LOCATION:  
Space between 3 feet and 5 feet of open end of vent, extending in all directions.
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (REMOTE PUMP - OUTDOOR)  
EXTENT OF CLASS 1, GROUP D, DIVISION 1 LOCATION:  
Any pit, box, or space below grade level if any part is within a horizontal distance of 10 feet from any edge of pump.  
EXTENT OF CLASS 1, GROUP D, DIVISION 2 LOCATION:  
Within 3 feet of any edge of pump, extending in all directions. Also up to 18 inches above grade level within 10 feet horizontally from any edge of pump.
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (DISPENSING DEVICE - PITS)  
EXTENT OF CLASS 1, GROUP D, DIVISION 1 LOCATION:  
Any pit, box, or space below grade level, any part of which is within the Division 1 or 2 classified location.
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (DISPENSING DEVICE - DISPENSER)  
EXTENT OF CLASS 1, GROUP D, DIVISION 1 LOCATION:  
Space classification inside the dispenser enclosure is covered in ANSI/UL 87, "Power Operated Dispensing Devices for Petroleum Products."
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (DISPENSING DEVICE - DISPENSER)  
EXTENT OF CLASS 1, GROUP D, DIVISION 2 LOCATION:  
Within 18 inches horizontally in all directions extending to grade from (1) the dispenser enclosure or (2) that portion of the dispenser enclosure containing liquid handling components. Space classification inside the dispenser enclosure is covered in ANSI/UL 87, "Power Operated Dispensing Devices for Petroleum Products."
- ◆ TYPICAL N.E.C. ARTICLE 514 CLASS 1 LOCATION (DISPENSING DEVICE - OUTDOOR)  
EXTENT OF CLASS 1, GROUP D, DIVISION 2 LOCATION:  
Up to 18 inches above grade level within 20 feet horizontally of any edge of enclosure.



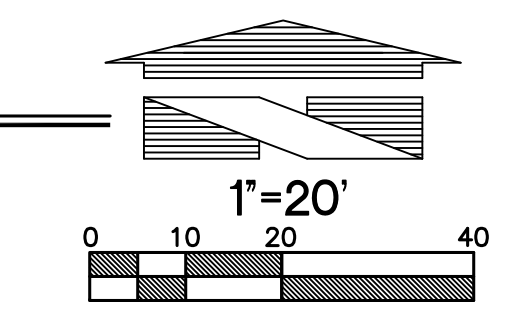
2 **TYPICAL RGS STUB-UP W/ SEAL OFF**  
SCALE: NTS

**SITE LUMINAIRE SCHEDULE**

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	INPUT VA	TOTAL VA	LUMENS / LAMP	VOLTS	NOTES	QUANTITY
S1	—	(1) 31.59W LED	SURFACE MOUNTED STRIP LIGHT	0-10V DIMMABLE	SURFACE	LSI EG3-4-LED-4L-DA-S-UNV-DIM-50-80	31.59	31.59	4508	120V 1P 2W	TRASH/RECYCLE ROOM W/ EMERGENCY BATTERY PACK FOR 90 MINUTE ILLUMINATION, 4508 LUMENS, 143.42 LUMENS/WATT	2
S2	□	(1) 63W LED	LED POLE LIGHT	ELECTRONIC	POLE	LSI SLM-LED-09L-SIL-FT-50-70CRI-SINGLE-16"POLE+2"BASE	63	63	9657	208V 2P 2W	PARKING LOT, INCLUDE LSI AIRLINK BLUE SENSOR.	6



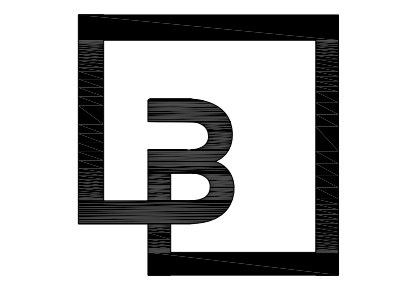
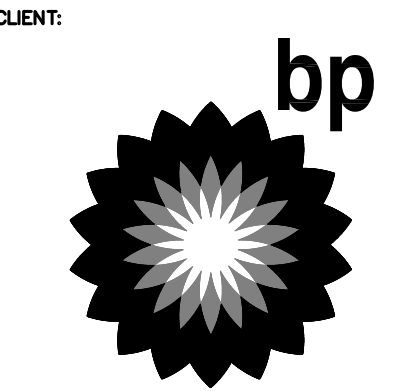
1 **ELECTRICAL SITE PLAN**



Know what's below. Call before you dig. Dial 811 (1-800-424-5555)

ABOSSEIN #223054

**Abossein Engineering, L.L.C.**  
MECHANICAL - ELECTRICAL CIVIL - LEED FIRE PROTECTION  
18465 NE 68TH ST REDMOND, WA 98052  
PH: (425) 462-9441  
FAX: (425) 462-9451  
E-Mail: cservice@abossein.com www.abossein.com



**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

NO.	DATE	REVISION DESCRIPTION



PRCNC20240007

**DEVELOPMENT INFORMATION:**  
ARCO NTI  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

**SITE ADDRESS:**  
SWC S MERIDIAN  
@ HIGHWAY 512  
PUTALLUP, WASHINGTON

**FACILITY #7184**  
DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REPA:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
- 21730

**ELECTRICAL SITE PLAN**

SHEET NO:  
**ES1.0**

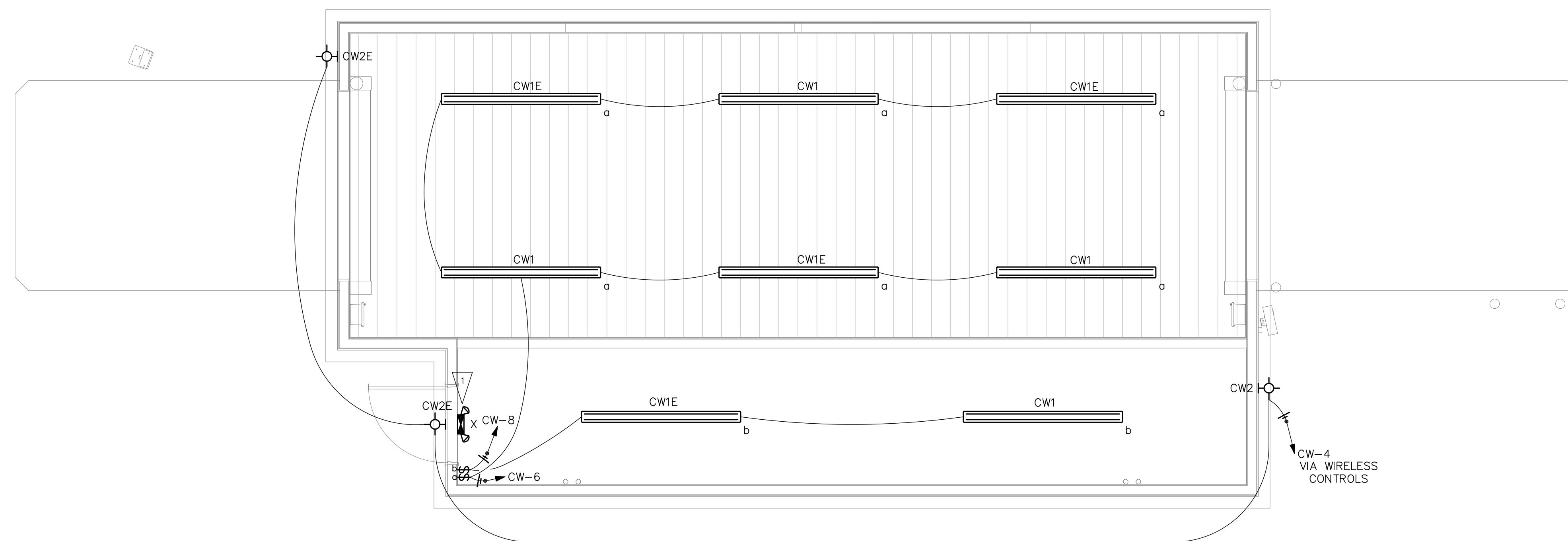
CARWASH LUMINAIRE SCHEDULE											
CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	INPUT VA	TOTAL VA	VOLTS	NOTES	QUANTITY
CW1		(1) 75W LED	ENCLOSED AND GASKETED LED FIXTURE	0-10V DIMMABLE	CEILING	LSI EG3-8-LED-11L-DA-S-UNV-DIM-50-80-OMSWL-STANDARD MOUNTING-STANDARD LATCHING	75	75	120V 1P 2W	CARWASH BAY, 10650 LUMENS, 74.25 LUMENS/WATT	4
CW1E		(1) 75W LED	ENCLOSED AND GASKETED LED FIXTURE	BATTERY	CEILING	LSI EG3-8-LED-11L-DA-S-UNV-DIM-50-80-OMSWL-EM-STANDARD MOUNTING-STANDARD LATCHING	75	75	120V 1P 2W	CARWASH BAY, 10650 LUMENS, 74.25 LUMENS/WATT, INCLUDES 1400 LUMEN EMERGENCY BATTERY BACKUP FOR 90 MINUTES OF EMERGENCY ILLUMINATION.	4
CW2		(1) 47W LED	WALL MOUNTED LED LIGHT	0-10V DIMMABLE	WALL	LSI XWM-3-LED-06L-50-UE-MSV-IMSBT1	47	47	120V 1P 2W	EXTERIOR SIDE & REAR WALLS, INCLUDES INTEGRAL MOTION AND PHOTOCELL SENSOR, 142 LUMENS/WATT EFFICACY	1
CW2E		(1) 47W LED	WALL MOUNTED LED LIGHT	BATTERY	WALL	LSI XWM-3-LED-06L-50-UE-MSV-IMSBT1-BB	47	47	120V 1P 2W	EXTERIOR SIDE & REAR WALLS, INCLUDES INTEGRAL MOTION AND PHOTOCELL SENSOR, 142 LUMENS/WATT EFFICACY	2
X		(1) 0.7W LED	EXIT SIGN W/ BATTERY BACKUP	BATTERY	UNIVERSAL	LSI EX-R-U-WB-WH-SD2	0.7	0.7	120V 1P 2W	CARWASH MECHANICAL ROOM EGRESS, W/EMERGENCY BATTERY PACK FOR 90 MINUTE ILLUMINATION	1

ALL EQUIPMENT IN CARWASH SHALL BE RATED FOR WET LOCATION. CONDUITS USED IN WET LOCATION TO BE PVC SCHEDULE 40. BOXES USED IN WET LOCATIONS TO BE THREADED HUBS. ALL CONDUCTORS TO BE RATED FOR WET LOCATION.

- NOTES:**
- REFER TO CARWASH DRAWINGS, CARWASH VENDOR TO FURNISH & CONNECT ALL CARWASH LIGHTING SHOWN.
  - REFER TO LIGHTING SHEET E1.0 FOR LOCATION AND INFORMATION ON ALL EXTERIOR BUILDING MOUNTED FIXTURES.
  - 'EM' AT LIGHT FIXTURE INDICATES LIGHT FIXTURE WITH EMERGENCY BACK UP. ALL EMERGENCY LIGHT FIXTURES SHALL BE SERVED FROM BATTERY BACKUP. EMERGENCY AND EXIT LIGHTS SHALL BE INSTALLED AND CIRCUITED PER THE LATEST CALIFORNIA ELECTRICAL CODE AND ALL LOCAL CODES (INSTALL A CENTRAL BATTERY SYSTEM WHERE THE USE OF INDIVIDUAL BATTERY UNITS ARE PROHIBITED BY LOCAL CODES). ALL EMERGENCY FIXTURES AND EXIT SIGNS SHALL BE CONNECTED TO UN-SWITCHED HOT LEG OF THE LOCAL LIGHTING CIRCUIT.
  - ALL EXTERIOR LIGHT FIXTURES TO BE CONTROLLED THROUGH THE LSI AIRLINK BLUE COMPLETE OUTDOOR LIGHTING WIRELESS MESH SYSTEM. AIRLINK BLUE SYSTEM INCLUDES DAYLIGHT AND MOTION SENSORS WITH DIMMING CONTROL CAPABLE OF AUTOMATICALLY SHUTTING OFF OUTDOOR LIGHTING WHEN DAYLIGHT IS AVAILABLE, EMPLOY AUTO FUNCTIONALITY WHEN AREA BECOMES OCCUPIED, AND CAPABLE OF PROVIDING CONTINUOUS DIMMING THROUGH A 50%-90% RANGE PER TITLE 24 130.2 (c). AIRLINK BLUE SYSTEM TO INCLUDE ASTRONOMICAL CLOCK AND TIME KEEPER AIRLINK BLUE COMPONENT FOR SCHEDULING CONTROLS SET PER TITLE 24 130.2 (c) 2. ALL EXTERIOR LUMINAIRES TO INCLUDE FACTORY INTEGRATED BLUETOOTH RADIO/SENSOR CONTROLLERS. AIRLINK BLUE SYSTEM TO BE INITIALIZED VIA WEB APP AND FIELD COMMISSIONED VIA MOBILE APP TO THE OWNER'S REQUIREMENTS. ANY CHANGES OR UPDATES TO BE ACCOMPLISHED ON SITE VIA MOBILE APP.

### FLAG NOTES

- EMERGENCY PATHWAY AND EXIT LIGHTS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHES AND TIMERS.



**1 CARWASH LIGHTING PLAN**  
1/4" = 1'-0"

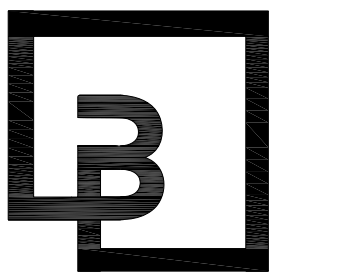
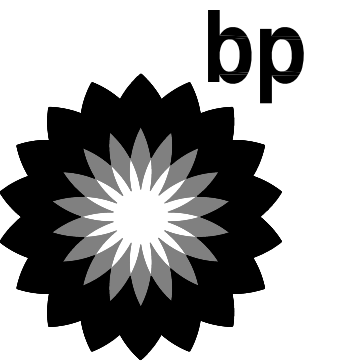
PRCNC20240007

ABOSSEIN #223054

Abossein  
Engineering,  
L.L.C.

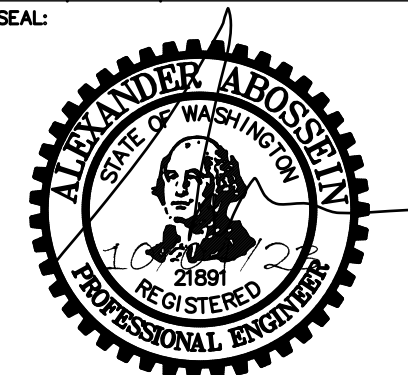
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CLIENT:



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Consulting Engineers, Inc.**  
18215 72nd Avenue South  
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425.251.6222  
borghausen.com

NO.	DATE	REVISION DESCRIPTION



DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
**SWC S MERIDIAN**  
@ HIGHWAY 512  
PUTALLUP, WASHINGTON

**FACILITY #7184**

DESIGNED BY:	ALLIANCE ZADN:
CHECKED BY:	BP REPR:
DRAWN BY:	ALLIANCE PK:
VERSION:	PROJECT NO: 21730

DRAWING TITLE:

**CARWASH  
LIGHTING PLAN**

SHEET NO:

**CWE1.0**



### FLAG NOTES

1. COORDINATE HEAT TAPE LOCATION WITH PLUMBING. FINAL CONNECTION TO OCCUR AFTER LOCATION AND COORDINATION WITH PLUMBING. PER NEC 426.28, HEAT TAPE TO BE EQUIPMENT GROUND FAULT PROTECTED AS PART OF DEICING OR SNOW MELTING EQUIPMENT THAT IS SENSITIVE TO LEAKAGE CURRENTS OF 6mA TO 50mA, AND IS NOT THE SAME AS GFCI USED FOR PERSONAL PROTECTION THAT TRIPS AT 5mA(+/-1mA)

### GENERAL NOTES

A. ALL ELECTRICAL FITTINGS TO BE WATERTIGHT. ANY FIXTURES IN THE VICINITY OF WASH UNIT TO BE WATER TIGHT INCLUDING LIGHTS. BOXES USED IN WET LOCATIONS TO BE THREADED HUBS. ALL CONDUCTORS TO BE RATED FOR WET LOCATIONS.

B. DRILL A 1/4" DIAMETER DRAIN HOLE IN THE BOTTOM OF ALL JUNCTION BOXES THAT ARE LOCATED IN THE WASH BAY.

C. NO CONDUITS MAY ENTER THE TOP OF ANY ENCLOSURE.

D. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS AS REQUIRED FOR A FULLY COMPLETE AND OPERABLE SYSTEM.

E. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL CONDITIONS PRIOR TO BID.

F. REFER TO RYKO ELECTRICAL DESIGN DRAWINGS FOR LOW-VOLTAGE COMMUNICATION AND CONTROL WIRING.

G. REFER TO CARWASH DRAWINGS FROM CARWASH VENDOR TO FURNISH & CONNECT ALL CARWASH EQUIPMENT.

H. ALL EQUIPMENT IN CARWASH SHALL BE RATED FOR WET LOCATION. CONDUITS USED IN WET LOCATION TO BE PVC SCHEDULE 40. BOXES USED IN WET LOCATIONS TO BE THREADED HUBS. ALL CONDUCTORS TO BE RATED FOR WET LOCATION.

I. WITHIN THE CARWASH BAY, ALL CONDUITS ARE TO BE CONCEALED WITHIN THE WALL AND ARE NOT TO BE SURFACE MOUNTED/EXPOSED.

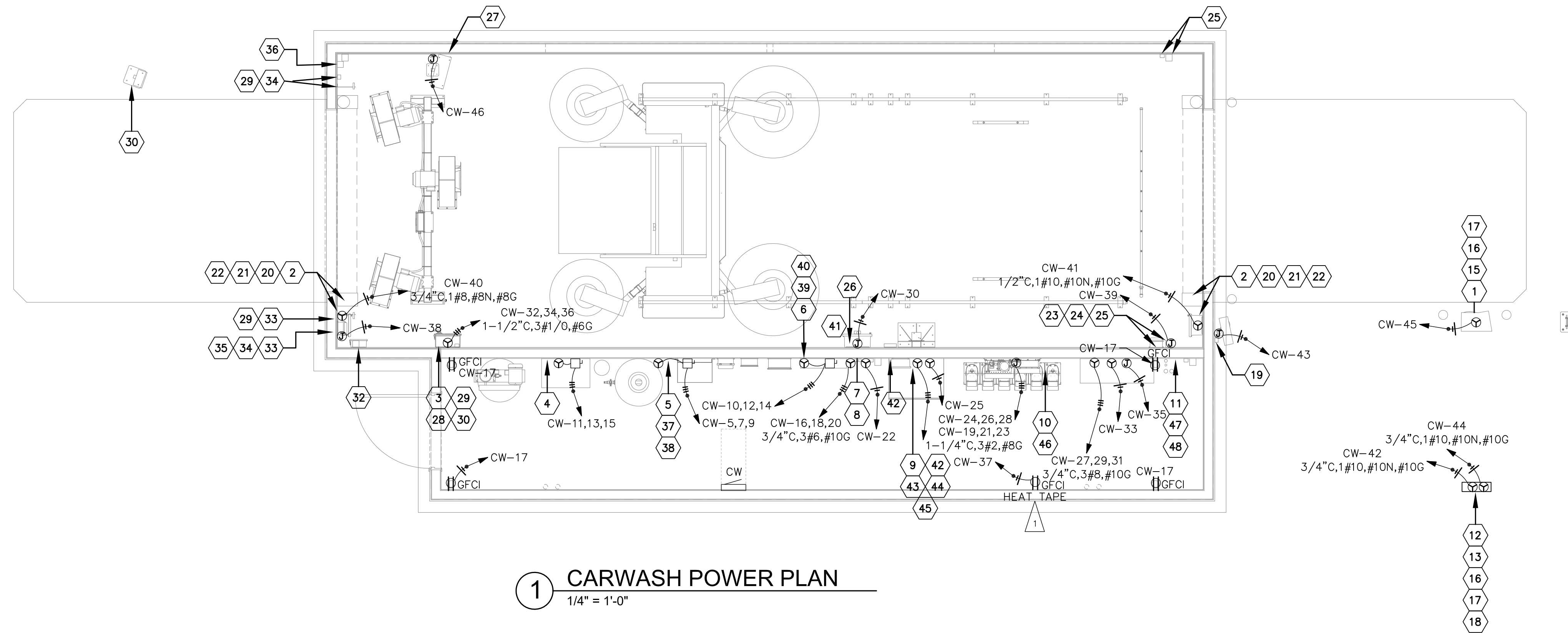
J. MINIMIZE THE USAGE OF JUNCTION BOXES THROUGHOUT THE CARWASH TUNNEL.

NOTE:  
REFER TO CARWASH DRAWINGS,  
CARWASH VENDOR TO FURNISH  
& CONNECT ALL CARWASH EQUIPMENT.

ALL EQUIPMENT IN CARWASH SHALL BE RATED FOR WET LOCATION. CONDUITS USED IN WET LOCATION TO BE PVC SCHEDULE 40. BOXES USED IN WET LOCATIONS TO BE THREADED HUBS. ALL CONDUCTORS TO BE RATED FOR WET LOCATION.

### CARWASH EQUIPMENT SCHEDULE

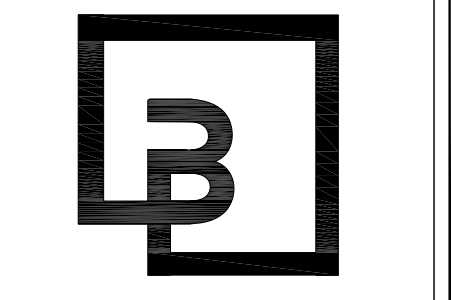
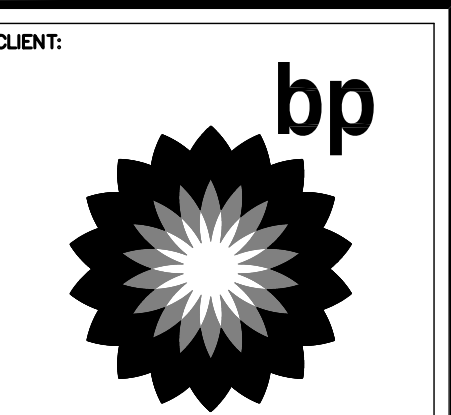
CALLOUT	SYMBOL	VOLTS	VOLTS AND PHASE	AMPS	MCA	MOCF	KVA	HP	LOAD TYPE	CIRCUIT	WIRE CALLOUT	DISCONNECT
19 - 3-MESSAGE LIGHTED ENTRANCE SIGN JBOX	⊕	120V 1P 2W	120V 1-PH 2W	1.5	1.9	20	0.18		LIGHTING	CW-43	1/2"C,1#12,#12N,#12G	JUNCTION BOX
27 - 8 SEGMENT LIGHTED SIGN JBOX	⊕	120V 1P 2W	120V 1-PH 2W	1.5	1.9	20	0.18		LIGHTING	CW-46	1/2"C,1#12,#12N,#12G	JUNCTION BOX
4 - AIR COMPRESSOR 5HP 3PH	⊕	208V 3P 3W	208V 3-PH 3W	17.54	20	20	6.32	5 HP	MOTOR	CW-11,13,15	1/2"C,3#12,#12G	NON-FUSED
3 - AIR KNIFE DRYER/CONTROL CABINET	⊕	208V 3P 3W	208V 3-PH 3W	92.31	115.5	120	33.26	30 HP	MOTOR	CW-32,34,36	1-1/2"C,3#1/0,#6G	HARDWIRED CONNECTION
2 - AIRLIFT DOORS CONTROL BOX	⊕	120V 1P 2W	120V 1-PH 2W	20	25	30	2.4	1.5 HP	MOTOR	CW-41	1/2"C,1#10,#10N,#10G	HARDWIRED CONNECTION
2 - AIRLIFT DOORS CONTROL BOX	⊕	120V 1P 2W	120V 1-PH 2W	20	25	30	2.4	1.5 HP	MOTOR	CW-40	3/4"C,1#8,#8N,#8G	HARDWIRED CONNECTION
33 - AUTO DOOR RELAY JBOX	⊕	120V 1P 2W	120V 1-PH 2W	1.5	1.9	20	0.18		NONCONTINUOUS	CW-38	1/2"C,1#12,#12N,#12G	JUNCTION BOX
6 - BOOST PUMP SYSTEM CONTROL BOX	⊕	208V 3P 3W	208V 3-PH 3W	14.99	19	20	5.4		NONCONTINUOUS	CW-10,12,14	1/2"C,3#12,#12G	NON-FUSED
CARWASH PAYSTATION	⊕	120V 1P 2W	120V 1-PH 2W	15	15	20	1.8		NONCONTINUOUS	CW-1	3/4"C,1#8,#8N,#8G	HARDWIRED CONNECTION
11 - EV ULTRACLEAR RECLAIM SYSTEM 120V	⊕	120V 1P 2W	120V 1-PH 2W	15	19	20	1.8		NONCONTINUOUS	CW-33	1/2"C,1#12,#12N,#12G	HARDWIRED CONNECTION
11 - EV ULTRACLEAR RECLAIM SYSTEM 208V	⊕	208V 3P 3W	208V 3-PH 3W	24.98	31.25	40	9		NONCONTINUOUS	CW-27,29,31	3/4"C,3#8,#10G	HARDWIRED CONNECTION
11 - EV ULTRACLEAR RECLAIM SYSTEM JBOX	⊕	120V 1P 2W	120V 1-PH 2W	1.5	1.9	20	0.18		NONCONTINUOUS	CW-35	1/2"C,1#12,#12N,#12G	JUNCTION BOX
25 - FLOOR MOUNT PHOTOEYE	⊕	120V 1P 2W	120V 1-PH 2W	1.5	1.9	20	0.18		NONCONTINUOUS	CW-39	1/2"C,1#12,#12N,#12G	JUNCTION BOX
10 - OFFBOARD CHEMICAL INJECTION PUMP	⊕	208V 3P 3W	208V 3-PH 3W	7.85	10	20	2.83	2 HP	MOTOR	CW-24,26,28	1/2"C,3#12,#12G	JUNCTION BOX
9 - ONBOARD H.P. PUMP CONTROL BOX 120V	⊕	120V 1P 2W	120V 1-PH 2W	15	19	20	1.8		NONCONTINUOUS	CW-25	1/2"C,1#12,#12N,#12G	HARDWIRED CONNECTION
9 - ONBOARD H.P. PUMP CONTROL BOX 208V	⊕	208V 3P 3W	208V 3-PH 3W	59.96	75	80	21.6		NONCONTINUOUS	CW-19,21,23	1-1/4"C,3#2,#8G	HARDWIRED CONNECTION
5 - RAINMAKER III R.O. SYS W/REPRESSURIZATION	⊕	208V 3P 3W	208V 3-PH 3W	14.99	19	20	5.4		NONCONTINUOUS	CW-5,7,9	1/2"C,3#12,#12G	NON-FUSED
26 - REMOTE BAY BUZZER KIT JBOX	⊕	120V 1P 2W	120V 1-PH 2W	1.5	1.9	20	0.18		NONCONTINUOUS	CW-30	1/2"C,1#12,#12N,#12G	JUNCTION BOX
13 - ROUTER	⊕	120V 1P 2W	120V 1-PH 2W	15	19	20	1.8		NONCONTINUOUS	CW-44	3/4"C,1#10,#10N,#10G	HARDWIRED CONNECTION
1 - UNITEC PORTAL TI ACTIVATION	⊕	120V 1P 2W	120V 1-PH 2W	8	10	20	0.96		NONCONTINUOUS	CW-45	1/2"C,1#12,#12N,#12G	HARDWIRED CONNECTION
12 - UNITED POS INTERFACE	⊕	120V 1P 2W	120V 1-PH 2W	15	19	20	1.8		NONCONTINUOUS	CW-42	3/4"C,1#10,#10N,#10G	HARDWIRED CONNECTION
VACUUM	⊕	120V 1P 2W	120V 1-PH 2W	16	20	20	1.92		MOTOR	CW-2	3/4"C,1#8,#8N,#8G	JUNCTION BOX
8 - WASH BAY TERMINAL BOX 120V	⊕	120V 1P 2W	120V 1-PH 2W	15	19	20	1.8		NONCONTINUOUS	CW-22	1/2"C,1#12,#12N,#12G	HARDWIRED CONNECTION
7 - WASH BAY TERMINAL BOX 208V	⊕	208V 3P 3W	208V 3-PH 3W	34.97	44	50	12.6		NONCONTINUOUS	CW-16,18,20	3/4"C,3#6,#10G	HARDWIRED CONNECTION



ABOSSEIN #223054

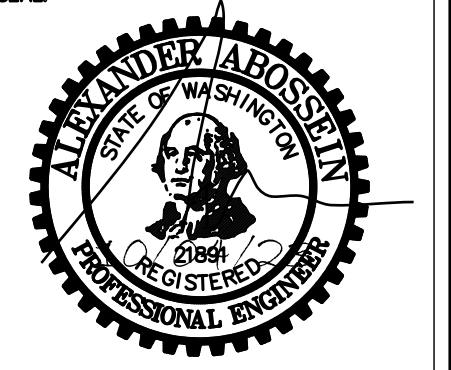
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DEVELOPMENT INFORMATION:  
ARCO NTI  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
SWC S MERIDIAN  
@ HIGHWAY 512  
PUTALLUP, WASHINGTON

FACILITY #7184  
DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REP:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

DRAWING TITLE:  
CARWASH POWER PLAN

SHEET NO:

CWE2.0

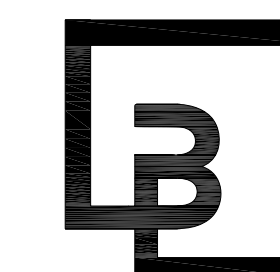
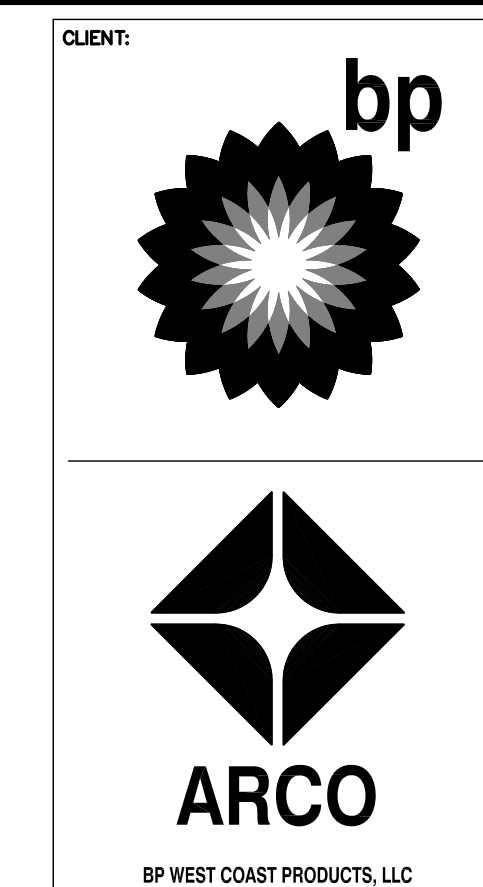
CW											
ROOM CARWASH MECH ROOM			VOLTS 208Y/120V 3P 4W			AIC 42,000					
MOUNTING SURFACE			BUS AMPS 400			MAIN BKR MLO					
FED FROM MSB-4			NEUTRAL 100%			LUGS STANDARD					
NOTE PROVIDE MEANS TO LOCK BREAKER IN OPEN POSITION FOR ALL MOTORS PER NEC 430.102											
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		
			A	B	C				A	B	C
1	20/1	CARWASH PAYSTATION	1.8			2	20/1	VACUUM	1.92		
3	20/1	AIR/WATER UNIT		1.5		4	20/1	EXTERIOR CARWASH EM BACKUP LIGHTING, LIGHTING		0.141	
5	20/3	5 - RAINMAKER III R.O. SYS W/REPRESSURIZATION			1.8	6	20/1	INTERIOR CARWASH EM BACKUP LIGHTING, LIGHTING			0.45
7			1.8			8	20/1	EM BACKUP LIGHTING, LIGHTING	0.15		
9				1.8		10	20/3	6 - BOOST PUMP SYSTEM CONTROL BOX		1.8	
11	20/3	4 - AIR COMPRESSOR 5HP 3PH	2.11		2.11	12					1.8
13				2.11		14			1.8		
15					0.72	16	50/3	7 - WASH BAY TERMINAL BOX 208V		4.2	
17	20/1	CARWASH MECHANICAL ROOM RECEPTACLE				18					4.2
19	80/3	9 - ONBOARD H.P. PUMP CONTROL BOX 208V	7.2			20			4.2		
21				7.2		22	20/1	8 - WASH BAY TERMINAL BOX 120V		1.8	
23					7.2	24	20/3	10 - OFFBOARD CHEMICAL INJECTION PUMP	0.942		0.942
25	20/1	9 - ONBOARD H.P. PUMP CONTROL BOX 120V	1.8			26					
27	40/3	11 - EV ULTRACLEAR RECLAIM SYSTEM 208V		3		28				0.942	
29					3	30	20/1	26 - REMOTE BAY BUZZER KIT JBOX			0.18
31			3			32	110/3	3 - AIR KNIFE	11.1		
33	20/1	11 - EV ULTRACLEAR RECLAIM SYSTEM 120V		1.8		34		DRYER/CONTROL CABINET		11.1	
35	20/1	11 - EV ULTRACLEAR RECLAIM SYSTEM JBOX			0.18	36					11.1
37	20/1	HEAT TAPE	0.1			38	20/1	33 - AUTO DOOR RELAY JBOX	0.18		
39	20/1	25 - FLOOR MOUNT PHOTOEYE		0.18		40	30/1	2 - AIRLIFT DOORS CONTROL BOX		2.4	
41	30/1	2 - AIRLIFT DOORS CONTROL BOX			2.4	42	20/1	12 - UNITED POS INTERFACE			1.8
43	20/1	19 - 3-MESSAGE LIGHTED ENTRANCE SIGN JBOX	0.18			44	20/1	13 - ROUTER	1.8		
45	20/1	1 - UNITEC PORTAL TI ACTIVATION		0.96		46	20/1	27 - 8 SEGMENT LIGHTED SIGN JBOX		0.18	
47	20/1	SPACE			0	48	20/1	SPACE			0
49	20/1	SPACE	0			50	20/1	SPACE	0		
51	20/1	SPACE		0		52	20/1	SPACE		0	
53	20/1	SPACE			0	54	20/1	SPACE			0
55	20/1	SPACE	0			56	20/1	SPACE	0		
57	20/1	SPACE			0	58	20/1	SPACE		0	
59	20/1	SPACE			0	60	20/1	SPACE			0
TOTAL CONNECTED KVA BY PHASE									40.1	41.1	37.9
			CONN KVA	CALC KVA					CONN KVA	CALC KVA	
LIGHTING			1.1	1.38	(125%)	CONTINUOUS			0	0	(125%)
LARGEST MOTOR			33.3	41.6	(125%)	HEATING			0	0	(N/A)
OTHER MOTORS			15.9	15.9	(100%)	COOLING			0	0	(N/A)
RECEPTACLES			0.72	0.72	(50%>10)	NONCONTINUOUS			68.1	68.1	(100%)
KITCHEN EQUIP			0	0	(N/A)	DIVERSE			0	0	(N/A)
						METERED DEMAND			0	0	(125%)
						TOTAL KVA			119	128	
						BALANCED 3-PHASE AMPS			354	354	

PRCNC20240007

ABOSSEIN #223054

Abossein  
Engineering,  
L.L.C.

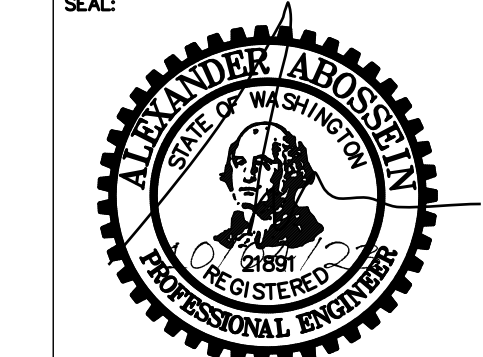
MECHANICAL - ELECTRICAL  
CIVIL - LEED  
FIRE PROTECTION  
18465 NE 68TH ST  
REDMOND, WA 98052  
PH: (425) 462-9441  
FAX: (425) 462-9451  
E-Mail: cservice@abossein.com  
www.abossein.com



Barghausen  
Consulting Engineers, Inc.

18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD'S

SITE ADDRESS:  
**SWC S MERIDIAN**  
@ HIGHWAY 512  
PUTALLUP, WASHINGTON

**FACILITY #7184**  
DESIGNED BY: ALLIANCE ZADM:  
CHECKED BY: BP REPA:  
DRAWN BY: ALLIANCE PM:  
VERSION: PROJECT NO:  
21730

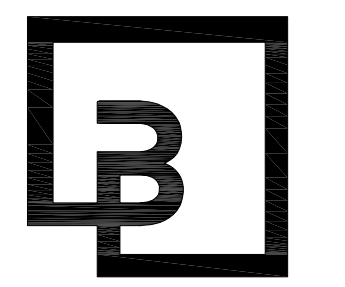
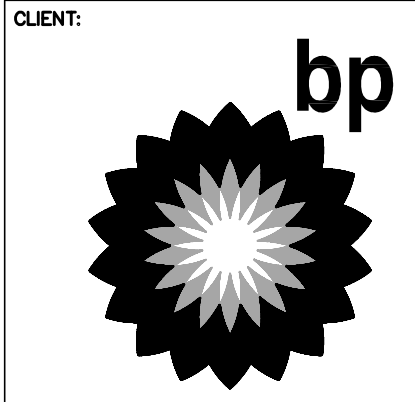
DRAWING TITLE:  
**CARWASH  
PANEL  
SCHEDULE**

SHEET NO:  
**CWE2.1**



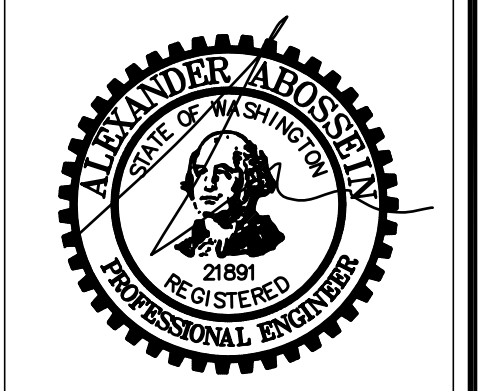






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 Kent, WA 98032  
 425.251.6222  
 barghausen.com

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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
 3400 am/pm  
 FUEL CANOPY w/ 6 MPD's

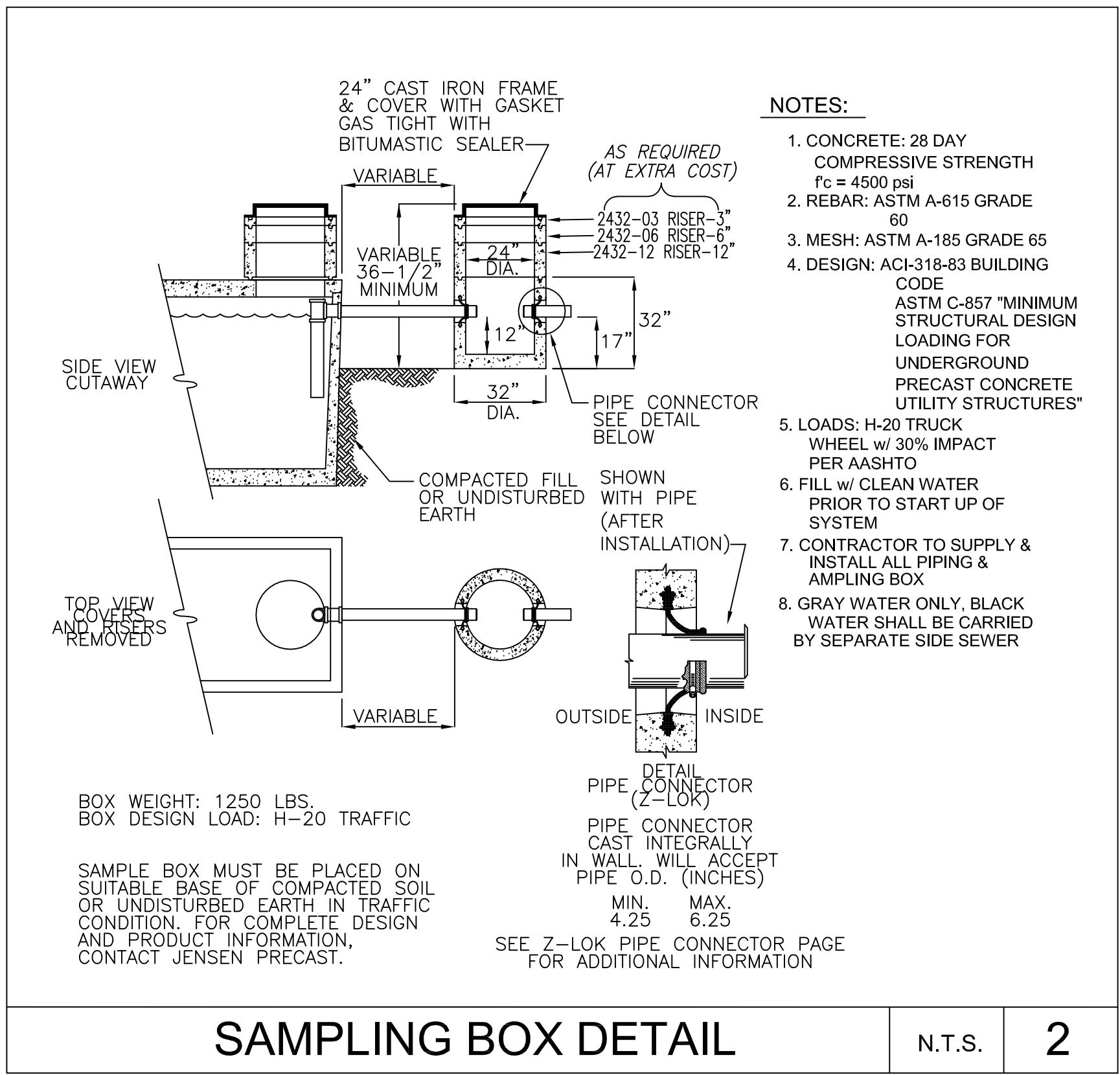
SITE ADDRESS:  
 1402 S MERIDIAN  
 PUYALLUP, WA 98371

FACILITY #7184

DESIGNED BY:	ALLIANCE ZADM
CHECKED BY:	BP REPM
DRAWN BY:	ALLIANCE FM
VERSION:	PROJECT NO: 21730

DRAWING TITLE:  
**PLUMBING DETAILS - III**

SHEET NO:  
**P4.2**



**NOTE:**  
 1. REFER TO CIVIL DRAWINGS FOR GREASE INTERCEPTOR DETAIL.

**SAMPLING BOX DETAIL** N.T.S. 2

PRCNC20240007

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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98371

FACILITY #7184  
DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REPA  
DRAWN BY: ALLIANCE PM  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**CARWASH WASTE AND VENT PLAN**

SHEET NO:  
**CWP1.1**

**GENERAL NOTES**

- COORDINATE WITH STRUCTURAL FOR EXACT LOCATION OF ALL STRUCTURAL FRAMING AND FOOTINGS AND FINALIZE THE EXACT ROUTING OF ALL PIPES WITH STRUCTURAL AND AT SITE PRIOR AND DURING THE CONSTRUCTION.
- COORDINATE WITH ARCHITECTURAL AND AT SITE FOR EXACT LOCATION OF ALL PLUMBING FIXTURES.
- ALL FIXTURES REQUIRING PLUMBING SHALL BE CONNECTED TO BUILDING WASTE, VENT, COLD WATER AND HOT WATER SYSTEM AS REQUIRED BY THE CODES. WASTE AND VENT PIPE SIZES SHALL NOT BE SMALLER THAN UPC 2015 TABLE 703.2.
- INSTALL CLEANOUTS PER UPC 2015 SECTION 707, SIZED PER TABLE 707.1 AND AS REQUIRED BY LOCAL JURISDICTIONS. ALL CLEANOUTS SHALL BE LOCATED IN WALLS/FLOORS IN A NOT HIGHLY VISIBLE LOCATION AS APPROVED BY THE ARCHITECT.
- CONNECT TO EACH FIXTURE, EQUIPMENT, ETC. WITH ALL ACCESSORIES, VALVES, VACUUM BREAKERS, REGULATORS, UNION, ETC., AS REQUIRED AND AS RECOMMENDED BY THE MANUFACTURERS.
- COORDINATE WITH THE STRUCTURAL ENGINEER AND GENERAL CONTRACTOR TO PROVIDE STRUCTURAL SUPPORT FOR ALL EQUIPMENT.
- PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING VENT STACKS WITH THE HVAC CONTRACTOR TO MAINTAIN A MINIMUM OF 10 FT. FROM THE OUTSIDE AIR INTAKES.
- ALL ROOF PENETRATIONS SHALL BE MINIMUM 5 FEET AWAY FROM AREA/OCCUPANCY SEPARATION WALLS.
- COMPLETE INSTALLATION OF THE PLUMBING SYSTEM SHALL BE PER THE LOCAL CODE BOOK, PLUMBING AND HEALTH CODES AND REGULATIONS AS ADOPTED BY THE LOCAL JURISDICTIONS.
- ALL EQUIPMENT SHALL BE FREE FROM DEFECTS IN MATERIAL, WORKMANSHIP AND SHALL BE OF THE KIND AND QUALITY DESCRIBED HEREIN.
- PLUMBING CONTRACTOR SHALL CONNECT TO EACH PIECE OF EQUIPMENT WITH ALL REQUIRED ACCESSORIES AND IN ACCORDANCE WITH DRAWINGS, MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODES.
- INSTALL SHUT OFF VALVES/STOPS AT HOT AND COLD WATER SUPPLY TO EACH FIXTURE EQUIPMENT PER CODE.
- INSTALL ALL TRAP ARMS SUCH THAT THE MAXIMUM LENGTH WILL NOT EXCEED THE CODE REQUIREMENTS. ALL TRAPS WITHOUT HAVING CONTINUOUS WATER DISCHARGE TO BE PROTECTED AGAINST TRAP EVAPORATION.
- VENT LENGTH SHALL NOT EXCEED 2015-UPC-TABLE-703.2.
- ALL DRAINAGE PIPING INSIDE BUILDING SHALL BE SLOPED AT MINIMUM 1/4" PER FOOT (2%) UNLESS OTHERWISE APPROVED BY LOCAL JURISDICTIONS. (OTHER THAN 2% SLOPE WILL REQUIRE ADJUSTMENT FACTOR [0.80 FOR 1% SLOPE] FOR TOTAL F.U. COUNT CAPACITIES PER UPC 2015 TABLE 703.2)
- ALL WATER PIPING SHALL BE INSTALLED ON THE WARM SIDE OF INSULATION.
- ALL PLUMBING, PIPING AND EQUIPMENT SHALL CONFORM TO SMACNA & LOCAL REGULATIONS FOR SEISMIC RESTRAINTS.
- ALL PIPING SHALL BE INSULATED PER THE STATE ENERGY CODE.
- VERIFY OVERFLOW DRAIN REQUIREMENTS FOR DISCHARGE WITH LOCAL JURISDICTION PRIOR TO CONSTRUCTION.
- PROVIDE HEAT TAP ON PLUMBING IN CARWASH BAY.

FIXTURE UNITS CALCULATIONS						
FIXT ID (ITEM)	QTY	DESCRIPTION	WATER PIPING			
			SIZE	GPM		
<b>CARWASH</b>						
CW25	1	EV ULTRACLEAR RECLAIM SYSTEM	1 1/2"	15		
CW26	1	OFFBOARD CHEMICAL INJECTION PUMP	1"	17		
CW27	1	ONBOARD HP PUMP W/CONTROL BOX	1"	17		
CW31	1	BOOSTER PUMP (OPTIONAL)	1 1/2"			
CW34	1	RAINMAKER III R.O. SYSTEM	3/4"	15		
TOTAL				64		
FIXT ID (ITEM)	QTY	DESCRIPTION	WATER PIPING		WASTE PIPING	
			F.U.PER FIXTURE	TOTAL CW F.U.	TOTAL HW F.U.	F.U.PER FIXTURE
FD-1	1	FLOOR DRAIN	-	-	2	2
HD-1	1	HUB DRAIN	-	-	3	3
CB-1	1	CATCH BASIN	-	-	6	6
HB-1	2	HOSE BIBB	2.5	2.5	3.5	-
TP-1	1	TRAP PRIMER	1.0	0.5	-	-
TOTAL			3.9	4	11	11

- NOTES:  
1. WATER SUPPLY FIXTURE UNITS ARE BASED ON CPC, APPENDIX A.  
2. DRAINAGE FIXTURE UNITS ARE BASED ON CPC, CHAPTER-7 TABLE 7-3.  
3. REFER TO CARWASH DRAWINGS FOR FINAL WATER CALCULATIONS AND CONNECTION POINTS.

NO.	ITEM / DESCRIPTION
CW6	TRENCH MOUNTED UNDERCAR MANIFOLD
CW8	SOFTGLOSS FLOOR TRACKS
CW9	SOFTGLOSS FLOOR MOUNT BOOM STAND
CW10	SOFTGLOSS CABLE MOUNT BRACKET
CW11	WASH BAY TERMINAL BOX
CW12	LOW PROFILE GUIDE RAILS (2 PLCS)
CW13	SOFTGLOSS WASH MACHINE
CW14	SLIMLINE DRYER PNEUMATIC CONTROL BOX
CW16	SLIMLINE DRYER (3 FAN)
CW24	FRESH WATER BACKUP VALVE ASSEMBLY
CW25	EV ULTRACLEAR RECLAIM SYSTEM 40 GPM W/ OZONE
CW26	OFFBOARD CHEMICAL INJECTION PUMP/ WITH CHEMICAL CONTAINERS
CW27	ONBOARD HP PUMP W/ CONTROL BOX
CW28	HP DIVERTER VALVES
CW29	OFF-BOARD RINSE VALVE
CW32	165 GALLON R.O. STORAGE TANK
CW33	CARBON FILTER
CW34	RAINMAKER III R.O. SYSTEM
CW35	AIR COMPRESSOR, 5 HP, 3 PH

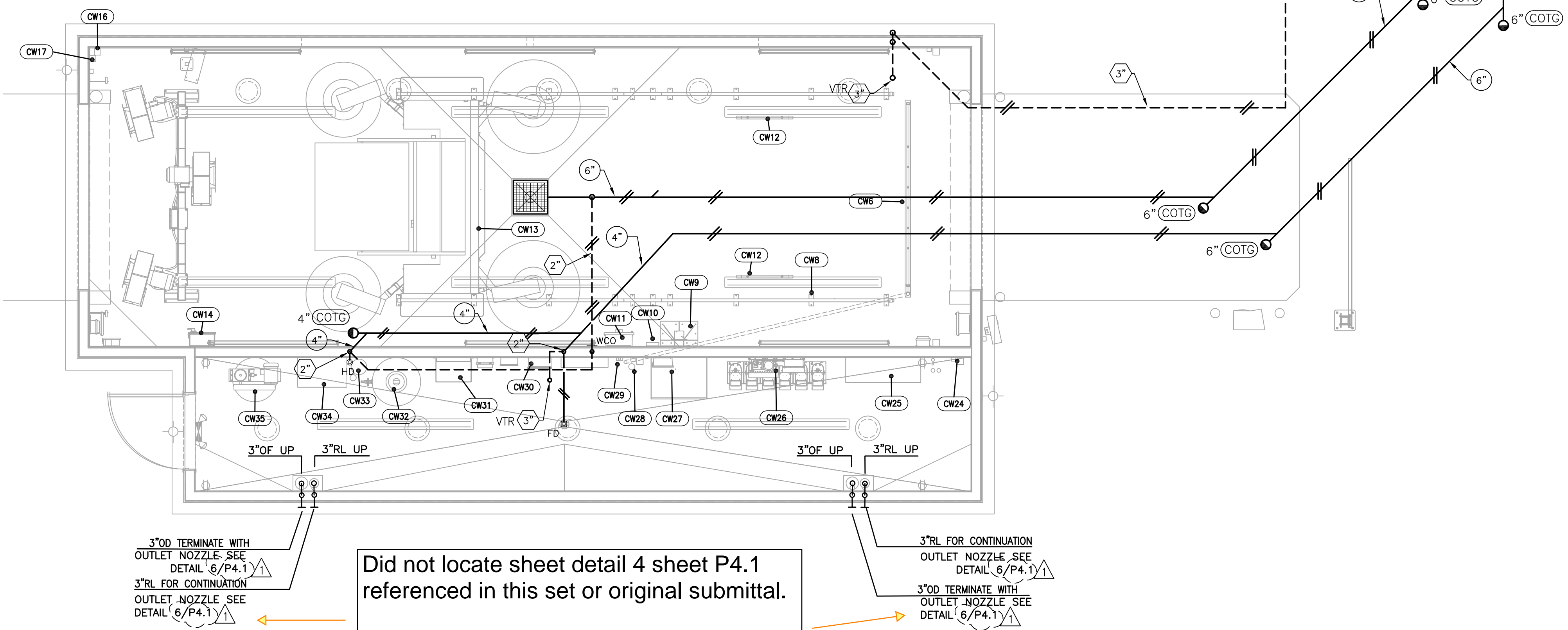
One hub drain proposed.

Two hose bibbs proposed—one from the car wash and the other from the air/water unit.

Each additional hose bibb is 1 water F.U.

Total waste SS drainage fixture units equals 11.

Total water drainage fixture units equals 4.



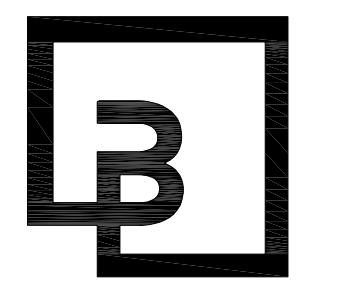
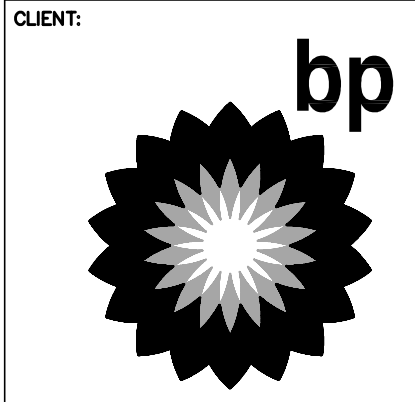
3"OD TERMINATE WITH OUTLET NOZZLE SEE DETAIL 6/P4.1  
3"RL FOR CONTINUATION OUTLET NOZZLE SEE DETAIL 6/P4.1

Did not locate sheet detail 4 sheet P4.1 referenced in this set or original submittal.

CWP1.1

3"RL FOR CONTINUATION OUTLET NOZZLE SEE DETAIL 6/P4.1  
3"OD TERMINATE WITH OUTLET NOZZLE SEE DETAIL 6/P4.1

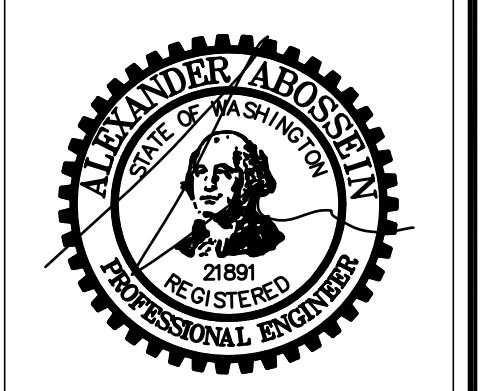
VERIFY ALL PLUMBING ROUGH-IN DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR INSTALLATION



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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98371

FACILITY #7184

DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REPA  
DRAWN BY: ALLIANCE FM  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**CARWASH WATER AND ROOF PLAN**

SHEET NO:

**CWP1.3**

FIXTURE UNITS CALCULATIONS					
FIXT ID (ITEM)	QTY	DESCRIPTION	WATER PIPING		
			SIZE	GPM	
CARWASH					
CW25	1	EV ULTRACLEAR RELCAIM SYSTEM	1 1/2"	15	
CW26	1	OFFBOARD CHEMICAL INJECTION PUMP	1"	17	
CW27	1	ONBOARD HP PUMP W/CONTROL BOX	1"	17	
CW31	1	BOOSTER PUMP (OPTIONAL)	1 1/2"		
CW34	1	RAINMAKER III R.O. SYSTEM	3/4"	15	
		TOTAL		64	

FIXT ID (ITEM)	QTY	DESCRIPTION	WATER PIPING		WASTE PIPING	
			F.U. PER FIXTURE	TOTAL CW F.U.	F.U. PER FIXTURE	TOTAL SS F.U.
FD-1	1	FLOOR DRAIN	-	-	2	2
HD-1	1	HUB DRAIN	-	-	3	3
CB-1	1	CATCH BASIN	-	-	6	6
HB-1	2	HOSE BIBB	2.5	5	-	-
TP-1	1	TRAP PRIMER	1.0	0.5	-	-
		TOTAL	3.0	4	11	11

NOTES:  
1. WATER SUPPLY FIXTURE UNITS ARE BASED ON CPC, APPENDIX A.  
2. DRAINAGE FIXTURE UNITS ARE BASED ON CPC, CHAPTER-7 TABLE 7-3.  
3. REFER TO CARWASH DRAWINGS FOR FINAL WATER CALCULATIONS AND CONNECTION POINTS.

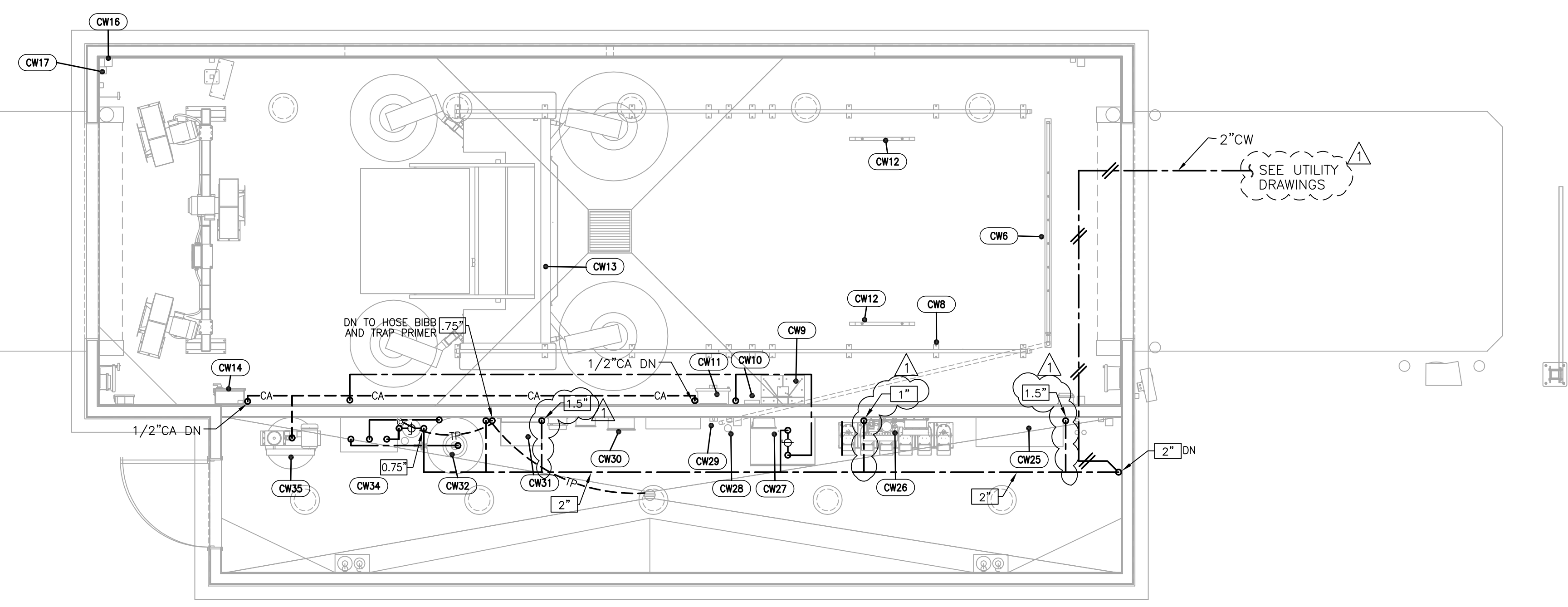
One hub drain proposed.

Two hose bibbs proposed—one from the car wash and the other from the air/water unit.

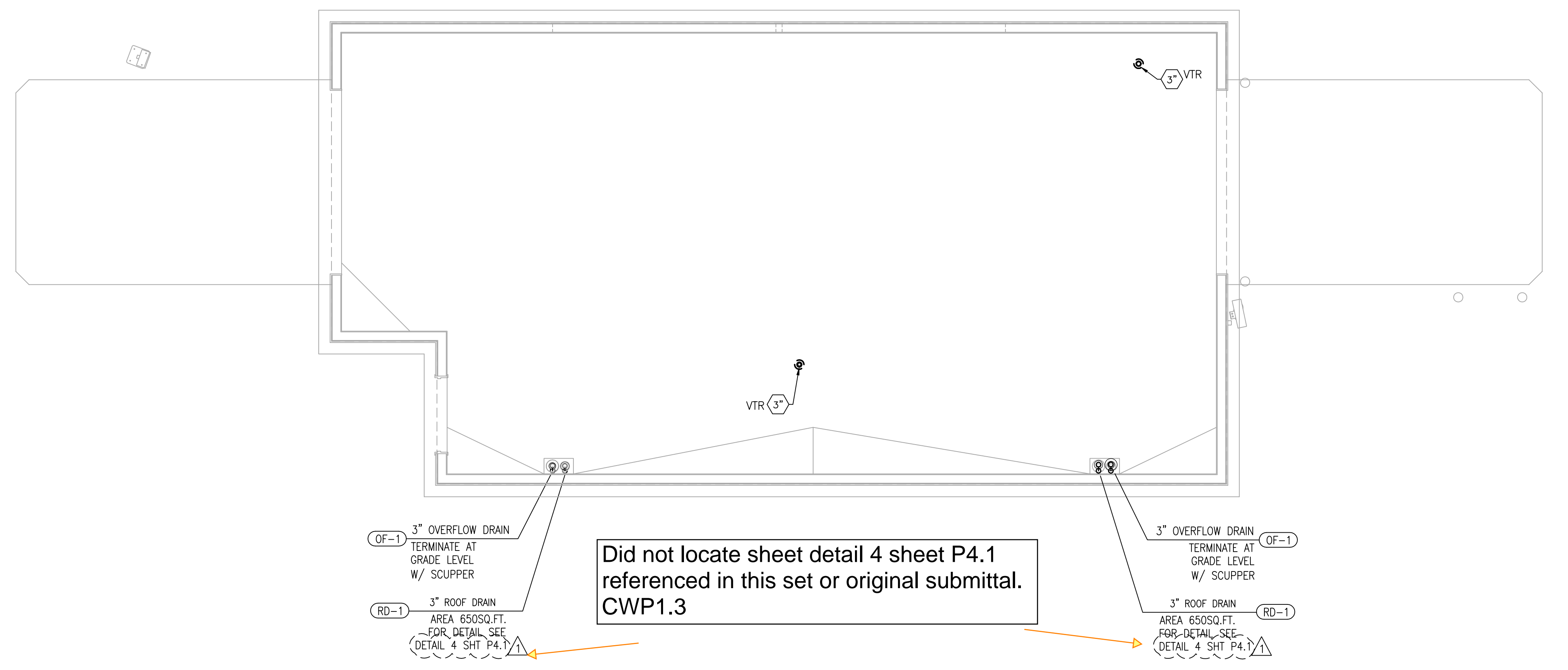
Each additional hose bibb is 1 water F.U.

Total waste SS drainage fixture units equals 11.

Total water drainage fixture units equals 4.



**1 CARWASH WATER PLUMBING PLAN**  
1/4" = 1'-0"



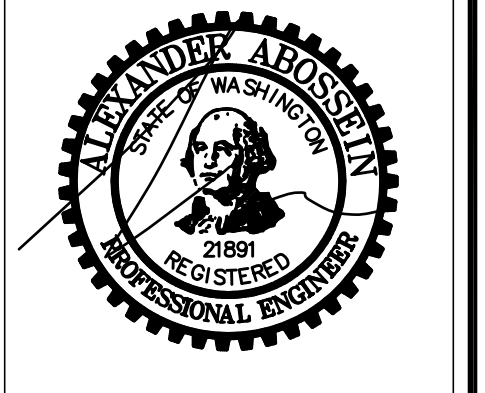
**2 CARWASH ROOF PLAN**  
1/4" = 1'-0"

Did not locate sheet detail 4 sheet P4.1 referenced in this set or original submittal. CWP1.3

VERIFY ALL PLUMBING ROUGH-IN DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR INSTALLATION



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DEVELOPMENT INFORMATION:  
**ARCO NTI**  
3400 am/pm  
FUEL CANOPY w/ 6 MPD's

SITE ADDRESS:  
1402 S MERIDIAN  
PUYALLUP, WA 98371

**FACILITY #7184**

DESIGNED BY: ALLIANCE ZADM  
CHECKED BY: BP REPA  
DRAWN BY: ALLIANCE FM  
VERSION: PROJECT NO: 21730

DRAWING TITLE:  
**CARWASH RISER DIAGRAMS**

SHEET NO:

**CWP2.0**

**EQUIPMENT SCHEDULE**

NO.	ITEM / DESCRIPTION
CW5	TRENCH MOUNTED UNDERCAR MANIFOLD
CW6	SOFTGLOSS FLOOR TRACKS
CW9	SOFTGLOSS FLOOR MOUNT BOOM STAND
CW10	SOFTGLOSS CABLE MOUNT BRACKET
CW11	WASH BAY TERMINAL BOX
CW12	LOW PROFILE GUIDE RAILS (2 PLCS)
CW13	SOFTGLOSS WASH MACHINE
CW14	SLIMLINE DRYER PNEUMATIC CONTROL BOX
CW16	SLIMLINE DRYER (3 FAN)
CW24	FRESH WATER BACKUP VALVE ASSEMBLY.
CW25	EV ULTRACLEAR RELCAIM SYSTEM 40 GPM W/ OZONE
CW26	OFFBOARD CHEMICAL INJECTION PUMP/ WITH CHEMICAL CONTAINERS
CW27	ONBOARD HP PUMP W/ CONTROL BOX
CW28	HP DIVERTER VALVES
CW29	OFF-BOARD RINSE VALVE
CW32	165 GALLON R.O. STORAGE TANK
CW33	CARBON FILTER
CW34	RAINMAKER III R.O. SYSTEM
CW35	AIR COMPRESSOR, 5 HP, 3 PH

**GENERAL NOTES**

- COORDINATE WITH STRUCTURAL FOR EXACT LOCATION OF ALL STRUCTURAL FRAMING AND FOOTINGS AND FINALIZE THE EXACT ROUTING OF ALL PIPES WITH STRUCTURAL AND AT SITE PRIOR AND DURING THE CONSTRUCTION.
- COORDINATE WITH ARCHITECTURAL AND AT SITE FOR EXACT LOCATION OF ALL PLUMBING FIXTURES.
- ALL FIXTURES REQUIRING PLUMBING SHALL BE CONNECTED TO BUILDING WASTE, VENT, COLD WATER AND HOT WATER SYSTEM AS REQUIRED BY THE CODES. WASTE AND VENT PIPE SIZES SHALL NOT BE SMALLER THAN UPC 2015 TABLE 703.2.
- INSTALL CLEANOUTS PER UPC 2015 SECTION 707, SIZED PER TABLE 707.1 AND AS REQUIRED BY LOCAL JURISDICTIONS. ALL CLEANOUTS SHALL BE LOCATED IN WALLS/FLOORS IN A NOT HIGHLY VISIBLE LOCATION AS APPROVED BY THE ARCHITECT.
- CONNECT TO EACH FIXTURE, EQUIPMENT, ETC. WITH ALL ACCESSORIES, VALVES, VACUUM BREAKERS, REGULATORS, UNION, ETC., AS REQUIRED AND AS RECOMMENDED BY THE MANUFACTURERS.
- COORDINATE WITH THE STRUCTURAL ENGINEER AND GENERAL CONTRACTOR TO PROVIDE STRUCTURAL SUPPORT FOR ALL EQUIPMENT.
- PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING VENT STACKS WITH THE HVAC CONTRACTOR TO MAINTAIN A MINIMUM OF 10 FT. FROM THE OUTSIDE AIR INTAKES.
- ALL ROOF PENETRATIONS SHALL BE MINIMUM 5 FEET AWAY FROM AREA/OCCUPANCY SEPARATION WALLS.
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- PLUMBING CONTRACTOR SHALL CONNECT TO EACH PIECE OF EQUIPMENT WITH ALL REQUIRED ACCESSORIES AND IN ACCORDANCE WITH DRAWINGS, MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODES.
- INSTALL SHUT OFF VALVES/STOPS AT HOT AND COLD WATER SUPPLY TO EACH FIXTURE EQUIPMENT PER CODE.
- INSTALL ALL TRAP ARMS SUCH THAT THE MAXIMUM LENGTH WILL NOT EXCEED THE CODE REQUIREMENTS. ALL TRAPS WITHOUT HAVING CONTINUOUS WATER DISCHARGE TO BE PROTECTED AGAINST TRAP EVAPORATION.
- VENT LENGTH SHALL NOT EXCEED 2015-UPC-TABLE-703.2.
- ALL DRAINAGE PIPING INSIDE BUILDING SHALL BE SLOPED AT MINIMUM 1/4" PER FOOT (2%) UNLESS OTHERWISE APPROVED BY LOCAL JURISDICTIONS. (OTHER THAN 2% SLOPE WILL REQUIRE ADJUSTMENT FACTOR [0.80 FOR 1% SLOPE] FOR TOTAL F.U. COUNT CAPACITIES PER UPC 2015 TABLE 703.2)
- ALL WATER PIPING SHALL BE INSTALLED ON THE WARM SIDE OF INSULATION.
- ALL PLUMBING, PIPING AND EQUIPMENT SHALL CONFORM TO SMACNA & LOCAL REGULATIONS FOR SEISMIC RESTRAINTS.
- ALL PIPING SHALL BE INSULATED PER THE STATE ENERGY CODE.
- VERIFY OVERFLOW DRAIN REQUIREMENTS FOR DISCHARGE WITH LOCAL JURISDICTION PRIOR TO CONSTRUCTION.
- PROVIDE HEAT TAP ON PLUMBING IN CARWASH BAY.

**PLUMBING FIXTURE SCHEDULE**

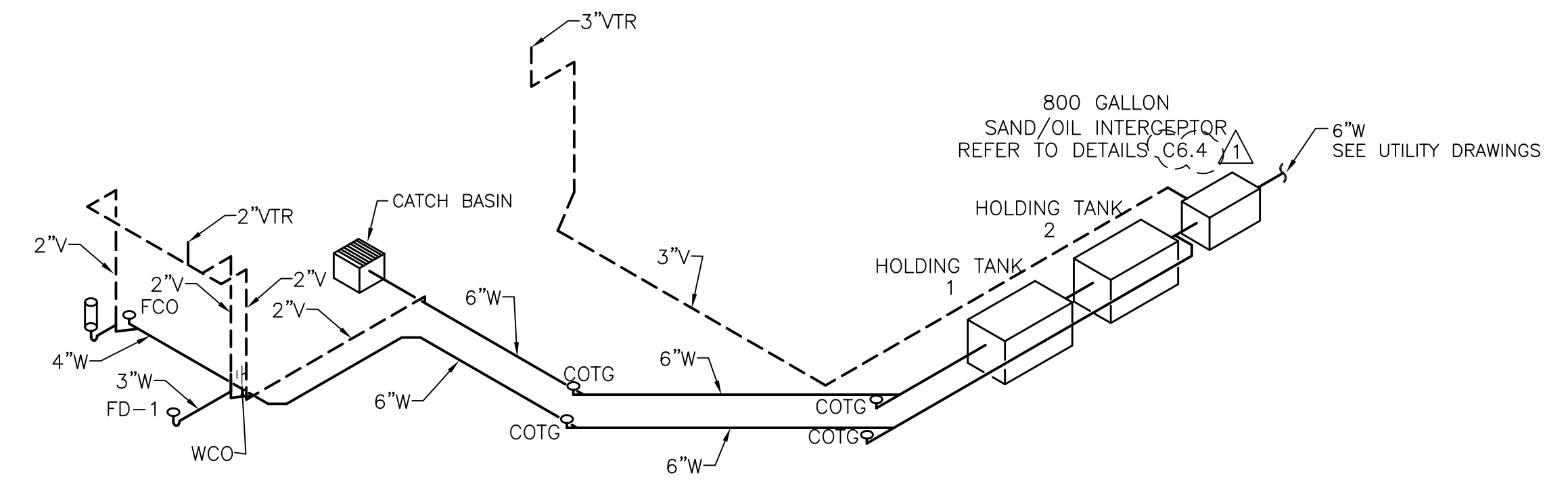
MARK	EQUIPMENT	DISCRPTION	SUPPLY PIPING	WASTE PIPING	MANUFACTURER/MODEL	NOTES
HB-1	HOSE BIBB	ANTI-SIPHON, AUTOMATIC DRAINING, FREE-PROOF TYPE WITH NICKEL BRONZE COVER	3/4" CW	SEE PLAN	ZURN Z-1321-C-04	1
FD-1	FLOOR DRAIN	PVC FLOOR DRAIN WITH PVC TOP HOUSING, PVC FLASHING COLLAR AND WITH CAST METAL RING AND ROUND STRAINER	----	SEE PLAN	SILOUX CHEIF 863-44NQ	2,3
TP-1	TRAP PRIMER		1/2"	----	ZURN SANI-GUARD Z-1022	
CB-1	CATCH BASIN	24"x24" POLYETHYLENE BODY CATCH BASIN WITH BLACK ACID RESISTANT COATED DUCTILE IRON GRATE AND FRAME.		4"	ZURN Z-887	
HD-1	HUB DRAIN	HUB DRAIN FOR RAINMAKER RO SYSTEM			BRADLEY S19-620	

- NOTES:**
- USE 4" WALL HYDRANT, ROUTE COLD WATER DROP INSIDE 6" WALL.
  - FLOOR DRAINS SHALL HAVE TRAP PRIMERS INSTALL.
  - ZURN AND WATTS ARE ACCEPTABLE ALTERNATES.

Total waste SS drainage fixture units equals 11.

Total water drainage fixture units equals 4.

**1 WASTE AND VENT RISER DIAGRAM**  
NONE



**FIXTURE UNITS CALCULATIONS**

FIXT ID (ITEM)	QTY	DESCRIPTION	WATER PIPING		WASTE PIPING	
			F.U. PER FIXTURE	TOTAL	F.U. PER FIXTURE	TOTAL
<b>CARWASH</b>						
CW25	1	EV ULTRACLEAR RELCAIM SYSTEM	1 1/2"	15		
CW26	1	OFFBOARD CHEMICAL INJECTION PUMP	1"	17		
CW27	1	ONBOARD HP PUMP W/CONTROL BOX	1"	17		
CW31	1	BOOSTER PUMP (OPTIONAL)	1 1/2"			
CW34	1	RAINMAKER III R.O. SYSTEM	3/4"	15		
		<b>TOTAL</b>		<b>64</b>		
FIXT ID (ITEM)	QTY	DESCRIPTION	WATER PIPING		WASTE PIPING	
			F.U. PER FIXTURE	TOTAL	F.U. PER FIXTURE	TOTAL
FD-1	1	FLOOR DRAIN	-	-	2	2
HD-1	1	HUB DRAIN	-	-	3	3
CB-1	1	CATCH BASIN	-	-	6	6
HB-1	2	HOSE BIBB	2.5	5	-	-
TP-1	1	TRAP PRIMER	1.0	1	-	-
		<b>TOTAL</b>		<b>4</b>		<b>11</b>

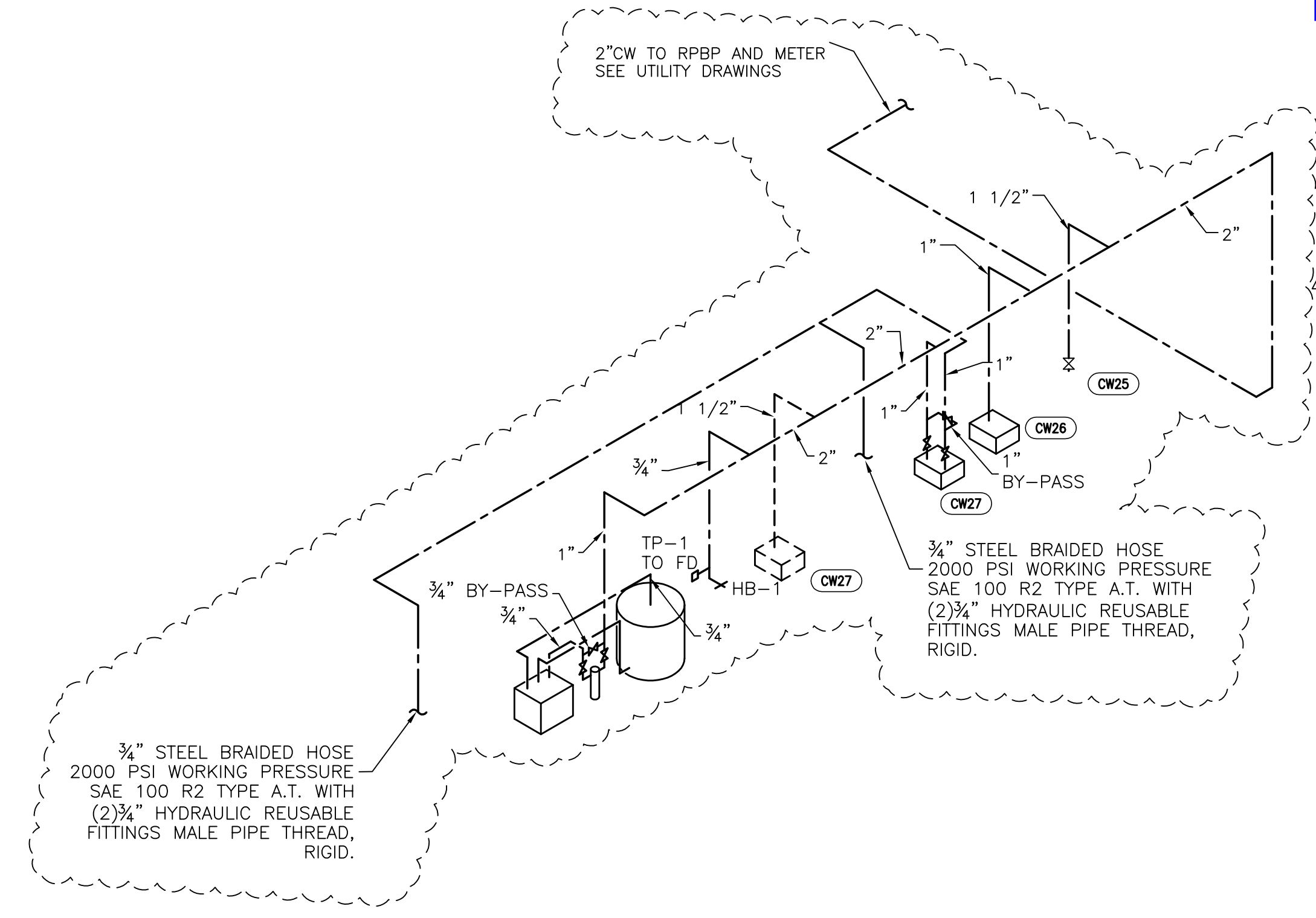
- NOTES:**
- WATER SUPPLY FIXTURE UNITS ARE BASED ON CPC, APPENDIX A.
  - DRAINAGE FIXTURE UNITS ARE BASED ON CPC, CHAPTER-7 TABLE 7-3.
  - REFER TO CARWASH DRAWINGS FOR FINAL WATER CALCULATIONS AND CONNECTION POINTS.

One hub drain proposed.

Two hose bibbs proposed—one from the car wash and the other from the air/water unit.

Each additional hose bibb is 1 water F.U.

**2 WATER RISER DIAGRAM**  
NONE



GENERAL NOTES:

- ALL ELECTRICAL FITTINGS TO BE WATERTIGHT. ANY FIXTURES IN VICINITY OF WASH UNIT TO BE WATER TIGHT INCLUDING LIGHTS.
- ALL ELECTRICAL WIRING, INCLUDING CONTROL WIRING, TO BE FURNISHED AND INSTALLED BY ELECTRICIAN.
- CONTROL WIRING CONDUIT AND WIRE AS WELL AS HIGH VOLTAGE CONDUIT AND WIRE TO BE FURNISHED AND INSTALLED BY ELECTRICIAN.
- ACCESS POINT THRU BAY WALL PROVIDED BY OTHERS.
- INTERCONNECTING PIPING FOR ABOVE GROUND RECLAIM SYSTEM PROVIDED AND INSTALLED BY PLUMBER.
- AIR LINE PIPING FURNISHED AND INSTALLED BY PLUMBER.
- DRILL A 1/4" DIAMETER DRAIN HOLE IN THE BOTTOM OF ALL JUNCTION BOXES THAT ARE LOCATED IN THE WASH BAY.
- ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CUSTOMER UNLESS OTHERWISE SPECIFIED.
- CONSULT YOUR LOCAL RYKO REPRESENTATIVE FOR DIMENSIONS OTHER THAN SHOWN.
- TERMINATE ALL PIPES WITH FEMALE PIPE THREADS UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS TO BE CLEAR SPACE DIMENSIONS.
- DO NOT USE WIRE LARGER OR SMALLER THAN THOSE SPECIFIED.
- ALL WIRES #16 AWG AND SMALLER ARE TO BE TFFN STRANDED.
- ALL WIRES #14 AWG AND LARGER ARE TO BE THHN STRANDED.
- NO CONDUITS MAY ENTER THE TOP OF ANY ENCLOSURE.
- BUILDING DETAILS ARE FOR ILLUSTRATION, AND ARE NOT INTENDED FOR CONSTRUCTION, PURCHASER SHOULD CONSULT WITH A PROPERLY CERTIFIED ENGINEER, CONTRACTOR, OR ARCHITECT WITH RESPECT TO COMPLIANCE WITH LOCAL SAFETY AND BUILDING CODES, FOR NECESSARY PERMITS AND LICENSES, AND FOR APPROPRIATE CONNECTIONS OF ALL UTILITIES.

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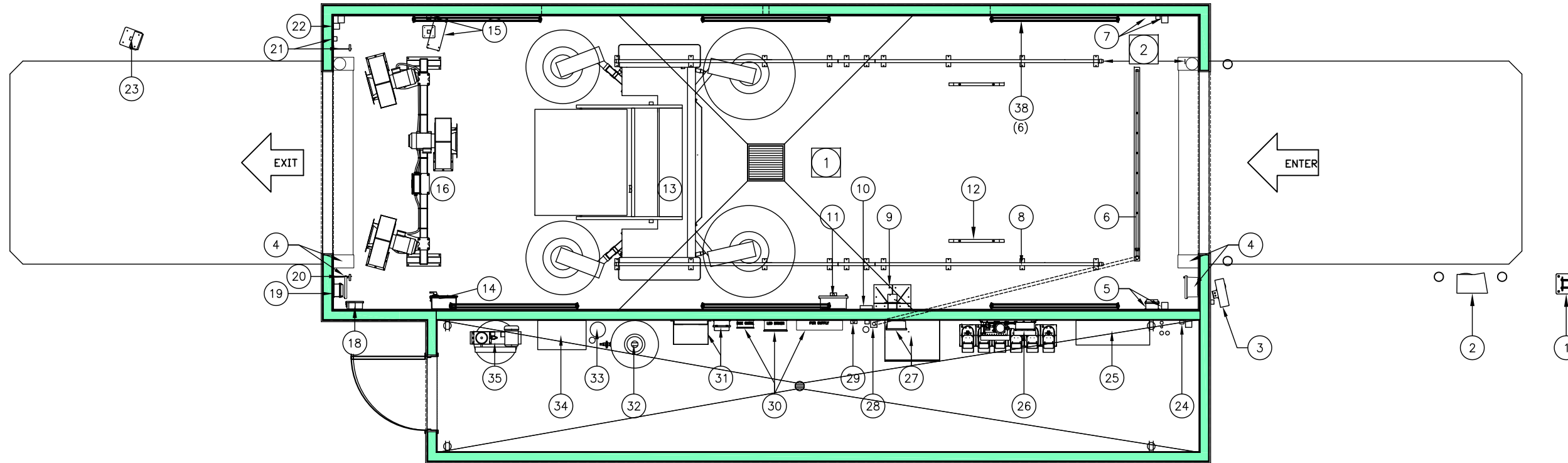
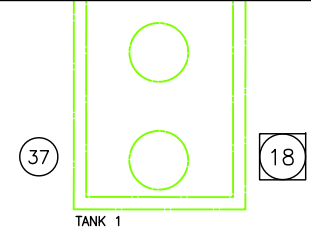
SHEET 1 OF 10		RYKO® SOLUTIONS, INC. GRIMES, IOWA, 50111 U.S.A.			PRODUCT SOFTGLOSS									
GENERAL NOTES SOFTGLOSS ARCO CAR WASH 1402 S MERIDIAN AVE PUYALLUP, WA 98371		All specifications subject to change without notice.			SCALE AS NOTED		DATE 9/12/23							
REV. DWG NO. A 22798-595		DRAWN KS			CHK'D KS		DATE 9/13/23		A 9999-999		REVISED LOCATIOON RECLAIM TANKS BY CIVIL PRINT		KS 9/20/23	
		APVD KS			DATE 9/13/23		- 9999-999		LTR ECO		KS 9/13/23		KS APVD	
		DESCRIPTION			RELEASING DRAWING		BY		DATE		APVD			

NOTES:

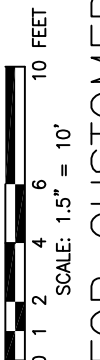
- 1 RECOMMENDED SLOPE OF FLOOR IN BAY IS 1/8" PER FOOT. EXCESSIVE SLOPE MAY AFFECT OPERATION OF THE MACHINE.
- 2 RECOMMENDED PLACEMENT OF TRACKS IN BAY SHOULD BE 4FT-6IN FROM NEAREST OBSTRUCTION.
- 3 TRENCH IN BAY FOR UNDERCAR MANIFOLD MEASURES 1-1/2" WIDE x 2" DEEP x 10'-2" LENGTH (BY OTHERS).

- 6 ACTUAL LOCATION OF THESE ITEMS MAY VARY. RECOMMENDED LOCATION SHOWN.
- 7 ACTUAL LOCATION OF ITEM WILL BE NEAR POINT OF SALE IN C-STORE.
- 8 FIRST LOCATE THE THERMOSTAT BULBS ON THE OUTSIDE OF THE NORTH WALL OUT OF DIRECT SUNLIGHT. THIS WILL THEN LOCATE THE POSITION OF THE THERMOSTAT ASSY APPROXIMATELY 4FT AWAY. TAKE CARE NOT TO CRIMP CAPILLARY TUBES LEADING TO THERMOSTAT BULBS.

- 17 TSS LED DRIVER AND DMX CONTROLLER SHOULD BE POSITIONED NEAR CENTER OF BAY FOR CABLE REACH.
- 18 REVISION A LOCATED THE RECLAIM TANKS AS POSITIONED BY THE ARCHITECT CIVIL PRINT. SEE CIVIL PRINT FOR ADDITIONAL INFORMATION.



- 4 WASH BAY SHOWN MEASURES 47'-0" LONG x 16'-0" WIDE. EQUIPMENT ROOM SHOWN MEASURES 41'-4" LONG x 7'-1 1/2" WIDE.
- 5 J-BOX REQUIRED PROVIDED BY OTHERS.



FOR CUSTOMER USE ONLY

EQUIPMENT LEGEND: PROVIDED BY RYKO UNLESS NOTED.

REFERENCE NUMBER	DESCRIPTION	REFERENCE NUMBER	DESCRIPTION	REFERENCE NUMBER	DESCRIPTION	REFERENCE NUMBER	DESCRIPTION
1	ENTRANCE ARCH w/CLEARANCE BAR	6	WASH BAY TERMINAL BOX WITH REMOTE BAY BUZZER KIT	21	AUTO DOOR PHOTOEYE W/BRACKET & AIR KNIFE DRYER PHOTOEYE LOCATION	31	BOOST PUMP SYSTEM (OPTIONAL)
2	UNITEC PORTAL TI ACTIVATION	12	LOW PROFILE GUIDE RAILS (2 PLCS)	22	DUAL THERMOSTAT ASSY	32	165 GALLON R.O. STORAGE TANK
3	3 MESSAGE LIGHTED ENTRANCE SIGN	13	SOFTGLOSS WASH MACHINE	23	DRYER COUNT DOWN TIMER SIGN	33	CARBON FILTER
4	AIRLIFT XRS VINYL ROLL UP DOORS WITH CONTROL BOX (OPTIONAL)	14	AIR KNIFE DRYER CONTROL CABINET	24	FRESH WATER BACKUP VALVE ASSY	34	RAINMAKER III R.O. SYSTEM
5	UNDERCAR ENTRANCE ACTIVATION WALL MNT PHOTOEYE & RELAY BOX	15	8 SEGMENT LIGHTED SIGN (WALL MT)	25	EV ULTRACLEAR RECLAIM SYSTEM 40GPM w/OZONE	35	AIR COMPRESSOR, 5HP, 3PH
6	HIGH PRESSURE TRENCH MOUNTED UNDERCAR MANIFOLD	16	AIR KNIFE DRYER (30HP)	26	OFFBOARD CHEMICAL INJECTION PUMP/ WITH CHEMICAL CONTAINERS	36	UNITEC P.O.S. INTERFACE
7	UNDERCAR ENTRANCE ACTIVATION BOX WALL MNT PHOTOEYE	17		27	ONBOARD HP PUMP W/CONTROL BOX	37	UNDERGROUND RECLAIM TANKS (PROVIDED BY OTHERS)
8	SOFTGLOSS FLOOR TRACKS	18	COMMUNICATION INTERFACE BOX (WITH TOUCH SCREEN AND E-STOP)	28	HP DIVERTER VALVES	38	TSS LED BAY FIXTURES (6)
9	SOFTGLOSS FLOOR MOUNT BOOM STAND	19	AUTO DOOR RELAY BOX	29	OFFBOARD RINSE VALVE/R.O.		
10	SOFTGLOSS CABLE MOUNT BRACKET	20	AUTO DOOR PHOTOEYE W/BRACKET & AIR KNIFE DRYER PHOTOEYE LOCATION	30	TSS DMX CONTROLLER-LED DRIVER -POWER SUPPLY LED LIGHTS		

SHEET 2 OF 10

RYKO SOLUTIONS, INC.

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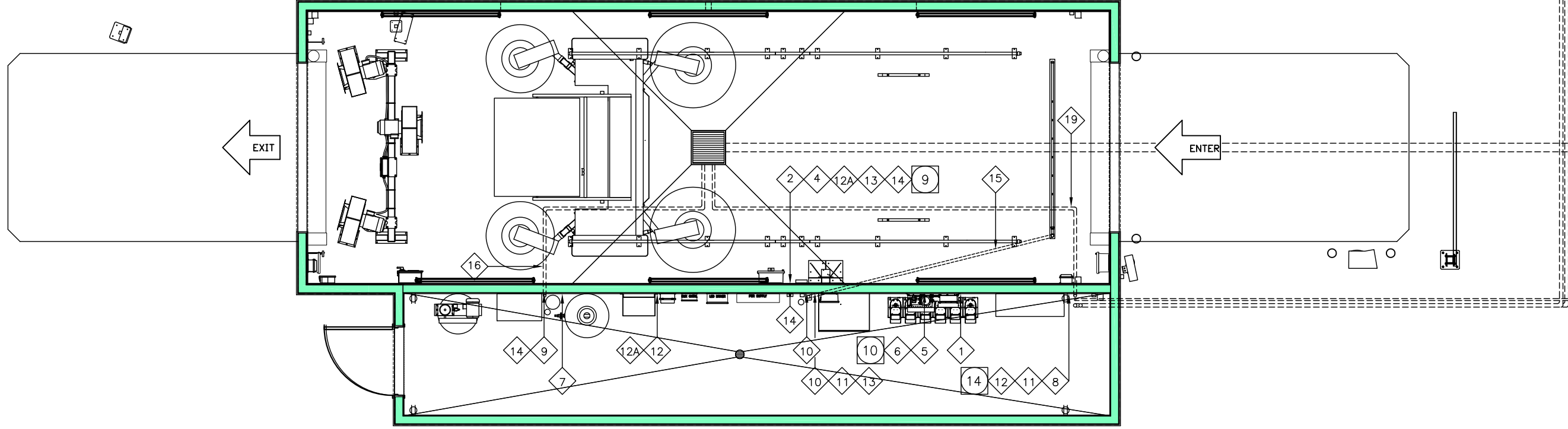
EQUIPMENT PLAN

SOFTGLOSS ARCO CAR WASH

1402 S MERIDIAN AVE PUYALLUP, WA 98371

REV. DWG NO. 22798-595 A

All specifications subject to change without notice.	DATE	9/12/23
	SCALE AS NOTED	9/12/23
APVD	CHK'D	KS
	DATE	9/13/23



SHEET 3 OF 10

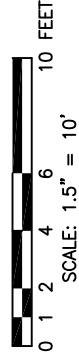
**RYKO® SOLUTIONS, INC.**  
 GRIMES, IOWA, 50111 U.S.A.

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PLUMBING PLAN  
 SOFTGLOSS  
 ARCO CAR WASH  
 1402 S MERIDIAN AVE  
 PUYALLUP, WA  
 98371

SCALE AS NOTED	DATE
DRAWN	CHK'D
APVD	DATE

REV. DWG NO. 22798-595  
 A



**FOR CUSTOMER USE ONLY**

# PLUMBING CHART

REFERENCE NUMBER	SIZE	DESCRIPTION	ORIGIN	TERMINUS	THREADING/ VALVE AT ORIGIN	THREADING/ VALVE AT TERMINUS	NOTES	REFERENCE NUMBER	SIZE	DESCRIPTION	ORIGIN	TERMINUS	THREADING/ VALVE AT ORIGIN	THREADING/ VALVE AT TERMINUS	NOTES
1	3/8"	AIR TO OFFBOARD CHEMICAL INJECTION PUMP	COMPRESSED AIR SUPPLY	WALL NEXT TO PUMP BOX	N/A	3/8" FPT SHUT-OFF VALVE	4 SCFM, 80 PSI MIN, 150 PSI MAX	11	1"	RECLAIM WATER TO HIGH PRESSURE PUMP	RECLAIM WATER	WALL NEXT TO PUMP BASE	N/A	1" FPT SHUT-OFF VALVE	18 GPM FLOW RATE @ 0-70 PSI
2	3/8"	AIR TO WASH BAY WALL	COMPRESSED AIR SUPPLY	LEFT WASH BAY WALL	N/A	3/8" FPT SHUT-OFF VALVE	5 SCFM, 100 PSI MIN, 125 PSI MAX								FILTER WATER TO 10 MICRON OR LESS.
3								12 12A	1"	RECLAIM WATER TO BOOST PUMP (12A) BOOSTED WATER TO WASH BAY WALL	INCOMING FRESH WATER	LEFT WASH BAY WALL	N/A	1" FPT SHUT-OFF VALVE	N/A
4	3/4"	FRESH WATER TO WASH BAY WALL	INCOMING FRESH WATER	LEFT WASH BAY WALL	N/A	3/4" FPT SHUT-OFF VALVE	35 GPM @ 40 PSI MIN, 125 PSI MAX	13	3/4"	HIGH PRESS LINE FROM HP PUMP TO WASH BAY WALL	ONBOARD HP PUMP	LEFT WASH BAY WALL	TERMINATE WITH 3/4" FPT	TERMINATE WITH 3/4" FPT	HIGH PRESSURE LINE (3000 PSI) MUST BE USED
5	3/4"	FRESH WATER TO OFFBOARD CHEMICAL INJECTION PUMP	INCOMING FRESH WATER	WALL UNDER INJECTION PUMP	N/A	3/4" FPT SHUT-OFF VALVE	7 GPM @ 40 PSI MIN, 75 PSI MAX	14	1"	R.O. WATER TO WASH BAY WALL	RO RINSE VALVE ASSY	LEFT WASH BAY WALL	N/A	1" FPT SHUT-OFF VALVE	N/A
6	3/4"	FRESH WATER TO COLOR WAVE VALVE ASSEMBLY	INCOMING FRESH WATER	WALL UNDER INJECTION PUMP	N/A	3/4" FPT SHUT-OFF VALVE	10 GPM @ 40 PSI MIN, 75 PSI MAX	15	1"	HIGH PRESSURE LINE TO TRENCH UNDERCAR MANIFOLD	HP DIVERTER VALVE ASSY	UNDERCAR MANIFOLD	N/A	N/A	HIGH PRESSURE LINE (3000 PSI) MUST BE USED
7	3/4"	FRESH WATER TO CARBON FILTER	INCOMING FRESH WATER	CARBON FILTER	3/4" FPT SHUT-OFF VLV	3/4" FPT SHUT-OFF VALVE	8 GPM @ 30 PSI MIN 85 PSI MAX	16	2"	FLOOR DRAIN FOR RAINMAKER III R.O. SYSTEM	FLOOR DRAIN	SANITARY SEWER	N/A	N/A	N/A
8	1" & 1/2"	14 FRESH WATER TO EV ULTRACLEAR RECLAIM	INCOMING FRESH WATER	EV ULTRACLEAR RECLAIM	1/2" & 1" FPT SHUTOFF	1/2" & 1" FPT SHUTOFF	15 GPM @ 40 PSI MIN, 125 PSI MAX	17	2"	SUCTION LINES TO RECLAIM	EV ULTRA CLEAR RECLAIM	TANK THREE OF RECLAIM SYSTEM	2" FPT	2" FULL FLAPPER CHECK VALVES	11
9	3/4"	FILTERED WATER TO RAINMAKER III R.O. SYSTEM	CARBON FILTER	RAINMAKER III R.O. SYSTEM	N/A	3/4" FPT SHUT-OFF VALVE	N/A	18	1"	OZONE/AREATION LINE	EV ULTRACLEAR RECLAIM	TANK ONE OF RECLAIM SYSTEM	1" FPT	NONE	12
10	1"	HP RECLAIM WATER TO HP DIVERTER VALVE ASSY	RECLAIM WATER	HP DIVERTER VALVE ASSY	N/A	1" FPT SHUT-OFF VALVE	N/A	19	2"	SAND TRAP/COLLECTION PIT	EV ULTRACLEAR RECLAIM	SAND TRAP/ COLLECTION PIT	2" FPT	NONE	13

**NOTES:**

- 9 ACCESS POINT THRU BAY WALL (PROVIDED BY OTHERS) MOUNT BOOM STAND, CABLE CARRIER AND WASH BAY TERMINAL BOX BEFORE HOLE LOCATION IS DETERMINED. HOLE WILL BE LOCATED BETWEEN CABLE CARRIER AND WASH BAY TERMINAL BOX. BOTTOM OF HOLE SHOULD BE 9'-6" FROM FLOOR.
- 10 RUN WATER LINE FROM FLOOR LEVEL UP TO BOTTOM OF OFFBOARD CHEMICAL INJECTION PUMP.
- 11 CONNECT THE SUCTION LINE OUTLET IN FLOOR. HOSE BARB, FLAPPER VALVE, AND SUCTION HOSE SHOWN ON DRAWING ARE PART OF SUCTION LINE SHIP KIT. THE SUCTION LINE SIZE WILL BE 2" FOR A 40 GPM RECLAIM UNIT. SUCTION LINES SHOULD BE LOCATED AS CLOSE TO THE UNIT AS POSSIBLE TO KEEP THE SUCTION LINE LENGTH TO A MINIMUM.
- 12 CONNECT THE OUTLET OF THE AREATION/OZONE INJECTION WITH THE 3/4" PROVIDED WITH THE SHIPPING KIT. CONNECT THE 3/4" HOSE TO THE 1" OUTLET ON THE FLOOR. IF THE FLOOR OUTLET IS NOT PRESENT, ROUTE THE 3/4" HOSE DIRECTLY INTO RECLAIM TANK FARTHEST FROM THE SUCTION LINES. IF NECESSARY, USE A HOSE PROTECTION PLATE TO PROTECT THE HOSE FROM BEING DRIVEN OVER.
- 13 ATTACH THE 1" HOSE PROVIDED IN THE SHIPPING KIT TO THE OUTLET OF THE 1" SOLENOID VALVE. ROUTE THE 1" HOSE TO THE 2" OUTLET ON THE FLOOR. INSERT ENOUGH 1" HOSE INTO THE 2" OUTLET TO KEEP THE 1" HOSE FROM COMING OUT WHEN WATER IS FLOWING THROUGH IT. IF THE 2" OUTLET ON THE FLOOR IS NOT PRESENT, ROUTE THE 1" HOSE TO THE TRENCH IN THE CENTER OF THE WASH BAY, ROUTE THE 1" HOSE TO THE TRENCH IN THE CENTER OF THE WASH BAY. USE A HOSE PROTECTION PLATE TO PROTECT THE HOSE FROM BEING DRIVEN OVER.
- 14 1" FRESH WATER LINE IS USED FOR FRESH WATER BACKUP THAT IS AN OPTION ON THE EV ULTRACLEAR RECLAIM SYSTEM.

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SHEET 4 OF 10

**RYKO® SOLUTIONS, INC.**  
GRIMES, IOWA, 50111 U.S.A.

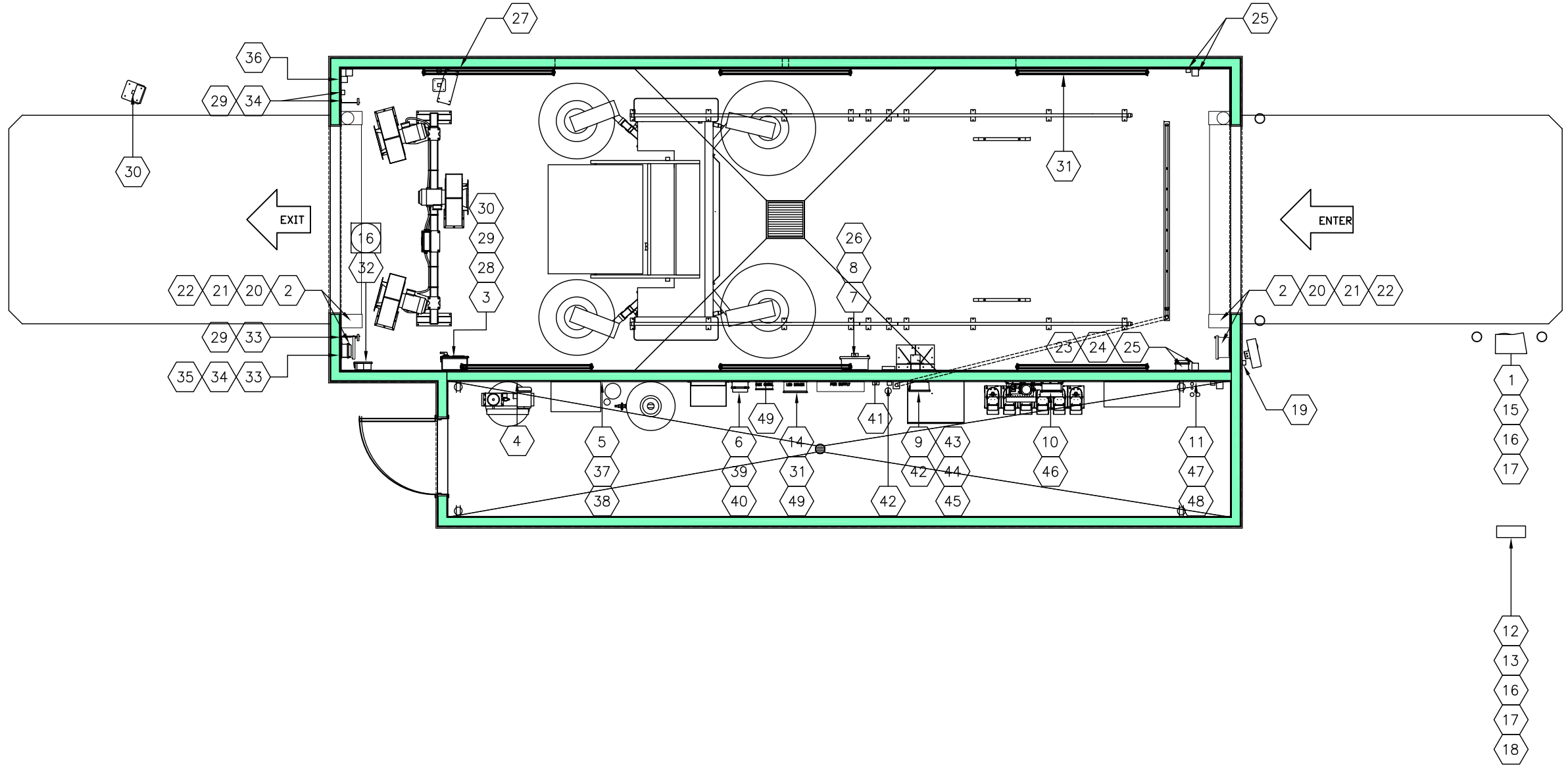
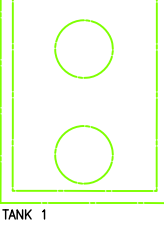
PLUMBING PLAN  
SOFTGLOSS  
ARCO CAR WASH  
1402 S. MERIDIAN AVE  
PUYALLUP, WA  
98371

All specifications subject to change without notice.	
SCALE AS NOTED	DATE 9/12/23
DRAWN KS	CHK'D KS
APVD KS	DATE 9/13/23

REV. DWG NO. 22798-595  
A

NOTES:

- 15 REFER TO SHEET 6 FOR ELECTRICAL CHART.
- 16 LOCATE COMMUNICATION INTERFACE BOX IN A CLEARLY VISIBLE AND QUICKLY ACCESSIBLE LOCATION WHERE THE OPERATOR CAN REACH IT TO STOP THE MACHINE IN AN EMERGENCY.



SHEET 5 OF 10

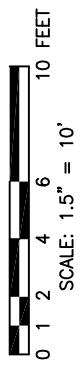
**RYKO® SOLUTIONS, INC.**  
 GRIMES, IOWA, 50111 U.S.A.

ELECTRICAL PLAN  
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 98371

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SCALE	DATE
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KS	KS
APVD	DATE
KS	9/13/23

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FOR CUSTOMER USE ONLY

# ELECTRICAL CHART

REFERENCE NUMBER	ORIGIN	TERMINUS	QTY	WIRE/CABLE SIZE	CONDUIT	NOTES	REFERENCE NUMBER	ORIGIN	TERMINUS	QTY	WIRE/CABLE SIZE	CONDUIT	NOTES
1	ELECTRICAL SERVICE	UNITEC PORTAL TI ACTIVATION	1	3-#14 AWG WIRES BLACK/WHITE/GREEN	3/4-1"	8 AMP, SINGLE PHASE, 120 VAC DEDICATED POWER	26	WASH BAY TERMINAL BOX	REMOTE BAY BUZZER KIT	2	#14 AWG WIRES	1/2"	(J-BOX BY OTHERS)
2	ELECTRICAL SERVICE	AIRLIFT XRS ROLL UP DOORS CONTROL BOX	2		AS REQD	20 AMP, SINGLE PHASE, 120VAC	27	WASH BAY TERMINAL BOX	8 SEGMENT LIGHTED SIGN	9 1	#14 AWG WIRES #14 AWG GREEN WIRE	3/4"	(J-BOX BY OTHERS)
3	ELECTRICAL SERVICE	AIR KNIFE DRYER/CONTROL CABINET	1		AS REQD	92.4 FLA, 208VAC, 3 PHASE OR 84 FLA, 230VAC, 3 PHASE	28	WASH BAY TERMINAL BOX	AIR KNIFE DRYER/ELECTRICAL CONTROL CABINET	12 1	#16 AWG WIRES #16 AWG GREEN WIRE	3/4"	
4	ELECTRICAL SERVICE	AIR COMPRESSOR, 5HP, 3PH	1		AS REQD	16 AMP, 3 PHASE, 208/230VAC W/GROUND	29	AIR KNIFE DRYER/ELECTRICAL CONTROL CABINET	PHOTOEYES FOR DRYER		CABLES SUPPLIED WITH PHOTOEYES (2)	1/2"	
5	ELECTRICAL SERVICE	RAINMAKER III R.O. SYS W/REPRESSURIZATION	1		AS REQD	15 AMP, 3 PHASE, 208/230VAC W/GROUND	30	AIR KNIFE DRYER/ELECTRICAL CONTROL CABINET	DRYER COUNT DOWN TIMER DISPLAY	6 1	#16 AWG WIRES #16 AWG GREEN WIRE	1/2"	
6	ELECTRICAL SERVICE	BOOST PUMP SYSTEM CONTROL BOX	1		AS REQD	15 AMP, 3 PHASE, 208/230 VAC (W/DISCONNECT WITHIN SIGHT)	31	ALL WIRING REQUIREMENTS FOR TSS LIGHTS AND CONTROLLERS SHOWN ON SHEET 7 THRU 10 DRAWING 28980-000 FOR INSTALLATION				AS REQD	SEE SHEET 7 THRU 10
7	ELECTRICAL SERVICE	WASH BAY TERMINAL BOX	1		AS REQD	35 AMP, 3 PHASE, 208/230VAC	32	WASH BAY TERMINAL BOX	COMMUNICATION INTERFACE BOX	4 1 1	#14 AWG WIRES #14 AWG GREEN WIRE 4 PAIR SHIELDED CABLE SUPPLIED BY RYKO WITH MACHINE BOOM	1/2"	
8	ELECTRICAL SERVICE	WASH BAY TERMINAL BOX	1		AS REQD	15 AMP, SINGLE PHASE, 120 VAC	33	AUTO DOOR RELAY BOX	PHOTOEYE W/DOOR BRACKET (DRIVER SIDE)		CABLE PROVIDED	1/2"	
9	ELECTRICAL SERVICE	ONBOARD H.P. PUMP CONTROL BOX	1		AS REQD	60 AMP, 3 PHASE, 208/230 VAC 15 AMP, SINGLE PHASE, 120VAC	34	AUTO DOOR RELAY BOX	PHOTOEYE W/DOOR BRACKET (PASSENGER SD)		CABLE PROVIDED	1/2"	(J-BOX BY OTHERS)
10	ELECTRICAL SERVICE	OFFBOARD CHEMICAL INJECTION PUMP	1		AS REQD	10 AMP, 3 PHASE, 208/230 VAC (J-BOX BY OTHERS)	35	WASH BAY TERMINAL BOX	AUTO DOOR RELAY BOX	4	#14 AWG WIRES	1/2"	
11	ELECTRICAL SERVICE	EV ULTRACLEAR RECLAIM SYSTEM	1		AS REQD	25 AMP, 3 PHASE, 208/230 VAC 15 AMP, SINGLE PHASE, 120VAC	36	WASH BAY TERMINAL BOX	DUAL THERMOSTAT ASSY	3	#14 AWG WIRES	1/2"	SEE SHEET 2 NOTE 8 FOR MOUNTING LOCATION
12	ELECTRICAL SERVICE	UNITED P.O.S. INTERFACE	1		AS REQD	15 AMP, SINGLE PHASE, 120VAC RECEPTACLE	37	WASH BAY TERMINAL BOX	RAINMAKER III R.O. SYSTEM	5 1	#14 AWG WIRES #14 AWG GREEN WIRE	1/2"	
13	ELECTRICAL SERVICE	ROUTER	1		AS REQD	15 AMP, SINGLE PHASE, 120VAC RECEPTACLE	38	RAINMAKER III R.O. SYSTEM	R.O. STORAGE TANK FLOAT SWITCH	2	#14 AWG WIRES	1/2"	
14	ELECTRICAL SERVICE	TSS LED DRIVER	1		AS REQD	10 AMP, 240VAC, SINGLE PHASE	39	WASH BAY TERMINAL BOX	BOOST PUMP CONTROL BOX	5	#14 AWG WIRES	1/2"	
15	WASH BAY TERMINAL BOX	UNITEC PORTAL TI ACTIVATION	10 1	#14 AWG WIRES #14 AWG GREEN WIRE	3/4-1"		40	BOOST PUMP CONTROL BOX	BOOST PUMP MOTOR	3 1	#14 AWG WIRES #14 AWG GREEN	1/2"	
16	UNITEC PORTAL TI ACTIVATION	UNITEC P.O.S. INTERFACE (INSIDE STORE)	INTERCOM PHONE NETWORK	4-#22 AWG WIRES 1 2PR / 4 COND 1 CAT 5E CABLE	3/4-1"		41	WASH BAY TERMINAL BOX	OFFBOARD RINSE VALVE/R.O.	3	#14 AWG WIRES	1/2"	
17	UNITEC PORTAL TI ACTIVATION	UNITEC ROUTER	1	CAT 5 COMMUNICATION CABLE	3/4-1"		42	ONBOARD HP PUMP CONTROL BOX	HP DIVERTER VALVE ASSEMBLY	4	#14 AWG WIRES	1/2"	
18	UNITEC ROUTER	INTERNET REQUIRED	1	AS REQUIRED	3/4-1"		43	WASH BAY TERMINAL BOX	ONBOARD H.P. PUMP CONTROL BOX	5	#14 AWG WIRES	1/2"	
19	WASH BAY TERMINAL BOX	3 MESSAGE LIGHTED ENTRANCE SIGN	4 1	#14 AWG WIRES #14 AWG GREEN WIRE	1/2"	(J-BOX BY OTHERS)	44	ONBOARD HP PUMP CONTROL BOX	PUMP INLET WATER SOLENOID JUNCTION BOX	2	#14 AWG WIRES	1/2"	
20	WASH BAY TERMINAL BOX	AIRLIFT DOORS CONTROL BOX (ENTRANCE & EXIT)	6	#14 AWG WIRES	1/2"		45	ONBOARD HP PUMP CONTROL BOX	ONBOARD HP PUMP MOTOR	3 1	#6 OR 10 AWG WIRES #6 OR 10 AWG GREEN	3/4"	
21	AIRLIFT DOORS CONTROL BOX (ENTRANCE & EXIT)	AIRLIFT DOOR MOTOR (POWER)	4	#12 AWG WIRES RED,WHITE,BLACK,GRN	1/2"		46	WASH BAY TERMINAL BOX	OFFBOARD CHEMICAL INJECTION PUMP (J-BOX BY OTHERS)	2 1 10	#14 AWG WIRES #14 AWG GREEN WIRE #18 AWG WIRES	3/4"	
22	AIRLIFT DOORS CONTROL BOX (ENTRANCE & EXIT)	PHOTOEYE TRANSMITTER AND RECEIVER		PROVIDED BY AIRLIFT	1/2"		47	WASH BAY TERMINAL BOX	EV ULTRACLEAR RECLAIM SYSTEM	4	#14 AWG WIRES	1/2"	
23	ONBOARD HP PUMP CONTROL BOX	ENTRANCE ACTIVATION RELAY BOX (UNDERCAR)	4	#14 AWG WIRES	1/2"		48	EV ULTRACLEAR RECLAIM SYSTEM	FRESH WATER BACKUP VALVE SOLENOID	2	#14 AWG WIRES (J-BOX BY OTHERS)	1/2"	
24	ENTRANCE ACTIVATION RELAY BOX (UNDERCAR)	FLOOR MOUNT PHOTOEYE (DRIVER SIDE)		CABLE PROVIDED	1/2"		49	LED DRIVER (TSS LIGHTS)	DMX CONTROLLER	1	CAT 5 COMMUNICATION CABLE	AS REQD	
25	ENTRANCE ACTIVATION RELAY BOX (UNDERCAR)	FLOOR MOUNT PHOTOEYE (PASSENGER SIDE)		CABLE PROVIDED	1/2"	(J-BOX BY OTHERS)		PROVIDED AND INSTALLED BY ELECTRICIAN					

SHEET 6 OF 10

**RYKO SOLUTIONS, INC.**  
GRIMES, IOWA, 50111 U.S.A.

ELECTRICAL PLAN  
SOFTGLOSS  
ARCO CAR WASH  
1402 S. MERIDIAN AVE  
PUYALLUP, WA  
98371

All specifications subject to change without notice.

SCALE	DATE	CHK'D	DATE
NONE	9/12/23	KS	9/13/23
DRAWN		KS	
APVD		KS	

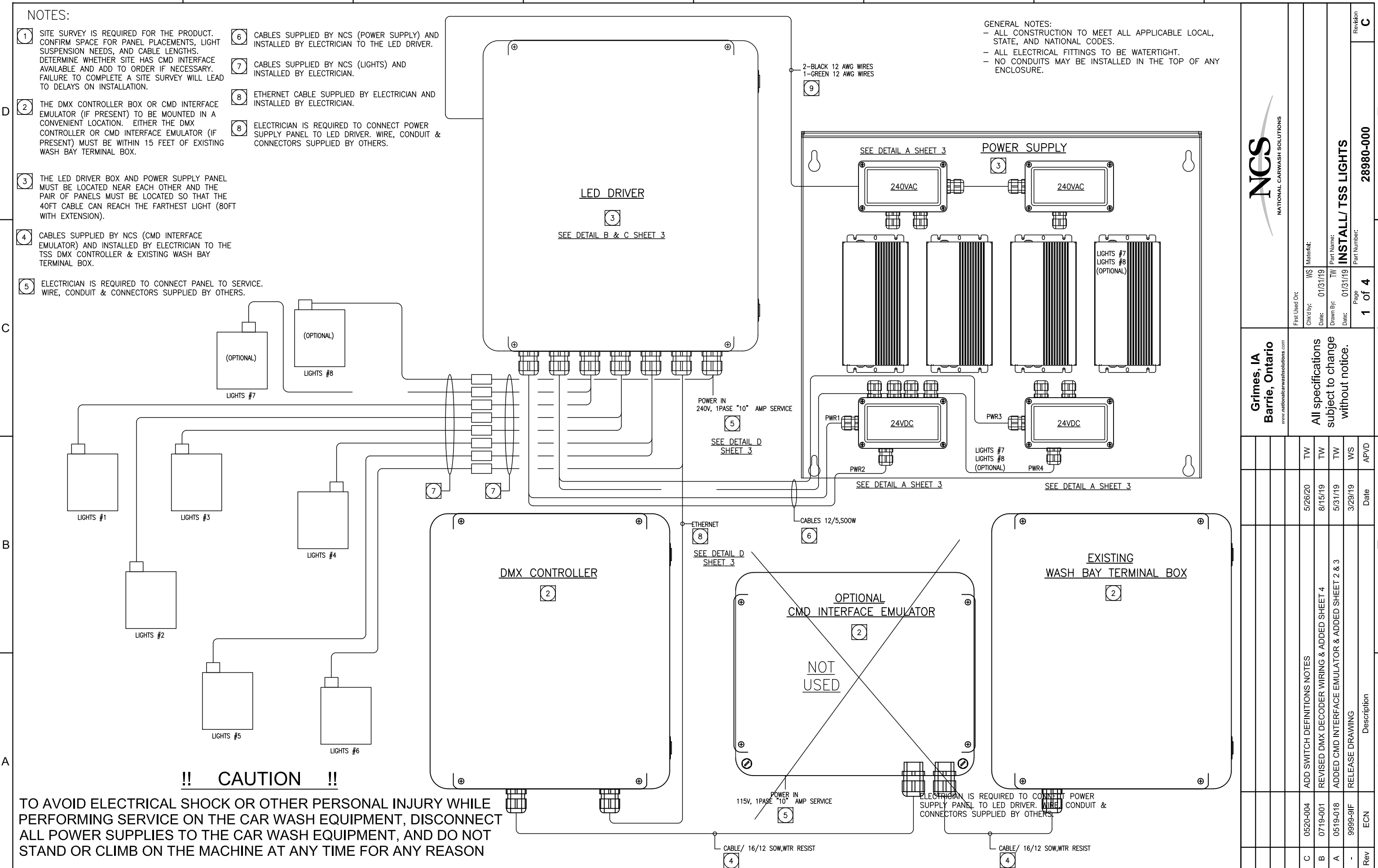
FOR CUSTOMER USE ONLY

REV. DWG NO. 22798-595  
A

NOTES:

- 1 SITE SURVEY IS REQUIRED FOR THE PRODUCT. CONFIRM SPACE FOR PANEL PLACEMENTS, LIGHT SUSPENSION NEEDS, AND CABLE LENGTHS. DETERMINE WHETHER SITE HAS CMD INTERFACE AVAILABLE AND ADD TO ORDER IF NECESSARY. FAILURE TO COMPLETE A SITE SURVEY WILL LEAD TO DELAYS ON INSTALLATION.
- 2 THE DMX CONTROLLER BOX OR CMD INTERFACE EMULATOR (IF PRESENT) TO BE MOUNTED IN A CONVENIENT LOCATION. EITHER THE DMX CONTROLLER OR CMD INTERFACE EMULATOR (IF PRESENT) MUST BE WITHIN 15 FEET OF EXISTING WASH BAY TERMINAL BOX.
- 3 THE LED DRIVER BOX AND POWER SUPPLY PANEL MUST BE LOCATED NEAR EACH OTHER AND THE PAIR OF PANELS MUST BE LOCATED SO THAT THE 40FT CABLE CAN REACH THE FARTHEST LIGHT (80FT WITH EXTENSION).
- 4 CABLES SUPPLIED BY NCS (CMD INTERFACE EMULATOR) AND INSTALLED BY ELECTRICIAN TO THE TSS DMX CONTROLLER & EXISTING WASH BAY TERMINAL BOX.
- 5 ELECTRICIAN IS REQUIRED TO CONNECT PANEL TO SERVICE. WIRE, CONDUIT & CONNECTORS SUPPLIED BY OTHERS.
- 6 CABLES SUPPLIED BY NCS (POWER SUPPLY) AND INSTALLED BY ELECTRICIAN TO THE LED DRIVER.
- 7 CABLES SUPPLIED BY NCS (LIGHTS) AND INSTALLED BY ELECTRICIAN.
- 8 ETHERNET CABLE SUPPLIED BY ELECTRICIAN AND INSTALLED BY ELECTRICIAN.
- 8 ELECTRICIAN IS REQUIRED TO CONNECT POWER SUPPLY PANEL TO LED DRIVER. WIRE, CONDUIT & CONNECTORS SUPPLIED BY OTHERS.

GENERAL NOTES:  
 - ALL CONSTRUCTION TO MEET ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES.  
 - ALL ELECTRICAL FITTINGS TO BE WATERTIGHT.  
 - NO CONDUITS MAY BE INSTALLED IN THE TOP OF ANY ENCLOSURE.



**!! CAUTION !!**

TO AVOID ELECTRICAL SHOCK OR OTHER PERSONAL INJURY WHILE PERFORMING SERVICE ON THE CAR WASH EQUIPMENT, DISCONNECT ALL POWER SUPPLIES TO THE CAR WASH EQUIPMENT, AND DO NOT STAND OR CLIMB ON THE MACHINE AT ANY TIME FOR ANY REASON

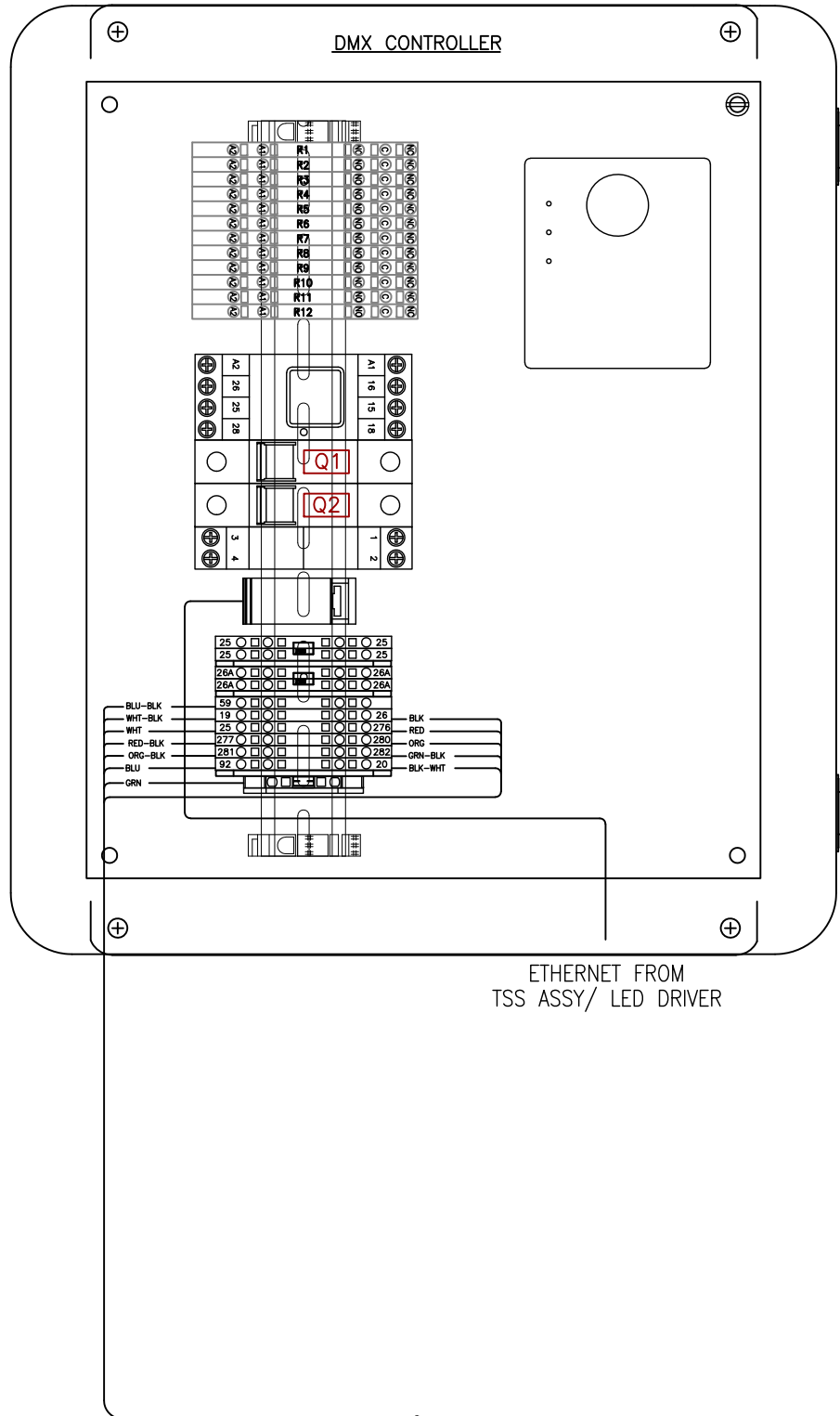


Grimes, IA  
 Barrie, Ontario  
 www.nationalcarwashsolutions.com

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Material:	WS	01/31/19	Part Name:	INSTALL/ TSS LIGHTS	Revision	C
Checked by:	TW	01/31/19	Drawn By:	TW	Page	1 of 4
Date:	01/31/19	Date:	01/31/19	Part Number:	28980-000	
First Used On:						
ECN	Description	Date				
0520-004	ADD SWITCH DEFINITIONS NOTES	5/26/20				
0719-001	REVISED DMX DECODER WIRING & ADDED SHEET 4	8/15/19				
0519-018	ADDED CMD INTERFACE EMULATOR & ADDED SHEET 2 & 3	5/31/19				
9999-91F	RELEASE DRAWING	3/29/19				





⚠️ DEFAULT SETTINGS FOR SWITCHES ON THE FRONT OF THE DMX CONTROLLER;  
 IDLE SHOW ENABLE:MANUAL  
 LIGHT DISABLE CONTROL: WASH CLOSED  
 IDLE SHOW SELECTOR: DEFAULT

SWITCH DEFINITIONS:

IDLE SHOW ENABLE CONTROL:

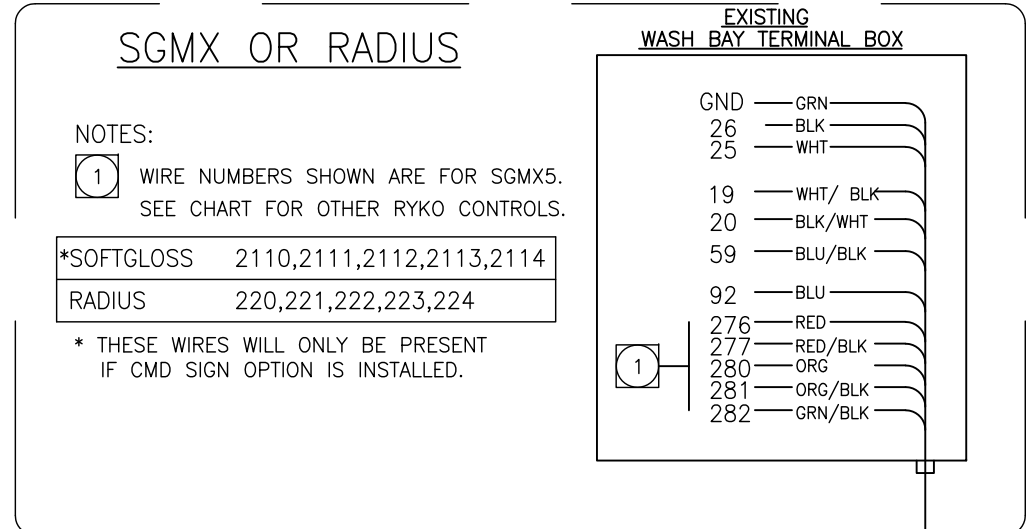
ALLOWS THE IDLE SHOW TO BE ENABLED MANUALLY OR VIA THE TIMER INSIDE THE BOX. MANUAL MODE HAS THE IDLE SHOW ENABLED AND ON ALL THE TIME WHILE STILL ALLOWING THE IN WASH SHOW TO RUN. TIMER MODE ENABLES THE IDLE SHOW ON A SCHEDULE CONTROLLED BY THE TIMER MODULE INSIDE THE BOX. PROGRAM TIMER ACCORDING TO CUSTOMER REQUIREMENTS, TIME OUTPUT IS ON FOR IDLE SHOW TO BE ENABLED. TIMER INSTRUCTIONS SHOULD BE INCLUDED WITH CONTROL BOX OR CAN BE FOUND VIA A GOOGLE SEARCH FOR THE TIMER MODEL NUMBER.

LIGHT DISABLE CONTROL:

ALLOWS THE LIGHTS TO BE DISABLED MANUALLY (TURNED OFF) OR ONLY DISABLED WHEN THE WASH CLOSED SIGNAL IS ACTIVE, I.E. ANY TIME THE COIN BOX WOULD SHOW THE CAR WASH IS CLOSED OR OUT OF ORDER. THE INTENT HERE IS TO AUTOMATICALLY TURN OFF ANY LIGHT DISPLAY INCLUDING ANYTIME THE IDLE SHOW MAY BE RUNNING IF THE WASH IS INOPERATIVE AND NOT ATTRACT CUSTOMERS TO A NON-WORKING WASH.

IDLE SHOW SELECTOR:

DEFAULT SHOW: MULTI COLOR EFFECT WITH DIFFERENT EFFECTS AND TRANSITIONS BETWEEN MANY DIFFERENT COLORS DESIGNED TO CATCH THE EYE AND DRAW CUSTOMERS IN.  
 ALTERNATE 1: RED WHITE AND BLUE THEME FOR 4<sup>TH</sup> OF JULY AND OTHER PATRIOTIC HOLIDAYS  
 ALTERNATE 2: RED AND GREEN HOLIDAY COLOR SHOW



**NCS**  
 NATIONAL CARWASH SOLUTIONS

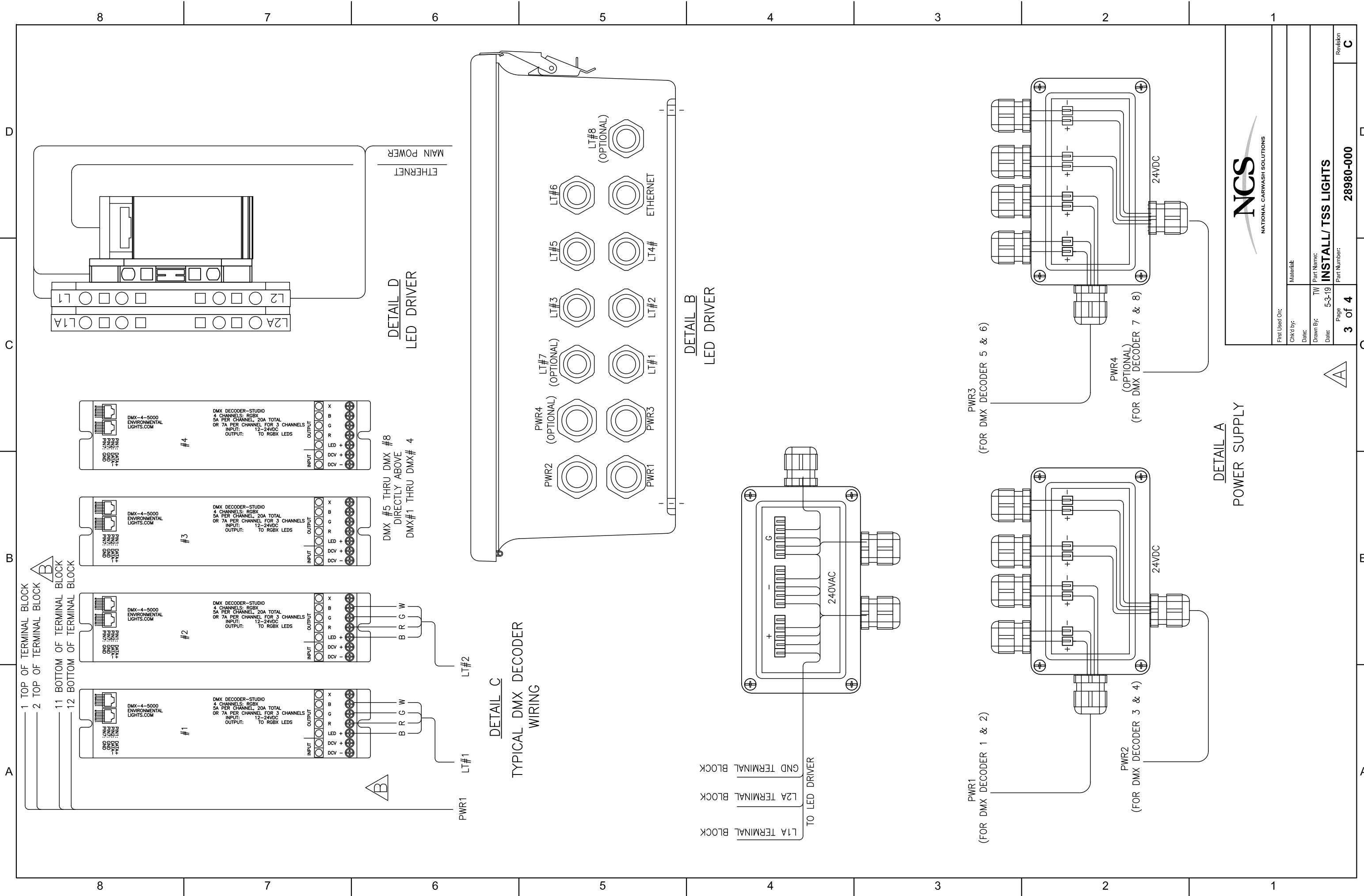
Material: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Part Name: **INSTALL/ TSS LIGHTS**  
 Part Number: **28980-000**

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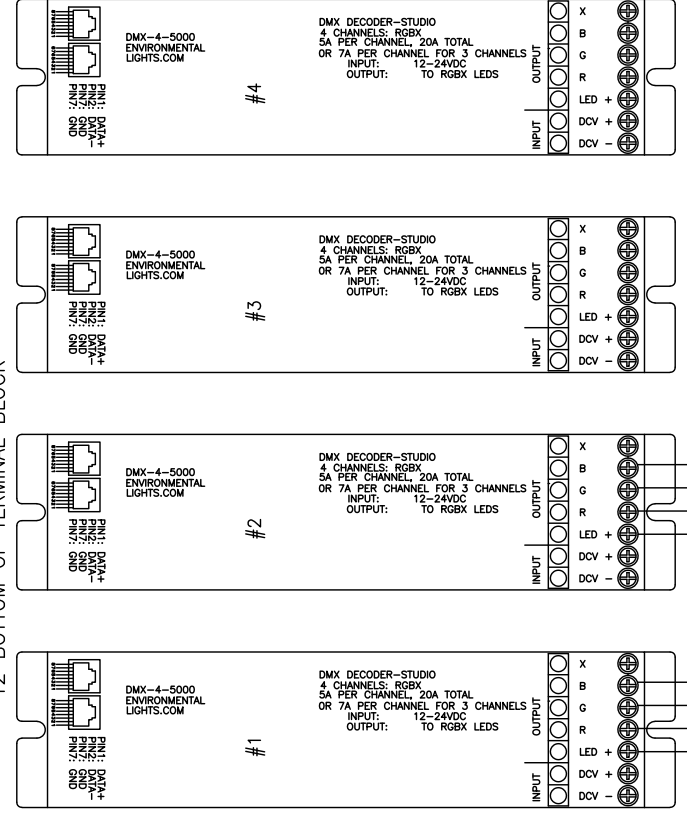
Revision **C**

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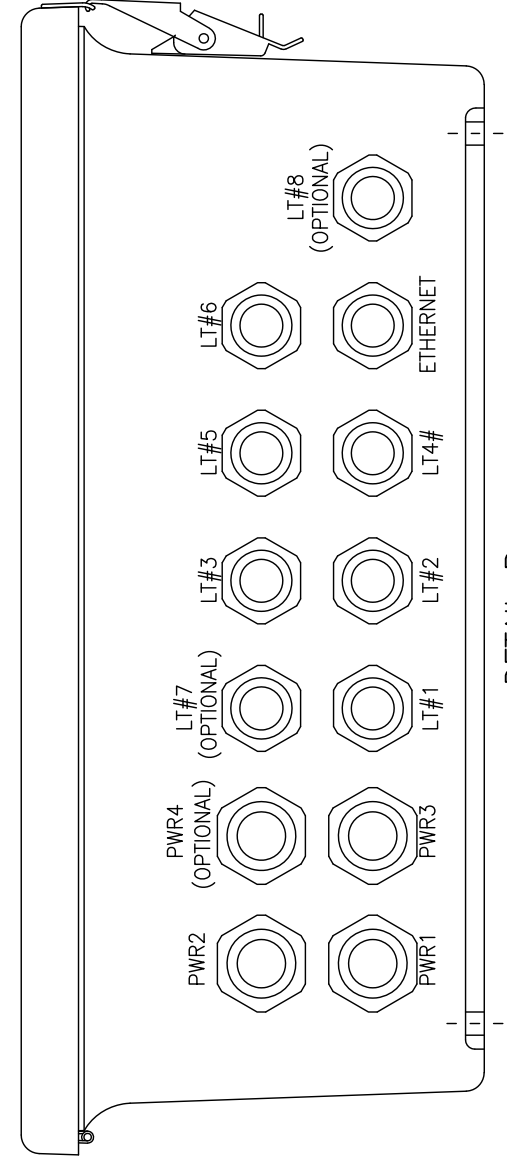
1 TOP OF TERMINAL BLOCK  
 2 TOP OF TERMINAL BLOCK  
 11 BOTTOM OF TERMINAL BLOCK  
 12 BOTTOM OF TERMINAL BLOCK



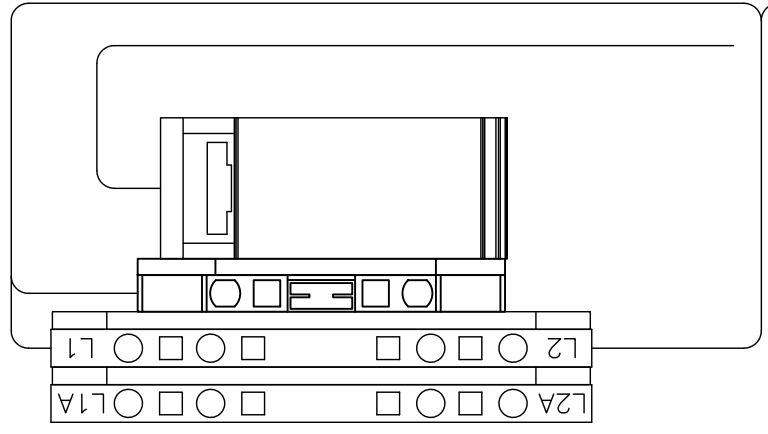
DMX #5 THRU DMX #8  
 DIRECTLY ABOVE  
 DMX#1 THRU DMX#4

PWR1 LT#1  
 LT#2

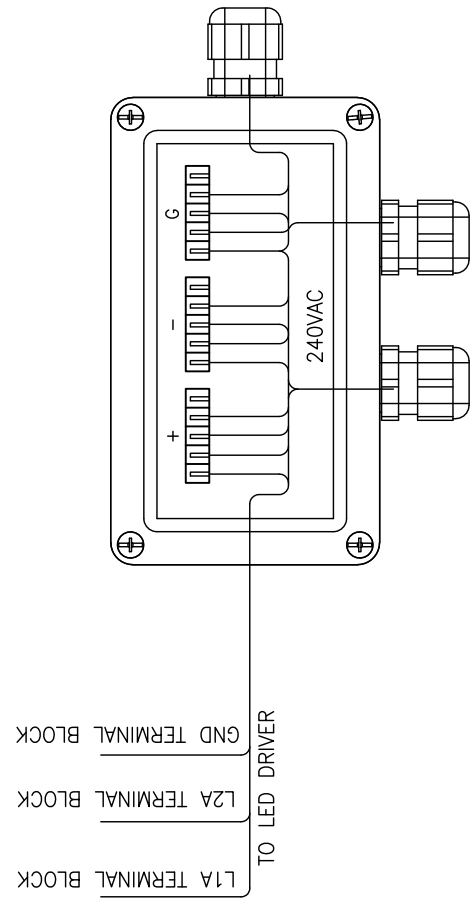
**DETAIL C**  
 TYPICAL DMX DECODER  
 WIRING



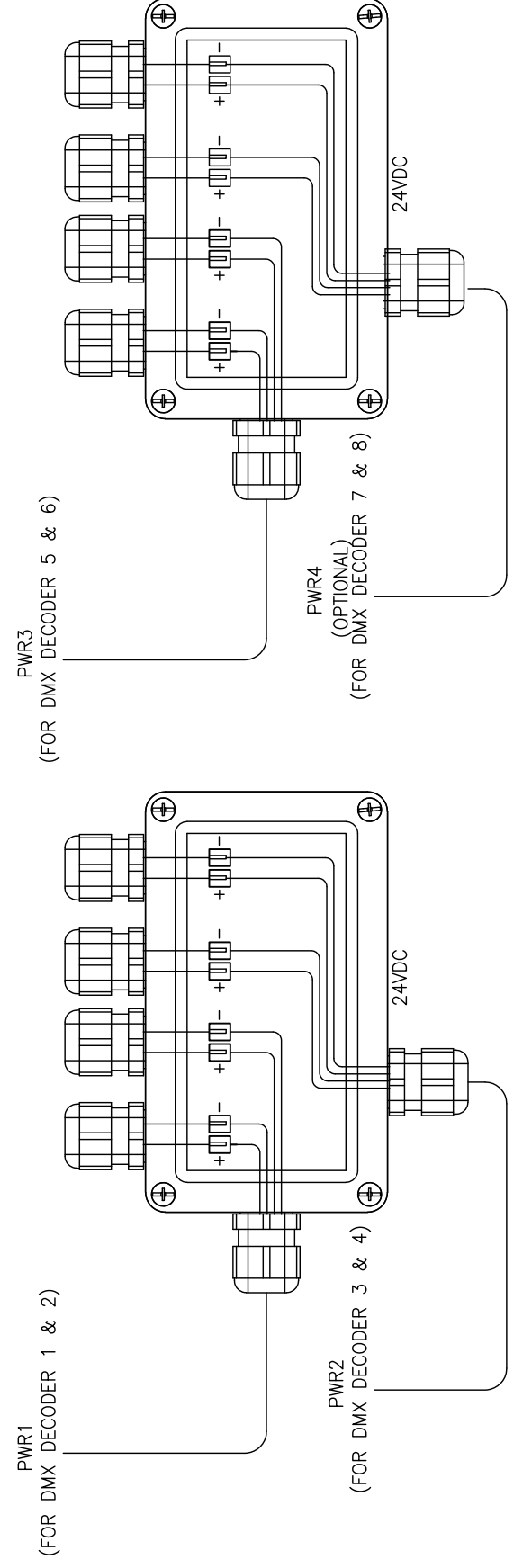
**DETAIL B**  
 LED DRIVER



**DETAIL D**  
 LED DRIVER



L1A TERMINAL BLOCK  
 L2A TERMINAL BLOCK  
 GND TERMINAL BLOCK  
 TO LED DRIVER

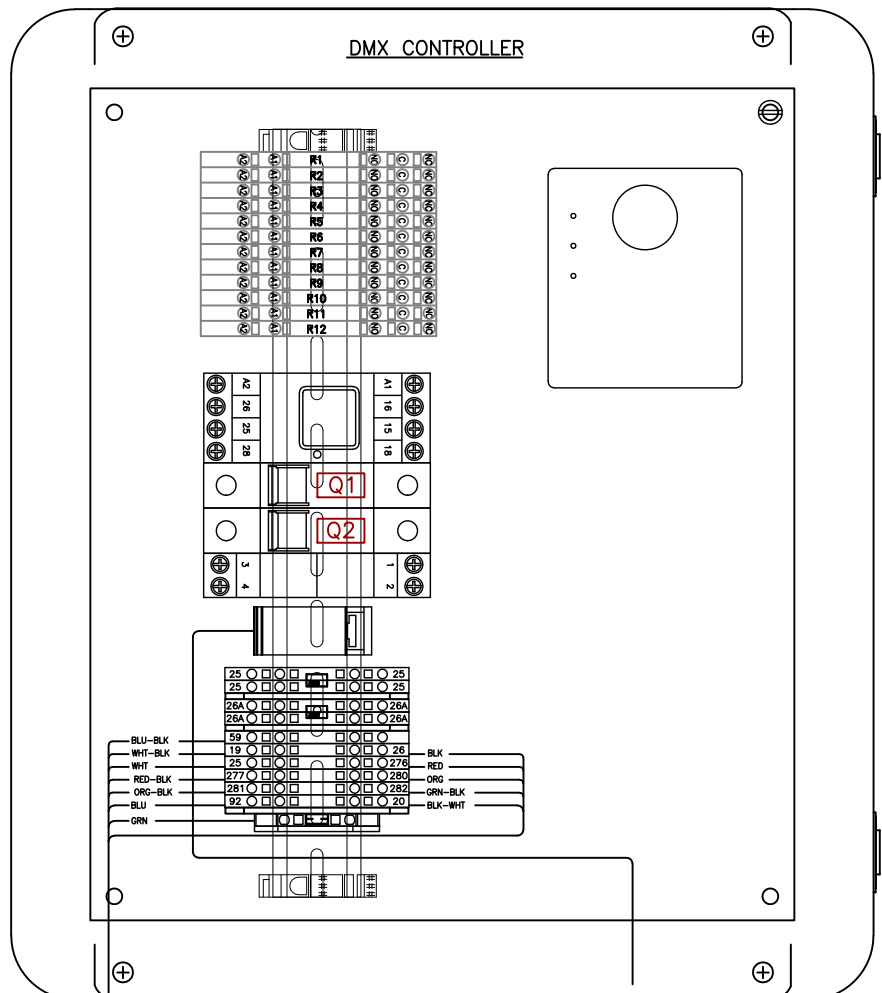


**DETAIL A**  
 POWER SUPPLY



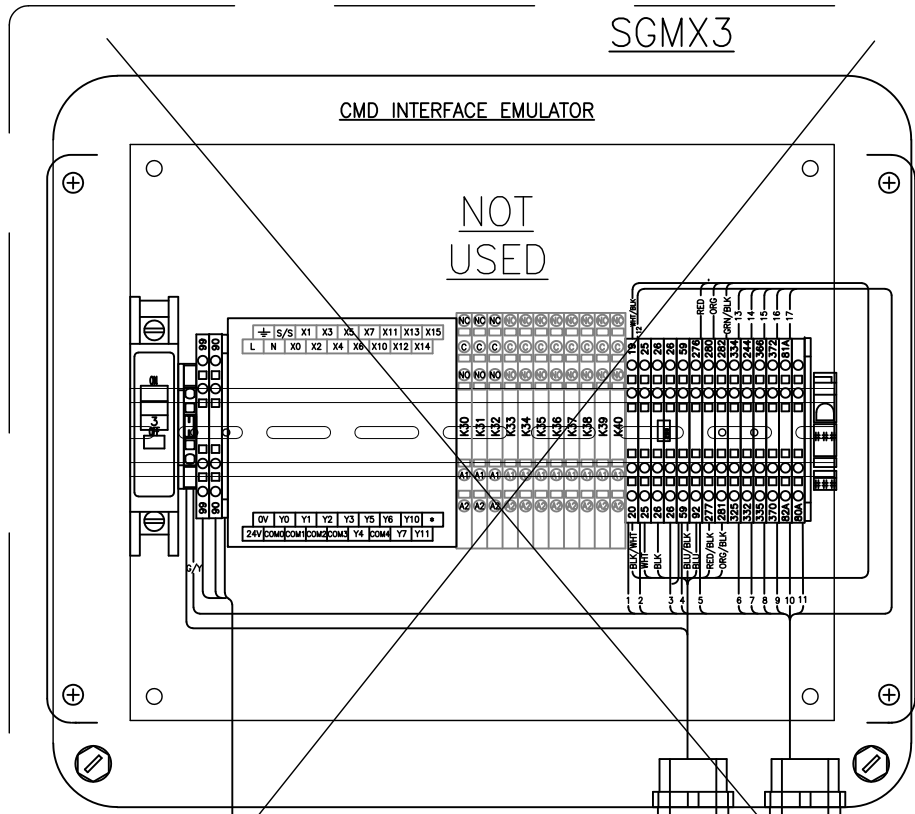
First Used On:	Material:	Part Name:	Revision
Checked by:	Date:	TW	C
Drawn By:	Date:	5-3-19	
Page		3 of 4	
Part Number:		28980-000	
Part Name:		INSTALL/ TSS LIGHTS	

8 7 6 5 4 3 2 1



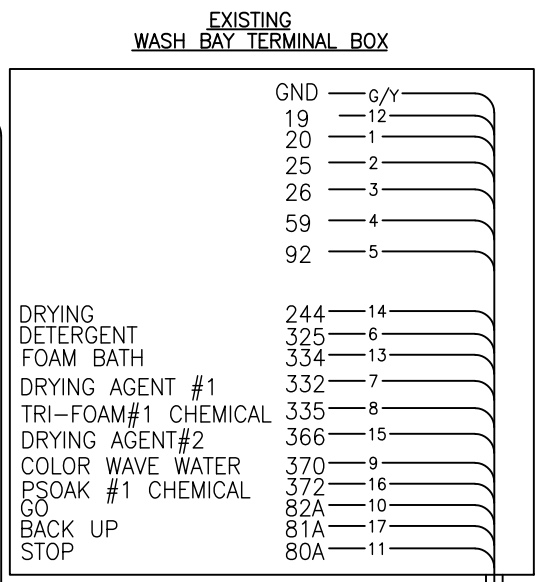
ETHERNET FROM  
TSS ASSY/ LED DRIVER

CABLE/ 16/12 SOW,WTR RESIST



POWER IN  
115V

- GND — GRN
- 26 — BLK
- 25 — WHT
- 19 — WHT/ BLK
- 20 — BLK/WHT
- 59 — BLU/BLK
- 92 — BLU
- 276 — RED
- 277 — RED/BLK
- 280 — ORG
- 281 — ORG/BLK
- 282 — GRN/BLK



CABLE/ 18/18, UL,CE

**NCS**  
NATIONAL CARWASH SOLUTIONS

File Used On: \_\_\_\_\_  
 Chkd by: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Drawn By: TW  
 Date: 5-3-19  
 Part Name: **INSTALL/ TSS LIGHTS**  
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Revision **C**

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