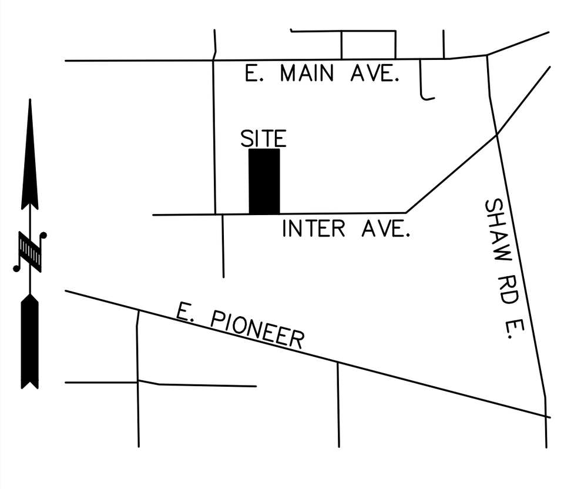
CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.
COVER SHEET

VICINITY MAP



SCALE: 4" = 1 MILE

SHEET INDEX

PARCEL NUMBER

2105200140

SITE ADDRESS

2315 INTER AVE, PUYALLUP, WA 98372

PROPERTY DESCRIPTION

(PER DEED OF TRUST, AFN 201810030016)
LOT 7, ACKERSON'S ADDITION TO PUYALLUP, ACCORDING TO THE PLAT RECORDED IN VOLUME 8 OF PLATS, PAGE 25, RECORDS OF PIERCE COUNTY, WASHINGTON.

SITUATE IN THE COUNTY OF PIERCE, STATE OF WASHINGTON.

CONSTRUCTION NOTES:

1. CONTRACTOR TO REMOVE AND RELOCATE FIRE HYDRANT ASSEMBLY AS SHOWN. SEE FIRE HYDRANT ASSEMBLY DETAIL ON SHEET C2.2. CONTRACTOR TO PROVIDE NEW 8"X8"X6" HYDRANT TEE W/ 6" GATE VALVE AND 8"MJ PLUG ON NORTH SIDE OF HYDRANT TEE W/ THRUST BLOCKING. CONTRACTOR TO INSTALL A MINIMUM OF 2 FEET OF 6"DI(CL52) PIPE BEFORE SETTING THE FIRE HYDRANT.
2. CONTRACTOR TO CUT OUT EXISTING 8"X8"X6" HYDRANT TEE W/ 6" GATE VALVE AT EXISTING HYDRANT. REPLACE WITH 8"X8"X8" TEE PER CITY OF PUYALLUP REQUIREMENTS.
3. CONTRACTOR TO ENSURE 0.5'(MIN) VERTICAL SEPARATION BETWEEN WATER AND STORMWATER LINES.
4. CONTRACTOR TO REMOVE AND REPLACE EXISTING FENCING (AS NECESSARY) TO FACILITATE HYDRANT SPOOL EXTENSION & FDC CONNECTION CONSTRUCTION AS SHOWN.
5. CONTRACTOR TO INSTALL 90° BEND FITTING IN WATER MAIN WITH THRUST BLOCKING PER CITY OF PUYALLUP REQUIREMENTS.
6. CONTRACTOR TO INSTALL POST INDICATOR VALVE (PIV) ON EXISTING FIRE LINE IN FRONT OF THE EXISTING DDCVA FIRE VAULT PER CITY OF PUYALLUP REQUIREMENTS. THE P.I.V. MUST BE INSTALLED A MINIMUM OF 1 FOOT FROM THE EXISTING VAULT. SEE CITY STANDARD ON DETAIL 03.10.03 ON SHEET C2.2.
7. CONTRACTOR TO RELOCATE EXISTING FIRE DEPARTMENT CONNECTION (F.D.C.)SO IT IS A MINIMUM OF 10 FEET AND A MAXIMUM OF 15 FEET FROM THE NEW FIRE HYDRANT LOCATION. SEE CITY STANDARD DETAIL 03.10.02 ON SHEET C2.2.
8. CONTRACTOR TO "POT HOLE" AND VERIFY WATER MAIN/FIRE LINE LOCATION, DEPTH, PIPE SIZE, CONDITION PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
9. CONTRACTOR TO INSTALL 45° BEND FITTING IN WATER MAIN WITH THRUST BLOCKING PER CITY OF PUYALLUP REQUIREMENTS.
10. CONTRACTOR TO SAWCUT, REMOVE AND REPLACE WITH EQUAL OR BETTER SECTION AS SHOWN AND PER CITY OF PUYALLUP REQUIREMENTS.

FIRE HYDRANT RELOCATION NOTE:

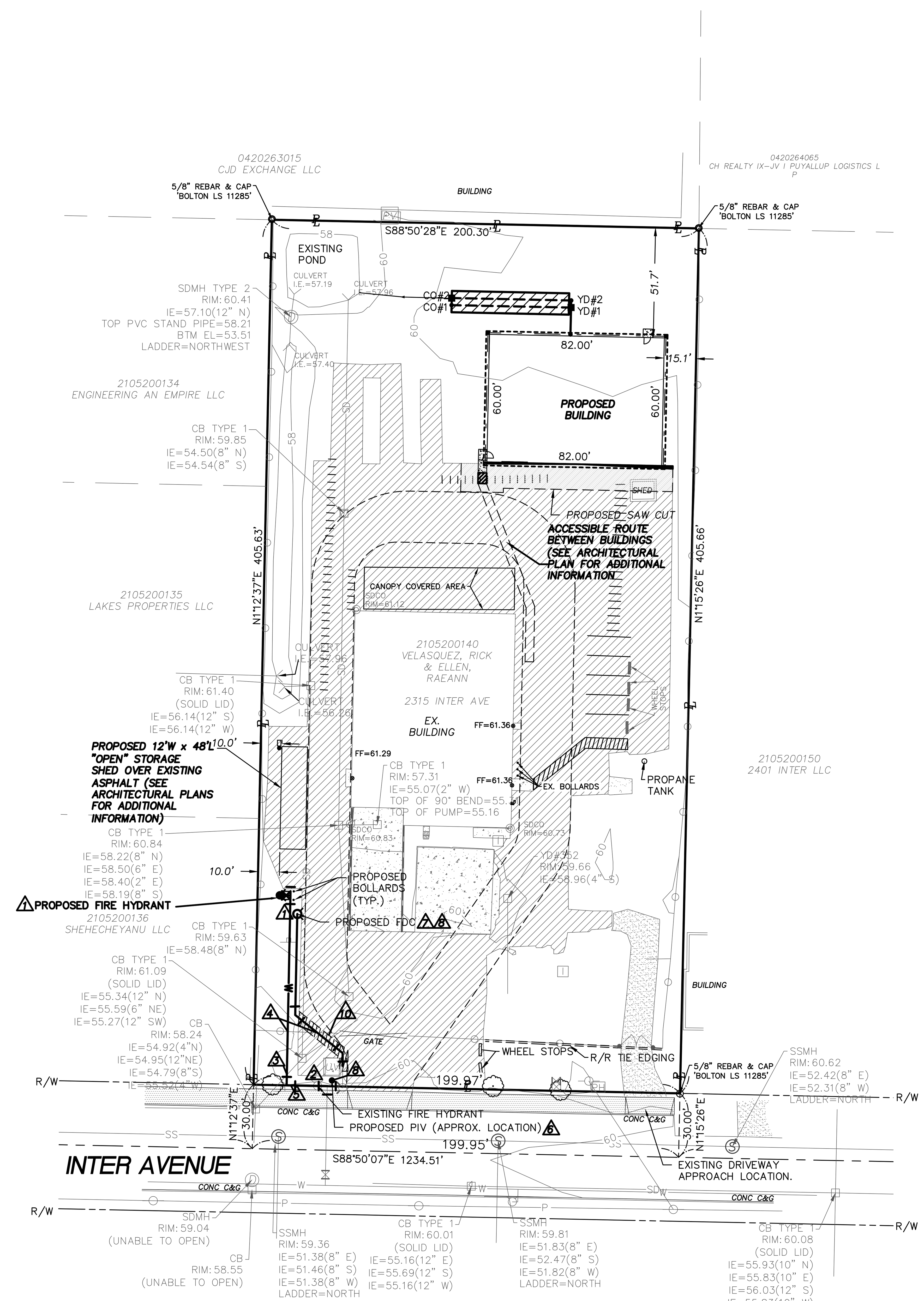
FIRE HYDRANT CAN ONLY BE RELOCATED AND REUSED IF NEW DEPTH OF BURY MATCHES EXISTING BURY DEPTH.

LANDSCAPE NOTE:

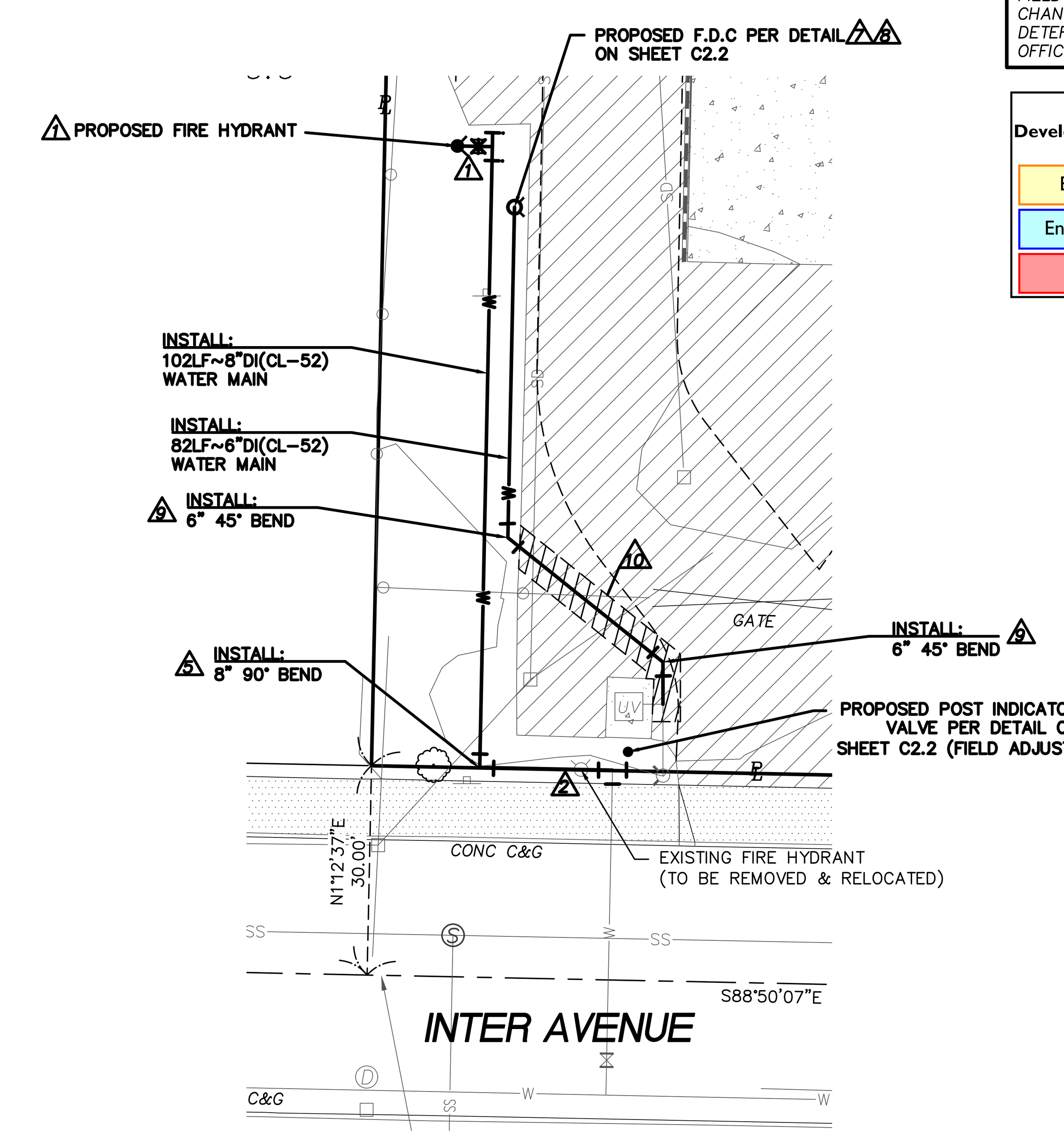
ALL PLANTING AREAS SHALL BE MULCHED WITH A UNIFORM FOUR (4") INCH LAYER OF ORGANIC COMPOST MULCH MATERIAL OR WOOD CHIPS OVER OVER A PROPERLY CLEANED, AMENDED AND GRADE SUBSURFACE.

IMPERVIOUS AREA

TOTAL = 5,931 SF.
BUILDING ROOF (NEW) = 5,355 SF.
"OPEN" STORAGE SHED (REPLACED) = 576 SF.



PLAN VIEW
HORIZONTAL SCALE: 1"=40'



ENLARGED VIEW OF WATER MAIN EXTENSION
PLAN VIEW
HORIZONTAL SCALE: 1"=20'

CONTRACTOR / DEVELOPER NOTE:

THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED MATERIAL TESTING, COMPACTION TESTING, AND APPLICABLE INSPECTIONS AS REQUIRED BY CITY OF PUYALLUP AND PRIVATE ENGINEER. THE CONTRACTOR SHALL SUPPLY CERTIFYING ENGINEER WITH DOCUMENTATION SIGNED BY A PROFESSIONAL SOILS AND/OR MATERIALS ENGINEER SHOWING THAT THE ROAD SECTION WAS BUILT ACCORDING TO THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. THE BACKFILL MATERIAL MEETS MINIMUM CITY/STATE REQUIREMENTS, COMPACTION WAS ACHIEVED IN ALL TRENCHES AND ROAD SECTION, AND ALL CONSTRUCTION MATERIALS AND CONSTRUCTION METHODS SHOWN ON THESE PLANS HAVE BEEN FOLLOWED.

FIRE HYDRANT/FDC LOCATION/ACCESS APPROVED

BY ____________
CITY OF PUYALLUP
FIRE CODE OFFICIAL
DATE 10/10/2023

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

APPROVED

BY ____________
CITY OF PUYALLUP
ENGINEERING DEPARTMENT
DATE 10/10/2023

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

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

SCALE: 1"=40'
0 20 40 80

VERTICAL DATUM
(WSRN)

NAVD 88 ESTABLISHED USING GPS RTK ROVER CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) STATIONS

CONTOUR INTERVAL=1'

TOPOGRAPHY PREPARED BY LARSON & ASSOCIATES

HORIZONTAL DATUM

NAD 83/11 WASHINGTON SOUTH ZONE
ESTABLISHED USING GPS RTK ROVER CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) STATIONS

SURVEYOR'S REFERENCES

(P) ACKERSON'S 2ND ADDITION TO PUYALLUP, AFN 215387
(R1) RECORD OF SURVEY, 200801255002

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- RIGHT OF WAY
- EXISTING WATER MAIN (APPROX. LOCATION)
- EXISTING SEWER MAIN
- EXISTING STORM MAIN
- EXISTING POWER LINE
- EXISTING WIRE FENCE
- EXISTING CHAINLINK FENCE
- PROPOSED STORM LINE
- PROPOSED WATER LINE
- PROPOSED CATCH BASIN/YARD DRAIN
- PROPOSED CLEAN OUT
- PROPOSED POST INDICATOR VALVE
- PROPOSED F.D.C
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- EXISTING WATER METER
- EXISTING F.D.C
- EXISTING IRR. BOX
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING DDCVA VAULT
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING STORM C/O
- EXISTING SEWER MANHOLE
- EXISTING UTILITY POLE
- EXISTING SIDEWALK
- EXISTING PAVEMENT
- EXISTING CONCRETE
- PROPOSED PAVEMENT GRIND/OVERLAY AREA
- EXISTING TREE

REVISION BLOCK

NO.	DATE	DESCRIPTION	BY
1	8/1/2023	ADDRESS CITY COMMENTS AND ADD NEW "OPEN" STORAGE SHED OVER EXISTING PAVEMENT AS SHOWN.	GJM

GRANT J. MIDDLETON, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
9/12/2023

UTILITY CONFLICT NOTE:

CAUTION:
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR VERIFYING THE LOCATION, 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 @ 811 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATION 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 CONSULT THE PROJECT ENGINEER TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

JOB NUMBER	9575
SCALE	HOR. 1"=40' VERT. N/A
DESIGNED	JLC
DRAWN	DNN
CHECKED	GJM

PROPONENT:
RICK VELASQUEZ
13615 122ND ST E
PUYALLUP, WA 98374
PH: (253) 224-4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA 98444 (253) 474-3404

COVER SHEET

C0.0

DATE	9/12/2023
DRAWING NO.	9575BASE

CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.
T.E.S.C. PLAN

CONSTRUCTION NOTES

1. CONTRACTOR TO UTILIZE EXISTING ACCESS TO THE PROPERTY FOR CONSTRUCTION.
2. CONTRACTOR TO INSTALL MIRAFI SILT FENCE AS SHOWN AND PER DETAIL ON C1.1
3. CONTRACTOR TO INSTALL CB INLET PROTECTION AT EXISTING CATCHBASINS AS SHOWN AND PER DETAIL ON SHEET C1.1
4. CONTRACTOR TO REMOVE EX. WIRE FENCING TO ALLOW FOR CONSTRUCTION ACTIVITIES.
5. CONTRACTOR TO RELOCATE EXISTING SIGN (AS NECESSARY) TO FACILITATE WATER MAIN EXTENSION CONSTRUCTION WORK FOR NEW/RELOCATED FIRE HYDRANT.
6. CONTRACTOR TO REMOVE AND REPLACE EXISTING FENCING TO "LIKE KIND" TO ALLOW FOR WATER MAIN EXTENSION CONSTRUCTION WORK AS SHOWN.
7. CONTRACTOR TO "POTHOLE" EXISTING STORM LINE TO VERIFY LOCATION PRIOR TO SETTING BUILDING POST FOUNDATIONS TO ENSURE THE BUILDING FOOTPRINT IS POSITIONED OUTSIDE OF THE STORM LINE WHILE ALSO MEETING CITY BUILDING SETBACK REQUIREMENTS FROM PROPERTY LINES.

INSPECTION SCHEDULE

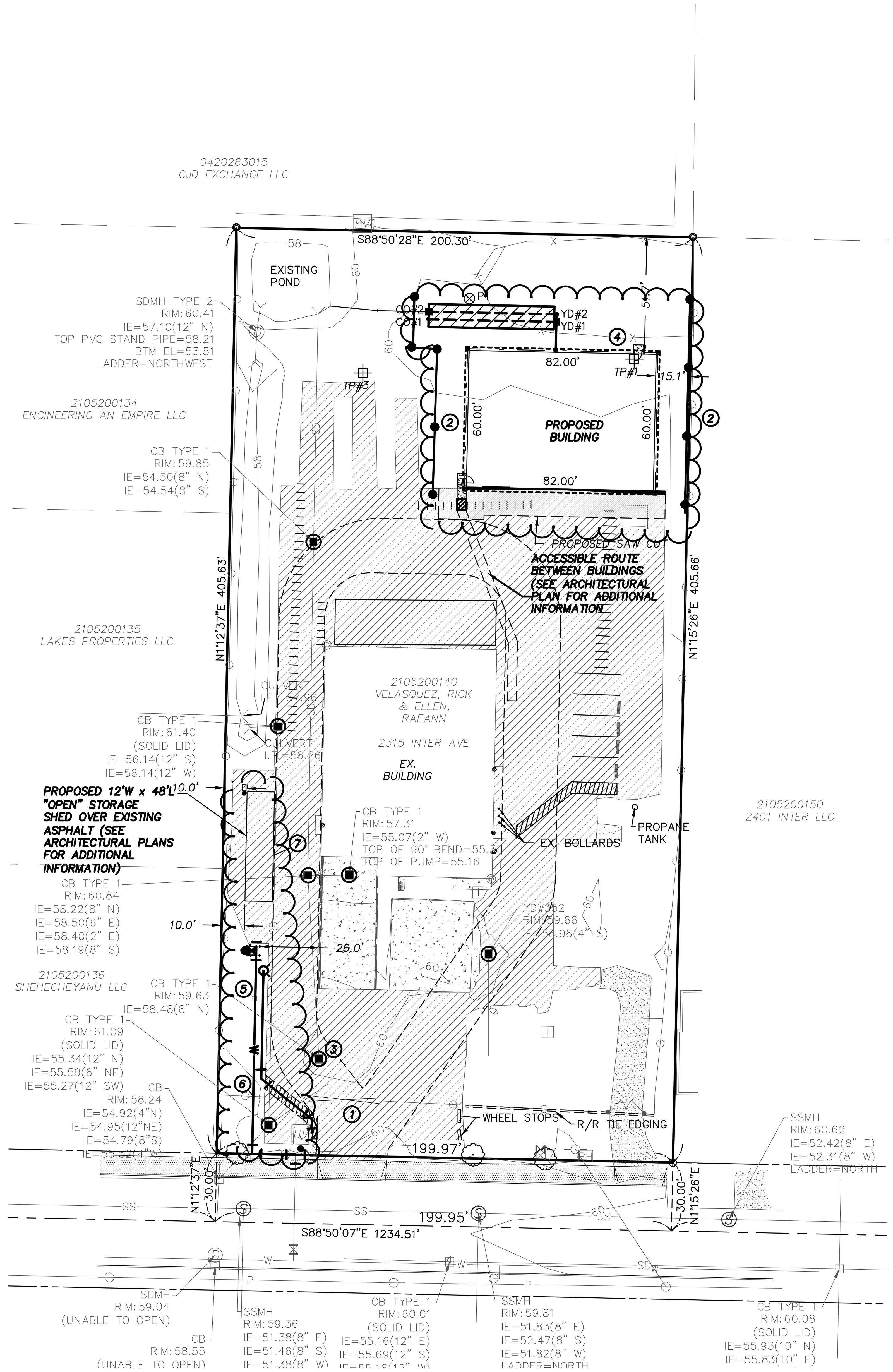
1. CONSTRUCTION ENTRANCE SHALL BE INSPECTED WEEKLY & CLEANED AS NEEDED OR NEW SPALLS ADDED AS NEEDED TO MAINTAIN A ROUGH SURFACE.
2. THE EXISTING ACCESS ROUTES INTO THE PROJECT SITE SHALL BE INSPECTED EVERY 2 DAYS & SWEPT OR CLEANED ON A WEEKLY BASIS OR MORE FREQUENTLY IF NEEDED.
3. ALL CUT & FILL SIDE SLOPES SHALL BE INSPECTED EVERY 2 DAYS AND/OR AFTER EVERY STORM EVENT TO REPAIR ANY EROSION OR SLOPE SCOURING.
4. INSPECT CB. INLET PROTECTION ON A WEEKLY BASIS AND AFTER EVERY MAJOR STORM EVENT.

FIRE ACCESS NOTES:

1. 26' CLEAR AT THE HYDRANT.
2. 20' CLEAR EACH WAY.
3. 13.5' GRADE CLEARANCE

CONSTRUCTION SEQUENCE

1. HOLD A PRE-CONSTRUCTION MEETING WITH THE CITY AND OBTAIN REQUIRED PERMITS.
2. ESTABLISH CLEARING AND GRADING LIMITS.
3. UTILIZE EXISTING PAVED ACCESS FOR CONSTRUCTION VEHICLE ACCESS.
4. INSTALL CATCH BASIN INLET PROTECTION AND SEDIMENT CONTROL DEVICES IN ALL EXISTING CATCH BASINS WITHIN DIRECT VICINITY OF THE PROJECT.
5. SCHEDULE AN EROSION CONTROL INSPECTION WITH THE CITY.
6. CLEAR AND GRADE SITE AND CONSTRUCT STORM DRAIN SYSTEM PER APPROVED PLANS.
7. PROVIDE C.B. INLET PROTECTION IN NEW CATCH BASINS UNTIL PARKING LOT STORM DRAIN SYSTEM IS COMPLETED AND THE SITE IS COMPLETELY STABILIZED AND PROTECTED FROM EROSION & SEDIMENTATION.
8. NOTE: THE BUILDING CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF STORM SYSTEM DURING BUILDING AND LANDSCAPE CONSTRUCTION.
9. HYDRO SEED AND/OR MULCH SLOPES AND OTHER EXPOSED AREAS IMMEDIATELY AFTER GRADING IS COMPLETED AS OUTLINED IN "EROSION CONTROL NOTES".
10. CLEAN OUT AND TEST ALL STORM DRAIN FACILITIES.
11. INSPECT AND MAINTAIN ALL EROSION CONTROL FACILITIES (I.E. CB INLET PROTECTION BMPs) AT REGULAR INTERVALS & COMPLETE REQUIRED REPORT. CLEAN AS REQUIRED UNTIL RISK OF SEDIMENTATION HAS PASSED.



NOTES

1. ALL FILL SHALL BE CLEAN EARTHEN MATERIAL ONLY, WITH NO CONCRETE, GARBAGE, SOLID WASTE OR ANY OTHER UNACCEPTABLE MASS.
2. ALL ASBESTOS ENCOUNTERED MUST BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH PUGET SOUND AIR POLLUTION CONTROL AGENCY (PSAPCA) AND TACOMA-PIERCE COUNTY HEALTH DEPARTMENT REGULATIONS.
3. ALL DEMOLITION MATERIAL MUST GO TO A LICENSED SOLID WASTE HANDLING OR DISPOSAL FACILITY.
4. ALL SEPTIC TANKS SHALL BE PUMPED BY A CERTIFIED SEPTIC HAULER, FILLED WITH SOIL AND A DECOMMISSIONING APPLICATION COMPLETED PER TACOMA-PIERCE COUNTY HEALTH DEPARTMENT REQUIREMENTS.
5. CONTRACTOR SHALL OBTAIN DEMOLITION PERMIT AS REQUIRED PRIOR TO ANY DEMOLITION OR STRUCTURE REMOVAL.
6. ALL SLOPES SHALL MAINTAIN MINIMUM SETBACKS IN ACCORDANCE WITH THE GRADING NOTES ON SHEET C1.1.
7. THE OWNER'S RETAINED GEOTECHNICAL ENGINEER SHALL TEST ALL FILL MATERIAL & OBTAIN SUFFICIENT COMPACTION TESTS TO VERIFY SOIL STABILITY.
8. EROSION CONTROL MEASURES OTHER THAN THOSE SPECIFIED MAY BE NEEDED TO PREVENT MIGRATION OF SEDIMENT. SEE SHEETS C1.1 FOR ADDITIONAL MEASURES.
9. CONTRACTOR TO HAVE EQUIPMENT AND MATERIALS I.E.: STRAW, 12" & 18" CMP, QUARRY SPALLS, TEMP RISER STRUCTURES, ETC. ON-SITE DURING CONSTRUCTION FOR EMERGENCY SITUATIONS. CONTRACTOR TO DEVELOP PLAN OF ACTION FOR EROSION MEASURES PRIOR TO STARTING CONSTRUCTION.
10. PRIOR TO START OF CONSTRUCTION, A NPDES PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF ECOLOGY IF NEEDED.
11. PRIOR TO START OF CONSTRUCTION, A FOREST PRACTICE PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES, IF NEEDED.
12. TO LIMIT IMPACTS TO NEIGHBORING PROPERTIES, DUST CONTROL WILL BE REQUIRED.

UTILITY CONFLICT NOTE:

CAUTION:

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CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

APPROVED

BY

CITY OF PUYALLUP ENGINEERING DEPARTMENT

DATE 10/10/2023

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

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

SCALE: 1"=40'

0 20 40 80

VERTICAL DATUM (WSRN)

NAVD 88 ESTABLISHED USING GPS RTK ROVER CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) STATIONS

CONTOUR INTERVAL=1'

TOPOGRAPHY PREPARED BY LARSON & ASSOCIATES

HORIZONTAL DATUM

NAD 83/11 WASHINGTON SOUTH ZONE
ESTABLISHED USING GPS RTK ROVER CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) STATIONS

SURVEYOR'S REFERENCES

(P) ACKERSON'S 2ND ADDITION TO PUYALLUP, AFN 215387

(R1) RECORD OF SURVEY, 200801255002

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- SILT FENCE
- CLEARING LIMITS
- RIGHT OF WAY
- EXISTING WATER MAIN (APPROX. LOCATION)
- EXISTING SEWER MAIN
- EXISTING STORM MAIN
- EXISTING POWER LINE
- EXISTING WIRE FENCE
- EXISTING CHAINLINK FENCE
- PROPOSED STORM LINE
- PROPOSED WATER LINE
- PROPOSED CATCH BASIN/YARD DRAIN
- PROPOSED CLEAN OUT
- PROPOSED POST INDICATOR VALVE
- PROPOSED F.D.C
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- EXISTING WATER METER
- EXISTING F.D.C
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- EXISTING SIDEWALK
- EXISTING PAVEMENT
- EXISTING CONCRETE
- PROPOSED PAVEMENT GRIND/OVERLAY AREA
- EXISTING TREE
- CB INLET PROTECTION
- TP#1 TEST PIT LOCATION SEE GEOTECHNICAL REPORT LOCATED WITHIN THE SSP REPORT FOR ADDITIONAL INFORMATION.
- P1 PILOT INFILTRATION TEST LOCATION SEE GEOTECHNICAL REPORT LOCATED WITHIN THE SSP REPORT FOR ADDITIONAL INFORMATION.

GRANT J. MIDDLETON, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER 9/12/2023

JOB NUMBER	9575
SCALE	HOR. 1"=40' VERT. N/A
DESIGNED	JLC
DRAWN	DNN
CHECKED	GJM

PROPONENT: RICK VELASQUEZ
13615 122ND ST E.
PUYALLUP, WA 98374
PH: (253) 224-4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA 98444 (253) 474-3404

T.E.S.C. PLAN

C1.0

DATE	9/12/2023
DRAWING NO.	9575BASE

CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.

GRADING, EROSION & SEDIMENT CONTROL NOTES

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

INLET PROTECTION NOTES

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, SO THAT THE OPEN END FACE OUTWARD, NOT UPWARD. THE ENDS OF ADJACENT BLOCKS SHALL ABUT. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF BLOCKS THAT ARE 4 INCHES, AND 12 INCHES WIDE. THE ROW OF BLOCKS SHALL BE AT LEAST 12 INCHES BUT NO GREATER THAN 24 INCHES HIGH.
2. PLACE WIRE MESH OVER THE OUTSIDE VERTICAL FACE (OPEN END) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE BLOCKS. USE HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS.
3. PILE STONE AGAINST THE WIRE MESH TO THE TOP OF THE BLOCKS. USE 3/4-INCH TO 3-INCH GRAVEL.
4. PLACE WIRE MESH OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. USE HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, OVERLAP THE STRIPS. PLACE FILTER FABRIC OVER WIRE MESH.
5. PLACE 3/4 INCH GRAVEL OVER THE WIRE MESH. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. EXTEND THE STONE BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
6. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, THE STONES MUST BE PULLED AWAY FROM THE INLET AND CLEANED OR REPLACED.

SEEDING NOTES

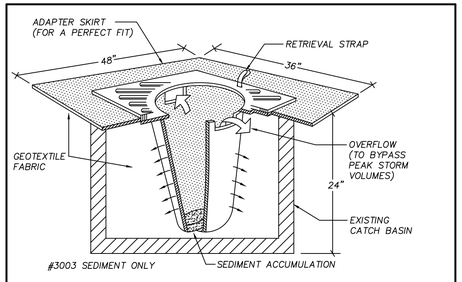
1. SEED MIXTURE SHALL BE 10%RED TOP, 40% ANNUAL RYE, 40% CHEWING FESCUE, 10% WHITE DUTCH CLOVER, AND SHALL BE APPLIED AT THE RATE OF 225 LBS. PER ACRE.
2. SEED BEDS PLANTED BETWEEN MAY 1 AND OCTOBER 31 WILL REQUIRE IRRIGATION AND OTHER MAINTENANCE AS NECESSARY TO FOSTER AND PROTECT THE ROOT STRUCTURE.
3. FOR SEED BEDS PLANTED BETWEEN OCTOBER 31 AND APRIL 30, ARMORING OF THE SEED BED WILL BE NECESSARY. (E.G., GEOTEXTILES, JUTE MAT, CLEAR PLASTIC COVERING).
4. BEFORE SEEDING, INSTALL NEEDED SURFACE RUNOFF CONTROL MEASURES SUCH AS GRADIENT TERRACES, INTERCEPTOR DIKES, SWALES, LEVEL SPREADERS AND SEDIMENT BASINS.
5. THE SEEDBED SHALL BE FIRM WITH A FAIRLY FINE SURFACE, FOLLOWING SURFACE ROUGHENING. PERFORM ALL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE SLOPE.
6. FERTILIZERS ARE TO BE USED ACCORDING TO SUPPLIERS RECOMMENDATIONS. AMOUNTS USED SHOULD BE MINIMIZED, ESPECIALLY ADJACENT TO WATER BODIES AND WETLANDS.

TOPSOILING NOTES

1. APPLY TOPSOIL TO AREAS WITH HIGHLY DENSE OR IMPERMEABLE SOILS.
2. APPLY WHERE MULCH AND FERTILIZER ALONE WOULD NOT PROVIDE A SUITABLE GROWTH MEDIUM.
3. APPLY WHERE SLOPES DO NOT EXCEED 2:1.
4. TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SAND CLAY LOAM, CLAY LOAM).
5. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR WHEN CONDITIONS EXIST THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING.
6. PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOP SOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLAN.
7. STOCKPILES SHALL BE STABILIZED (WITH PLASTIC COVERING OR OTHER APPROVED DEVICE) DAILY BETWEEN NOVEMBER 1 AND MARCH 31.
8. IN ANY SEASON, SEDIMENT LEACHING FROM STOCKPILES MUST BE PREVENTED.

SOD NOTES

1. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4-INCH AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH.
2. STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED BY THE END OF A 3 FOOT SECTION.
3. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
4. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.



PROVIDE CATCH BASIN SEDIMENT PROTECTION WITH
STREAMGUARD BASIN INSERT #3003, FROM FOSS ENVIRONMENTAL
7440 W. MARGINAL WAY S.
SEATTLE, WA 98108-4141
PHONE: 1-800-909-3677

INLET SEDIMENT PROTECTION (AFTER PAVING) NOT TO SCALE

Test Pit TP-1
Location: West portion of parcel
Approximate Elevation: 60' (NAVD88)

Depth (ft)			Soil Type	Soil Description
0	-	0.5	-	Topsoil
0.5	-	3.0	SM	Brown silty SAND (loose, moist) (alluvium)
3.0	-	5.5	SM/ML	Gray, orange iron oxide stained silty SAND, interbedded gray mottled silt (medium dense/stiff, moist to wet) (alluvium)
5.5	-	6.0	ML	Gray mottled SILT (stiff, wet) (alluvium)
6.0	-	6.5	SP	Gray SAND (medium dense, wet) (alluvium)

Terminated at 3.2 feet below ground surface.
No caving observed.
Slow groundwater seepage observed at 4 feet below existing grades.

Test Pit TP-2
Location: SW central portion of parcel
Approximate Elevation: 60' (NAVD88)

Depth (ft)			Soil Type	Soil Description
0	-	0.5	-	Topsoil
0.5	-	3.0	SM	Reddish brown silty SAND (loose to medium dense, moist) (alluvium)
3.0	-	3.5	ML	Light gray SILT (medium stiff, moist) (alluvium)
3.5	-	6.0	SP	Gray mottled SAND (medium dense, wet) (alluvium)
6.0	-	7.5	SM	Gray mottled silty SAND (medium dense, wet) (alluvium)
7.5	-	8.0	ML	Gray SILT (stiff, wet) (alluvium)

Terminated at 8.0 feet below ground surface.
No caving observed.
Slow groundwater observed at 4.5 feet below ground surface

Logged by: AES — Observed on: December 21, 2021

GEORESOURCES earth science & geotechnical engineering
4809 Pacific Hwy. E. | Fife, WA 98424 | 253.896.1011 | www.georesources.rocks

Test Pit Logs
Proposed Commercial Development
2315 Inter Avenue
Puyallup, Washington
PN: 2105200140

Doc ID: CIMCO.InterAve.F | April 2022 | Figure A-2

Pilot Infiltration Test PIT-1
Location: West portion of parcel
Approximate Elevation: 60' (NAVD88)

Depth (ft)			Soil Type	Soil Description
0	-	0.5	-	Topsoil
0.5	-	2.0	SM	Reddish brown silty SAND (loose to medium dense, moist) (alluvium)
2.0	-	3.0	SM	Gray silty SAND (medium dense, moist) (alluvium)
3.0	-	5.0	SM	Gray mottled silty SAND (medium dense, moist) (alluvium)

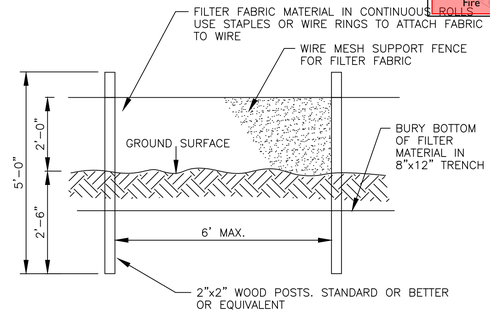
Infiltration testing performed at 2 feet below existing grades.
Measured 1 inch per hour.
Overexcavated to 5 feet below existing grades.
No caving observed.
No groundwater seepage observed.

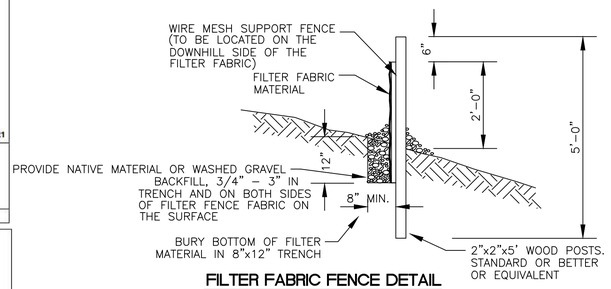
Logged by: AES — Observed on: December 21, 2021

GEORESOURCES earth science & geotechnical engineering
4809 Pacific Hwy. E. | Fife, WA 98424 | 253.896.1011 | www.georesources.rocks

Test Pit Logs
Proposed Commercial Development
2315 Inter Avenue
Puyallup, Washington
PN: 2105200140

Doc ID: CIMCO.InterAve.F | April 2022 | Figure A-3





FILTER FABRIC FENCE DETAIL
N.T.S.

APPROVED
BY _____
CITY OF PUYALLUP
ENGINEERING DEPARTMENT
DATE 10/10/2023
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning | Engineering | Public Works | Fire | Traffic

REVISION BLOCK			
NO.	DATE	DESCRIPTION	BY
1	8/1/2023	ADDRESS CITY COMMENTS	GJM
		AND ADD NEW "OPEN"	
		STORAGE SHED OVER	
		EXISTING PAVEMENT AS	
		SHOWN.	

GRANT J. MIDDLETON — STATE OF WASHINGTON — 37416 — REGISTERED PROFESSIONAL ENGINEER
9/12/2023

JOB NUMBER 9575
SCALE: HOR. N/A; VERT. N/A
DESIGNED JLC | DRAWN DNN | CHECKED GJM

PROPONENT:
RICK VELASQUEZ
1615 122ND ST E
PUYALLUP, WA 98374
PH: (253) 224-4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA. 98444 (253) 474-3404

T.E.S.C. SPECIFICATIONS

DATE 9/12/2023
DRAWING NO. 9575BASE
SHEET 3 OF 7

C1.1

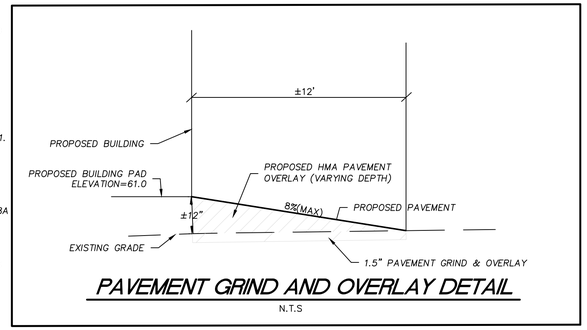
CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.

STORM PLAN

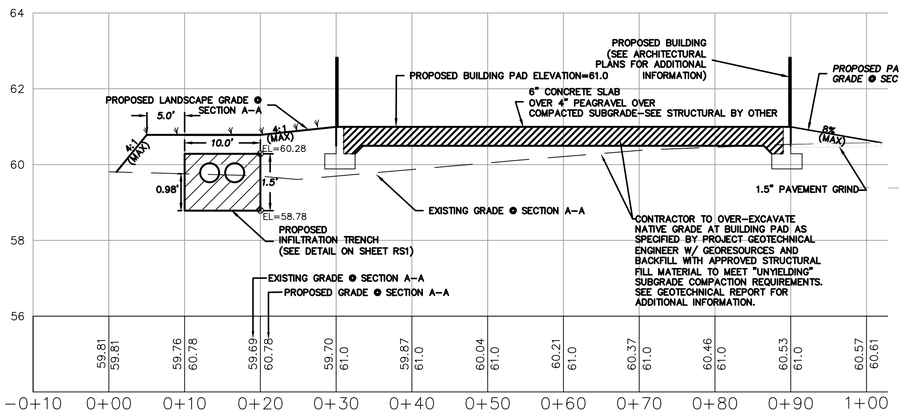
CONSTRUCTION NOTES:

1. IMMEDIATELY AFTER CONSTRUCTION, CONTRACTOR TO STABILIZE SLOPES BY ANY MEANS NECESSARY (I.I. SEEDING, SODDING, MULCHING, ETC.) PER NOTES LOCATED ON SHEET C1.1.
2. 4" DOWNSPOUT TO 6"PVC ROOFDRAIN TIGHTLINE (TYP.)
3. CONTRACTOR TO "BUILD UP" BUILDING PAD AREA WITH SUITABLE STRUCTURAL MATERIAL(AS NECESSARY) TO ENSURE POSITIVE DRAINAGE AWAY FROM THE BUILDING PAD LOCATIONS.
4. CONTRACTOR TO CONSTRUCT 55'L X 10'W X 1.5'D INFILTRATION TRENCH W/ DUAL 6" PVC(SDR35) PERF. PIPES @ 0.00% AS SHOWN AND PER DETAIL ON SHEET C2.1. THE CONTRACTOR SHALL INVITE THE GEOTECHNICAL ENGINEER TO PROVIDE INSPECTION OF SOIL CONDITIONS AT DESIGNED TRENCH LOCATION TO ENSURE PROPER SOIL CONDITIONS AT DEPTH EXIST, MEETING OR EXCEEDING DESIGN ASSUMPTIONS.
5. CONTRACTOR TO AMEND DISTURBED SOILS PER 2012 (AMENDED IN 2014) DOE MANUAL, VOLUME V, SECTION 5.3.1 (BMPT5.13) AS WELL AS CITY DETAIL 01.02.08A ON SHEET C2.1.
6. CONTRACTOR TO PROVIDE GRADED POSITIVE "OVER LAND" RELEASE FROM INFILTRATION TRENCH TO EXISTING STORM POND FROM "BUBBLE UP" EMERGENCY OVERFLOW GRATED INLET (YD#2) TO ALLOW LARGER THAN DESIGN STORM EVENTS TO BE PROPERLY CONVEYED TO THE EXISTING DOWNSTREAM DRAINAGE SYSTEM. ENSURE 1.0% (MIN.) GRADED FLOWLINE SWALE TO TOP OF EXISTING POND AS SHOWN.
7. CONTRACTOR TO PROVIDE RESIDENTIAL SEDIMENT CONTROL STRUCTURE IN YD#1 PER DETAIL ON SHEET C2.1
8. CONTRACTOR TO PROVIDE SINGLE DOWNSPOUT AND SPLASH BLOCK AT NORTHWEST CORNER OF THE PROPOSED OPEN SHED BUILDING AS SHOWN AND PER DETAIL ON SHEET 5.



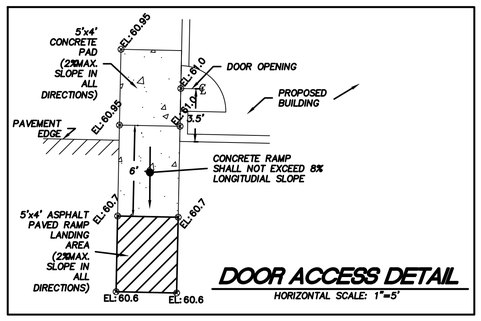
PAVEMENT GRIND AND OVERLAY DETAIL

N.T.S



BUILDING SECTION A-A

HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=2'



DOOR ACCESS DETAIL

HORIZONTAL SCALE: 1"=5'

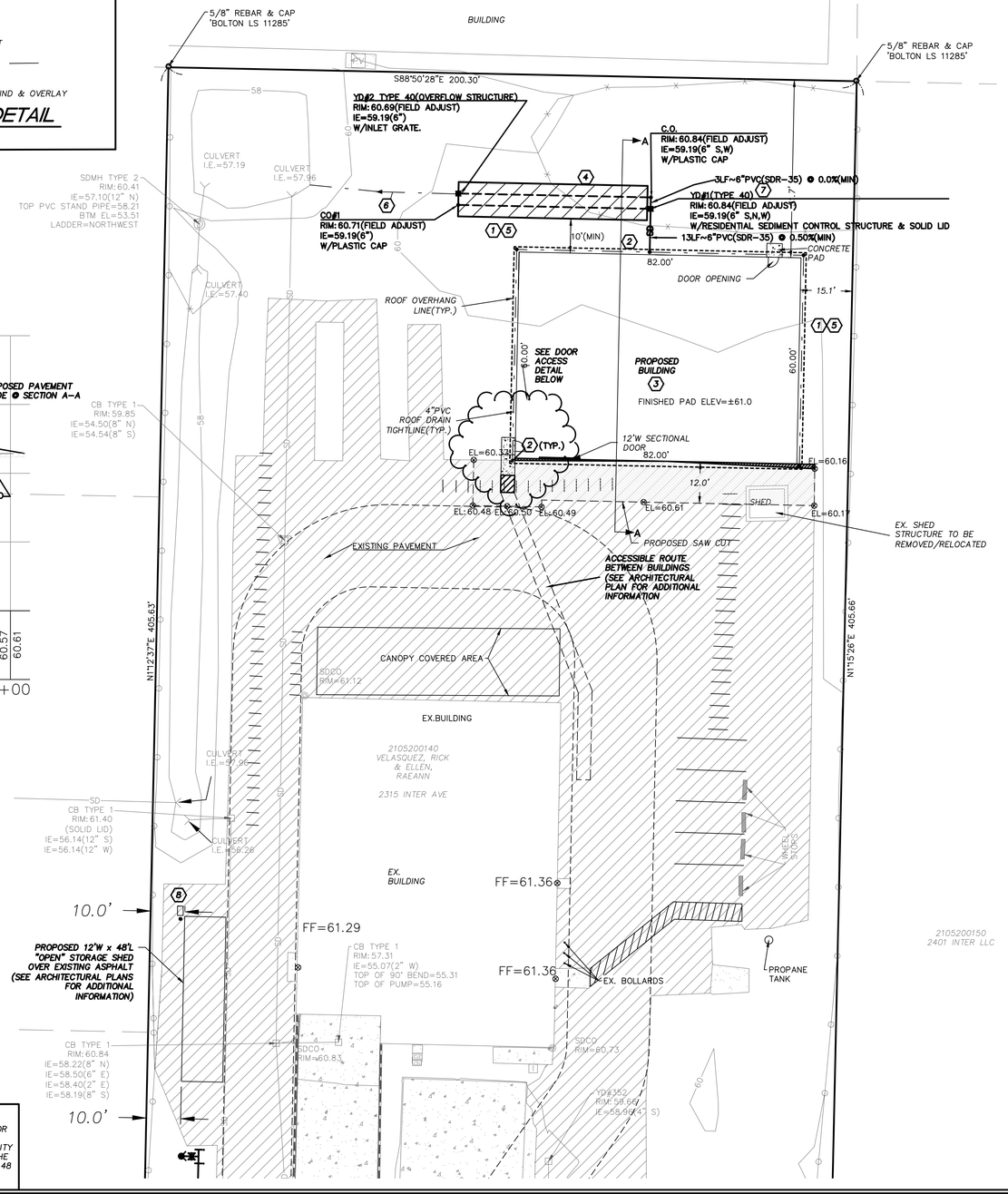
UTILITY CONFLICT NOTE:

CAUTION:

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR VERIFYING THE LOCATION, 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 @ 811 AND THEN POTHOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATION 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 CONSULT THE PROJECT ENGINEER TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



APPROVED

BY _____

CITY OF PUYALLUP
ENGINEERING DEPARTMENT

DATE 10/10/2023

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

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

SCALE: 1"=20'
0 10 20 40

VERTICAL DATUM
(WSRN)

NAVD 88 ESTABLISHED USING GPS RTK ROVER CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) STATIONS

CONTOUR INTERVAL=1'
TOPOGRAPHY PREPARED BY LARSON & ASSOCIATES

HORIZONTAL DATUM
NAD 83/11 WASHINGTON SOUTH ZONE
ESTABLISHED USING GPS RTK ROVER CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK (WSRN) STATIONS

SURVEYOR'S REFERENCES
(P) ACKERSON'S 2ND ADDITION TO PUYALLUP, AFN 215387
(R1) RECORD OF SURVEY, 200801255002

LEGEND

- PROPERTY LINE
- 60 EXISTING CONTOUR
- SD EXISTING STORM MAIN
- X EXISTING WIRE FENCE
- EXISTING CHAINLINK FENCE
- SD PROPOSED STORM LINE
- PROPOSED CATCH BASIN/YARD DRAIN
- PROPOSED CLEAN OUT
- EXISTING CATCH BASIN
- EXISTING STORM C/O
- PV EXISTING POWER VAULT
- EXISTING PAVEMENT
- PROPOSED PAVEMENT GRIND/OVERLAY AREA
- PROPOSED CONC PAD

GRANT J. MIDDLETON — STATE OF WASHINGTON — 38804 — REGISTERED PROFESSIONAL ENGINEER — 9/12/2023

JOB NUMBER 9575

SCALE		
	HOR. 1"=20'	VERT. 1"=2'
DESIGNED JLC	DRAWN DNN	CHECKED GJM

PROPONENT:
RICK VELASQUEZ
13615 122ND ST E
PUYALLUP, WA 98374
PH: (253) 224-4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA. 98444 (253) 474-3404

STORM PLAN

DATE
9/12/2023
DRAWING NO.
9575BASE
SHEET 4 OF 7

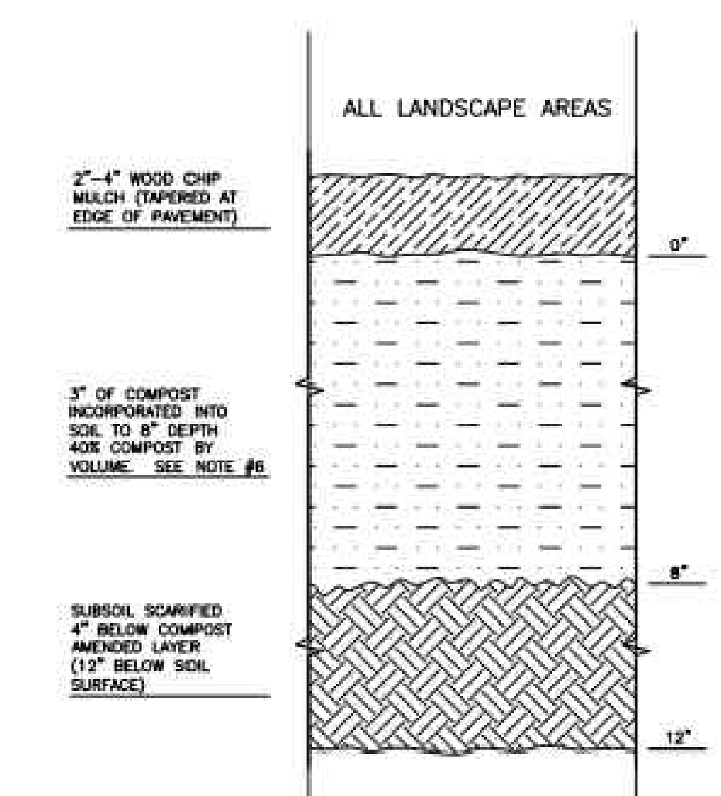
C2.0

CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.

STORM NOTES

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A 'PUNCH LIST' PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
4. A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
5. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE ENGINEERING SERVICES STAFF PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
6. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
7. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRE REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
8. DURING CONSTRUCTION, ALL EXISTING AND NEWLY INSTALLED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SEDIMENTS.
9. ALL STORM MANHOLES SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.01. FLOW CONTROL MANHOLE/OIL WATER SEPARATOR SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.06 AND 02.01.07.
10. MANHOLE RING AND COVER SHALL CONFORM TO CITY STANDARD DETAIL 06.01.02.
11. CATCH BASINS TYPE I SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.02 AND 02.01.03 AND SHALL BE USED ONLY FOR DEPTHS LESS THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.
12. CATCH BASINS TYPE II SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.04 AND SHALL BE USED FOR DEPTHS GREATER THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE..
13. CAST IRON OR DUCTILE IRON FRAME AND GRATE SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.05. GRATE SHALL BE MARKED WITH 'DRAINS TO STREAM'. SOLID CATCH BASIN LIDS (SQUARE UNLESS NOTED AS ROUND) SHALL CONFORM TO WSDOT STANDARD PLAN B-30.20-04 (OLYMPIC FOUNDRY NO. SM60 OR EQUAL). VANED GRATES SHALL CONFORM TO WSDOT STANDARD PLAN B-30.30-03 (OLYMPIC FOUNDRY NO. SM60V OR EQUAL).
14. STORMWATER PIPE SHALL BE ONLY PVC, CONCRETE, DUCTILE IRON, OR DUAL WALLED POLYPROPYLENE PIPE.
    a. THE USE OF ANY OTHER TYPE SHALL BE REVIEWED AND APPROVED BY THE ENGINEERING SERVICES STAFF PRIOR TO INSTALLATION.
    b. PVC PIPE SHALL BE PER ASTM D3034, SDR 35 FOR PIPE SIZE 15-INCH AND SMALLER AND F679 FOR PIPE SIZES 18 TO 27 INCH. MINIMUM COVER ON PVC PIPE SHALL BE 3.0 FEET.
    c. CONCRETE PIPE SHALL CONFORM TO THE WSDOT STANDARD SPECIFICATIONS FOR CONCRETE UNDERDRAIN PIPE. MINIMUM COVER ON CONCRETE PIPE SHALL NOT LESS THAN 3.0 FEET.
    d. DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
    e. POLYPROPYLENE PIPE (PP) SHALL BE DUAL WALLED, HAVE A SMOOTH INTERIOR AND EXTERIOR CORRUGATIONS AND MEET WSDOT 9-05.24(1). 12-INCH THROUGH 30-INCH PIPE SHALL MEET OR EXCEED ASTM F2736 AND AASHTO M330, TYPE S, OR TYPE D. 36-INCH THROUGH 60-INCH PIPE SHALL MEET OR EXCEED ASTM F2881 AND AASHTO M330, TYPE S, OR TYPE D. TESTING SHALL BE PER ASTM F1417. MINIMUM COVER OVER POLYPROPYLENE PIPE SHALL BE 3-FEET.
15. TRENCHING, BEDDING, AND BACKFILL FOR PIPE SHALL CONFORM TO CITY STANDARD DETAIL NO. 06.01.01.
16. STORM PIPE SHALL BE A MINIMUM OF 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.
17. ALL STORM DRAIN MAINS SHALL BE TESTED AND INSPECTED FOR ACCEPTANCE AS OUTLINED IN SECTION 406 OF THE CITY OF PUYALLUP SANITARY SEWER SYSTEM STANDARDS.
18. ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

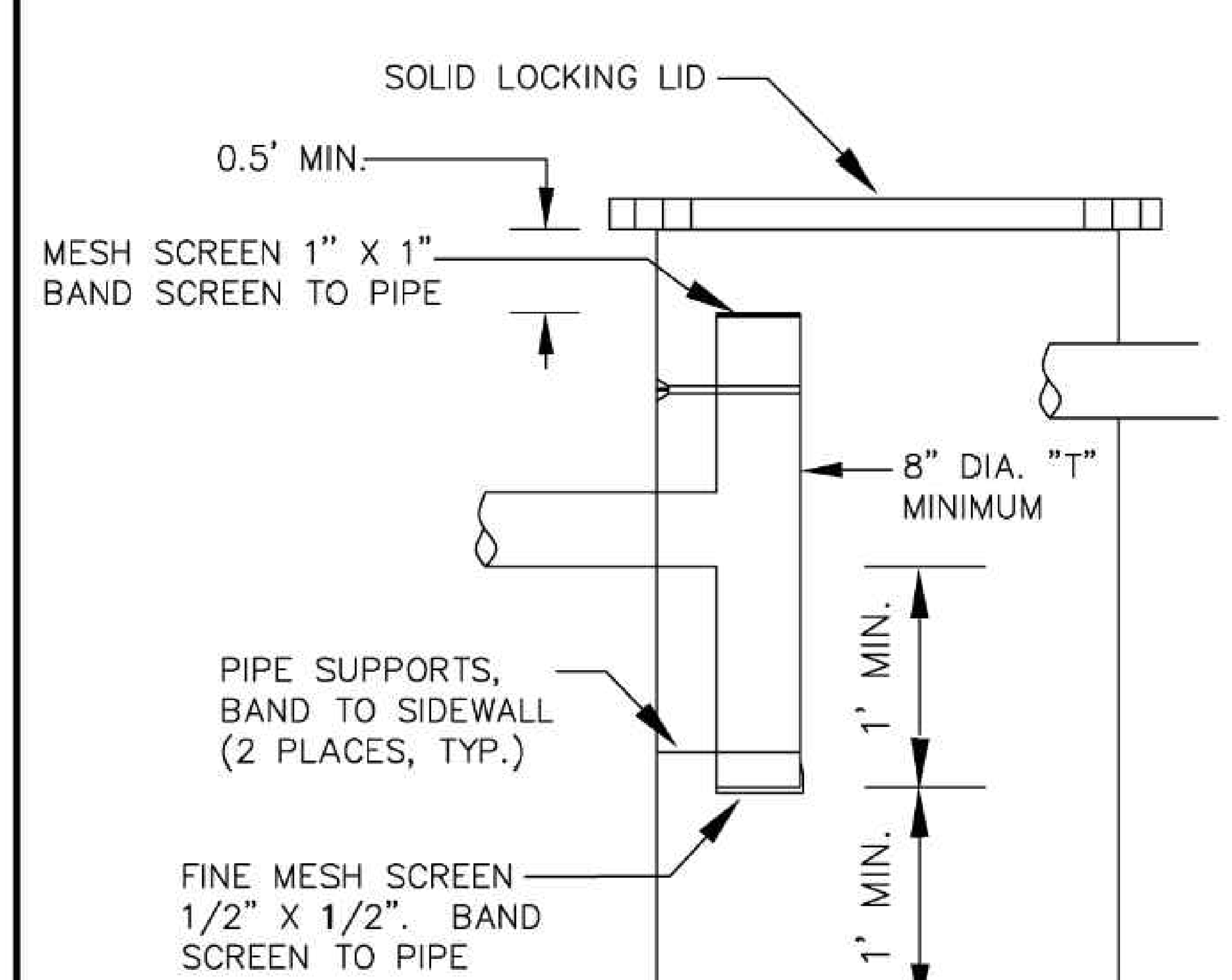


NOTES:
1. ALL SOIL AREAS DISTURBED OR COMPACTED DURING CONSTRUCTION, AND NOT COVERED BY BUILDINGS OR PAVEMENT, SHALL BE AMENDED WITH COMPOST AS DESCRIBED BELOW.
2. SUBSOIL SHOULD BE SCARIFIED (LOOSENED) 4 INCHES BELOW AMENDED LAYER, TO PRODUCE 12-INCH DEPTH OF UN-COMPACTED SOIL, EXCEPT WHERE SCARIFICATION WOULD DAMAGE TREE ROOTS OR AS DETERMINED BY THE ENGINEER. SEE NOTE BELOW REGARDING PLANTING STEPS FOR STREET TREES.
3. COMPOST SHALL BE TILLED IN TO 8 INCH DEPTH INTO EXISTING SOIL, OR PLACE 8 INCHES OF COMPOST-AMENDED SOIL, PER SOIL SPECIFICATION.
4. PLANTING BEDS SHALL RECEIVE 3 INCHES OF COMPOST TILLED IN TO 8-INCH DEPTH, OR MAY SUBSTITUTE 8" OF IMPORTED SOIL CONTAINING 35-40% COMPOST BY VOLUME. MULCH AFTER PLANTING, WITH 4 INCHES OF ARBORIST WOOD CHIP MULCH OR APPROVED EQUAL (6" OF LOOSE WOOD CHIPS AT THE TIME OF PLANTING TO ALLOW SETTLING TO 4").
5. SETBACKS: TO PREVENT UNEVEN SETTLING, DO NOT COMPOST-AMEND SOILS WITHIN 3 FEET OF UTILITY INFRASTRUCTURES (POLES, VAULTS, METERS ETC.). WITHIN ONE FOOT OF PAVEMENT EDGE, CURBS AND SIDEWALKS SOIL SHOULD BE COMPACTED TO APPROXIMATELY 95% PROCTOR TO ENSURE A FIRM SURFACE.
6. SEE SECTION 8.2(B) OF THE VMS FOR SOIL AMENDMENT AND INSTRUCTION PROCEDURES FOR STREET TREE PLANTER STRIPS. ALL STREET TREE PLANTER STRIPS SHALL RECEIVE 40% COMPOST AMENDED SOIL TO THE FULL DEPTH OF THE STREET TREE ROOTBALL.

CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

SOIL AMENDMENT AND DEPTH

CITY STANDARD 01.02.08a



CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

RESIDENTIAL INFILTRATION TRENCH SUMP STRUCTURE

CITY STANDARD 02.05.02

1. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.
2. ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITEE.
3. THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
4. APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTORS, CHANNELS, OR RETENTION FACILITIES.
5. ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITEE BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.
6. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.
7. NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.

CITY OF PUYALLUP
DEVELOPMENT ENGINEERING and PUBLIC WORKS DEPARTMENTS

GRADING, EROSION, AND SEDIMENTATION CONTROL NOTES

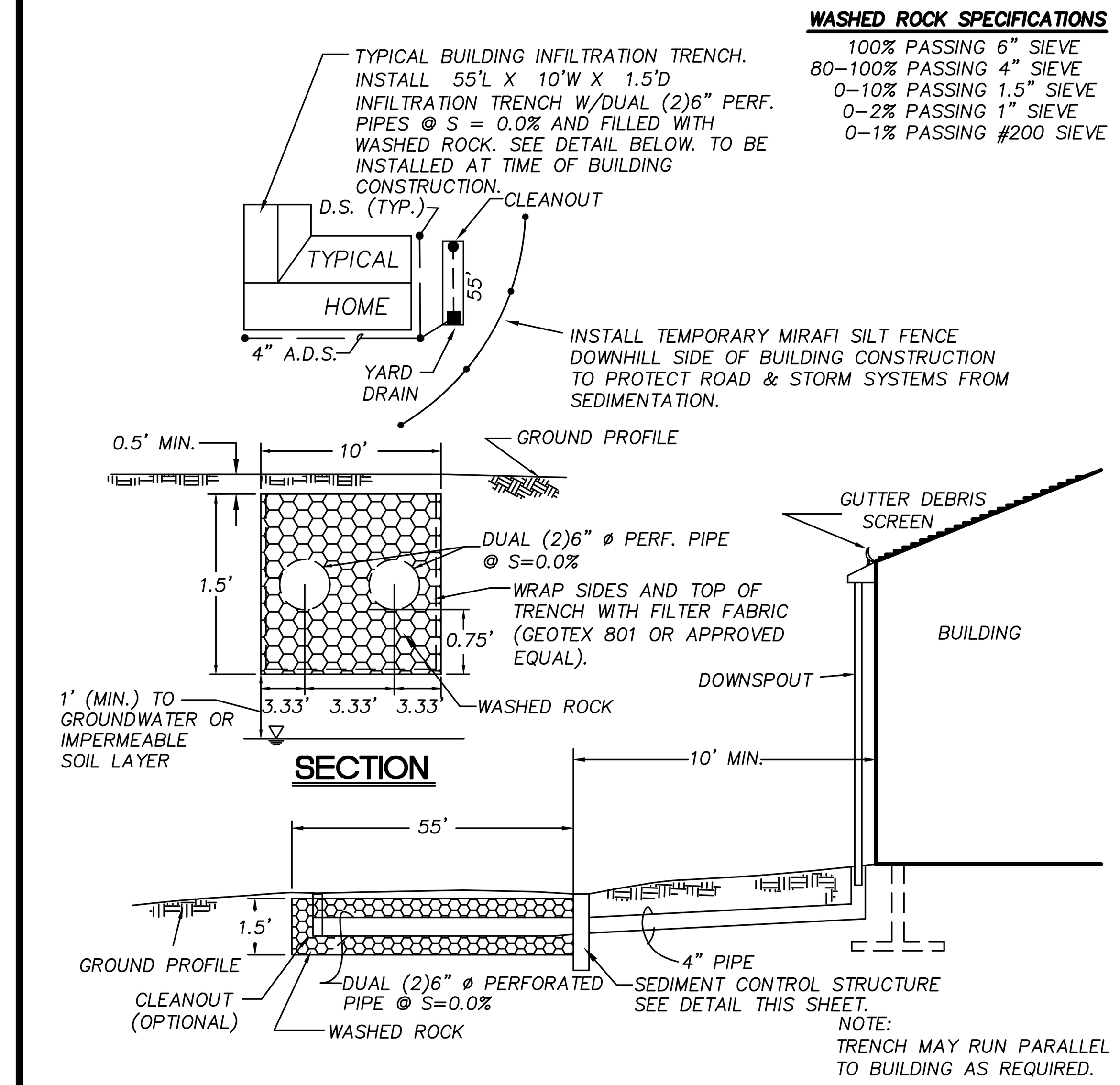
05.02.01

HOUSE INFILTRATION TRENCH NOTES:

1. ALL STORMWATER RUNOFF FROM ROOF AND DRIVEWAY SHALL BE COLLECTED AND TIGHTLINED TO THE INFILTRATION TRENCH.
2. TRENCHES SHALL BE INSTALLED ONLY IN UNDISTURBED GROUND WHICH HAS NOT BEEN FILLED OR EXCAVATED.
3. TRENCHES SHALL BE PLACED TO RUN PARALLEL WITH NATURAL CONTOURS OF THE LAND.

WASHED ROCK SPECIFICATIONS

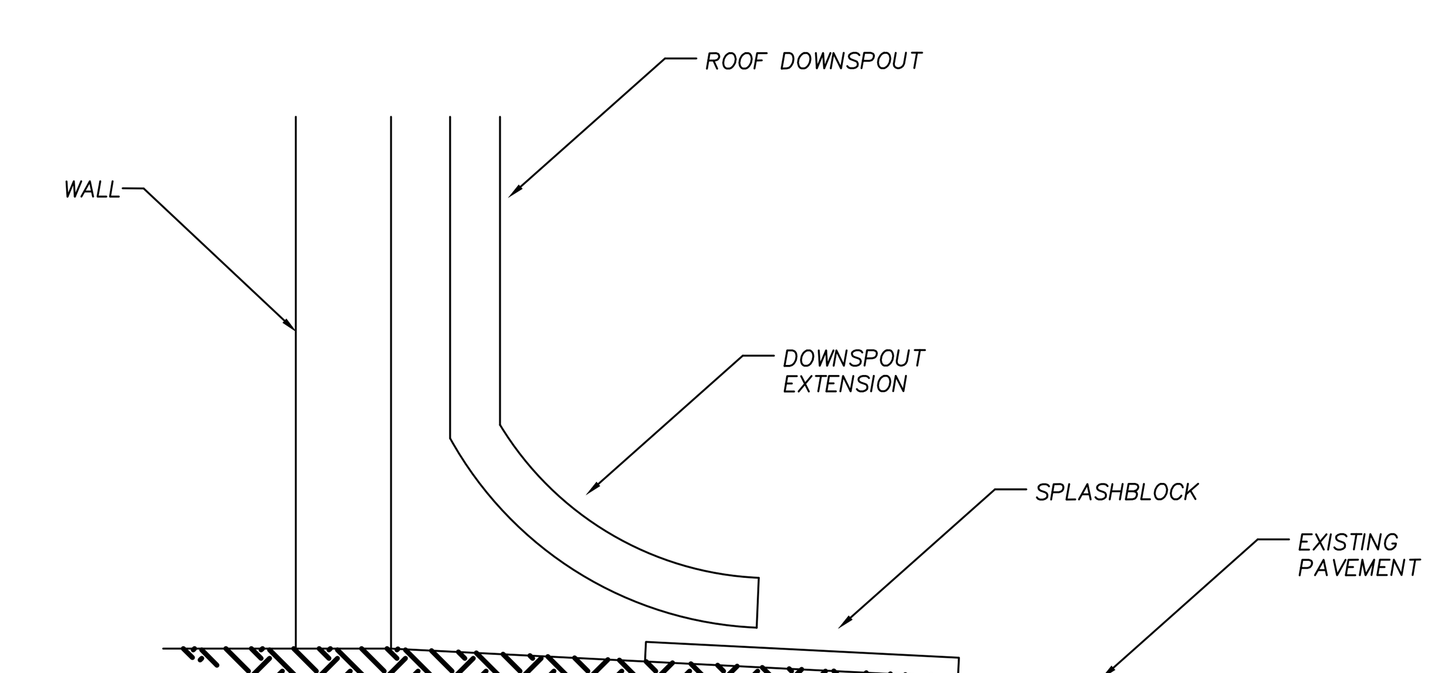
100% PASSING 6" SIEVE
80-100% PASSING 4" SIEVE
0-10% PASSING 1.5" SIEVE
0-2% PASSING 1" SIEVE
0-1% PASSING #200 SIEVE



LARSON AND ASSOCIATES
Land Surveyors & Engineers, Inc.
9027 PACIFIC AVENUE
Tacoma, Washington 98444
(253) 474-3404

INFILTRATION TRENCH FOR THE BUILDING

REVISED DATE: 07.29.03 SCALE: N.T.S. LARSON STANDARD DETAIL NO. 240
FILE NAME: P:\DETAILS\LARSON\200STORM\240.DWG



DOWNSPOUT SPLASHBLOCK DETAIL
N.T.S

REVISION BLOCK

NO.	DATE	DESCRIPTION	BY
1	8/1/2023	ADDRESS CITY COMMENTS AND ADD NEW "OPEN" STORAGE SHED OVER EXISTING PAVEMENT AS SHOWN.	GJM

GRANT J. MIDDLETON, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER
9/12/2023

APPROVED
BY
CITY OF PUYALLUP ENGINEERING DEPARTMENT
DATE 10/10/2023

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

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

JOB NUMBER 9575
SCALE HOR. N/A VERT. N/A
DESIGNED JLC DRAWN DNN CHECKED GJM

PROPONENT: RICK VELASQUEZ 13615 122ND ST E PUYALLUP, WA 98374 PH: (253) 224-4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA. 98444 (253) 474-3404

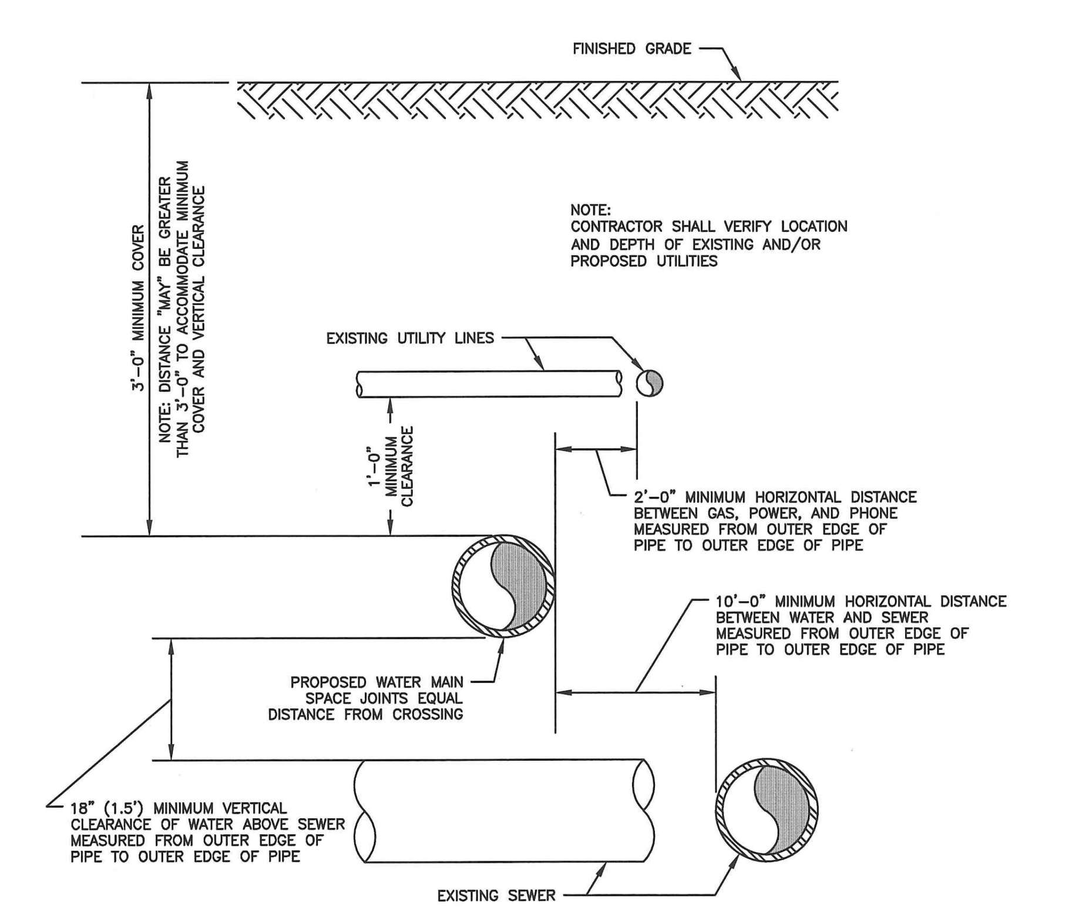
STORM DETAILS AND SPECIFICATIONS

C2.1

DATE 9/12/2023
DRAWING NO. 9575BASE
SHEET 5 OF 7

CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.

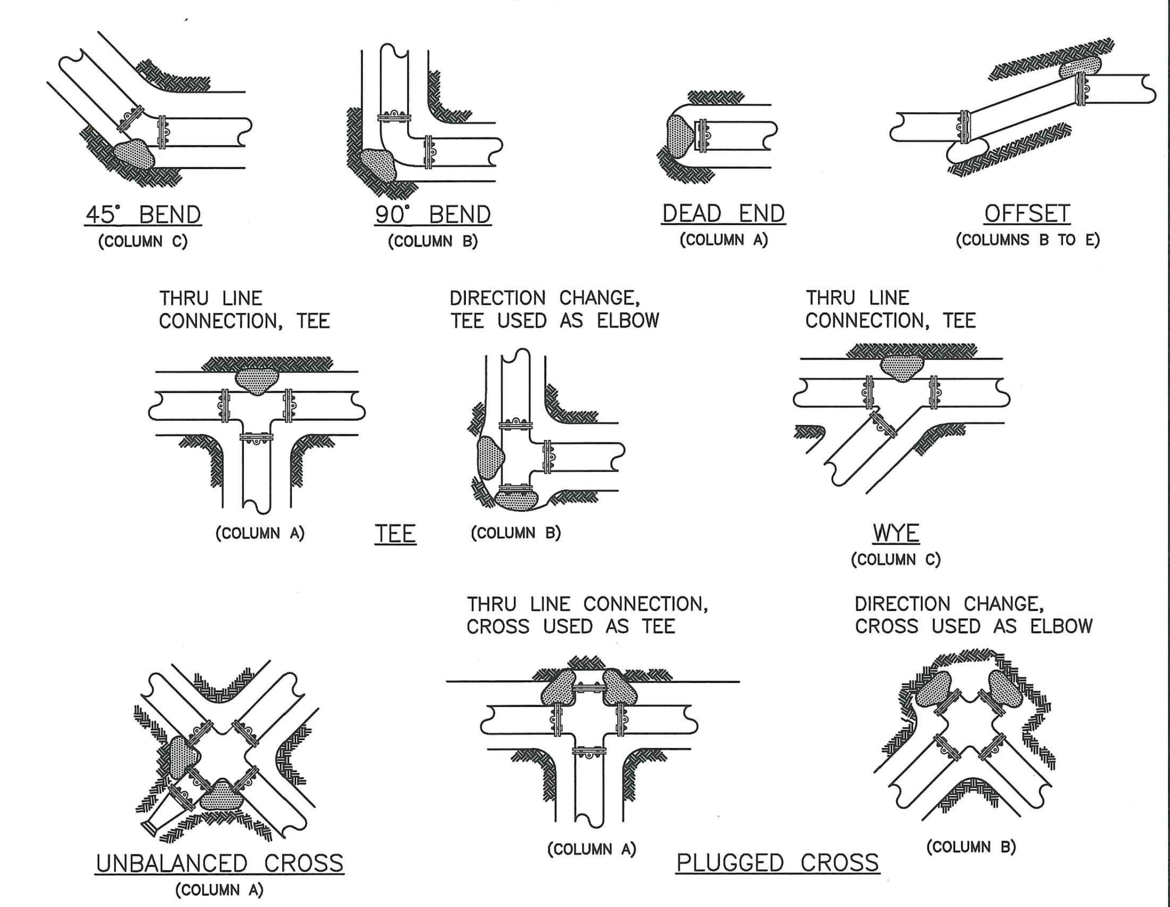


SEE CITY STANDARD 03.01.03-2 FOR ADDITIONAL NOTES FOR THIS DETAIL

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION — DATE SEALED: 2/5/2018

WATER MAIN CROSSING OTHER UTILITIES (NOT TO SCALE) — CITY STANDARD 03.01.03-1

NOTE: DRAWINGS DEPICT BLOCK LOCATION, NOT SIZE.
FOR SIZE SEE NOTES 3, 4, 5, AND CITY STD. 03.02.01-3



NOTES:

1. THE FOLLOWING PRECAUTIONS MUST BE OBSERVED WHEN CONSTRUCTING THRUST BLOCKS:
   - A. BLOCKS MUST BE POURED OR PLACED AGAINST UNDISTURBED SOIL.
   - B. THE PIPE FITTING(S) AND BOLTS MUST BE ACCESSIBLE. WRAP IN PLASTIC BEFORE POURING CONCRETE BLOCKING.
   - C. CONCRETE SHOULD BE CURED FOR AT LEAST 5 DAYS AND SHOULD HAVE A MINIMUM COMPRESSION STRENGTH OF 3,000 PSI AT 28 DAYS.
   - D. RESTRAINED JOINTS SHALL BE INSTALLED, IN ADDITION TO CONCRETE THRUST BLOCKING.
   - E. BLOCKS MUST BE POSITIONED TO COUNTERACT THE DIRECTION OF THE RESULTANT THRUST FORCE.
2. ALL PIPE SHALL BE PROPERLY BEDDED, SEE CITY OF PUYALLUP STANDARD BEDDING DETAIL NO. 06.01.01.
3. CONTRACTOR TO PROVIDE BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE.
4. DIVIDE THRUST BY SAFE BEARING LOAD TO DETERMINE REQUIRED AREA (IN SQUARE FEET) OF CONCRETE TO DISTRIBUTE LOAD.
5. BEARING SURFACE AREAS TO BE ADJUSTED BY THE ENGINEER FOR OTHER PRESSURE AND/OR SOIL CONDITIONS.

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION — DATE SEALED: 2/5/2019

HORIZONTAL THRUST BLOCKING (NOT TO SCALE) — CITY STANDARD 03.02.01-1

FILE NAME: F:\DRAWINGS\COMMON\STANDARDS\CITY STANDARDS\2018\02 - PART 2 - STANDARD DETAILS\CAD\300\03.02

TABLE 2: THRUST AT FITTINGS AT 200 PSI

SIZE	TEST PRESSURE (PSI)	THRUST FITTINGS AT 200 PSI				
		A	B	C	D	E
		TEE AND DEAD ENDS	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	200	3,140	4,440	2,405	1,225	615
6"	200	7,070	9,995	5,410	2,760	1,385
8"	200	12,565	17,770	9,620	4,905	2,465
10"	200	19,635	27,770	15,030	7,660	3,850
12"	200	28,275	39,985	21,640	11,030	5,545
14"	200	38,485	54,425	29,455	15,015	7,545
16"	200	50,265	71,085	38,470	19,615	9,855

TABLE 3: BEARING VALUE OF SOIL

SOIL TYPE	SAFE BEARING LOAD LBS/SF
MUCK, PEAT, ETC.	0
SOFT CLAY/ALLUVIAL SOIL	1,000
SAND	2,000
SAND AND GRAVEL	3,000
SAND AND GRAVEL CEMENTED WITH CLAY	4,000
HARD SHALE	10,000

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

NOTES:

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

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

$39{,}985 \times \frac{300\ PSI}{200\ PSI} = 59{,}978$ LBS

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

SEE TABLE 3, BEARING VALUE OF SOIL

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

$59{,}978$ LBS $\div$ 3000 LB/SF = 20 SF OF AREA

③ CONTRACTOR TO PROVIDE BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE

④ AREAS SHALL BE ADJUSTED FOR OTHER PRESSURE CONDITIONS.

⑤ NO WATER MAIN SHALL DEAD END AGAINST A MAIN LINE VALVE. DEAD END WATER MAINS SHALL BE BLOCKED AGAINST A RESTRAINED MECHANICAL JOINT (M.J.) PLUG OR CAP.

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION — DATE SEALED: 2/5/2018

THRUST BLOCKING TABLE (NOT TO SCALE) — CITY STANDARD 03.02.01-3

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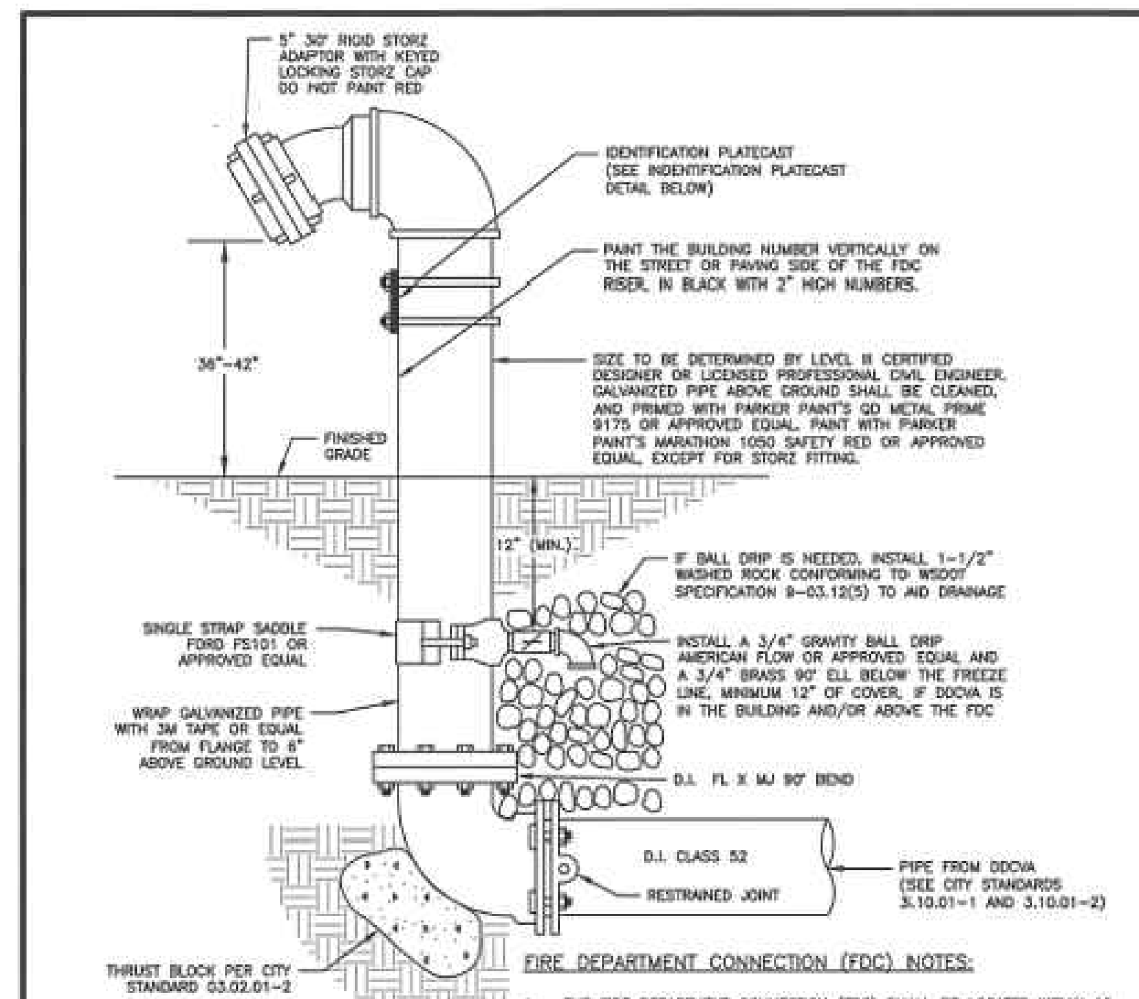


FIRE DEPARTMENT CONNECTION (FDC) NOTES:

1. THE FIRE DEPARTMENT CONNECTION (FDC) SHALL BE LOCATED WITHIN 15 FEET OF A FIRE HYDRANT, BUT NOT LESS THAN 10 FEET.
2. THE FDC SHALL BE A MINIMUM OF 50 FEET FROM THE BUILDING, UNLESS APPROVED BY THE FIRE CODE OFFICIAL, BUT NEVER LESS THAN 5 FEET FROM BUILDING.

IDENTIFICATION PLATECAST DETAIL

IDENTIFICATION PLATECAST DETAIL NOTES:

1. IDENTIFICATION PLATECAST WILL BE BRASS
2. IDENTIFICATION PLATECAST WILL BE 1/4" THICK
3. LETTERS WILL BE ONE INCH HIGH AND RAISED
4. USE TWO (2) ZINC U-BOLTS TO AFFIX TO PIPE

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION

FIRE DEPARTMENT CONNECTION (FDC) (NOT TO SCALE) — CITY STANDARD 03.10.02

NOTES FOR WATER MAIN CROSSING OTHER UTILITIES
CITY STANDARD 03.01.03-1

WHEN LOCAL CONDITIONS PREVENT THE SEPARATIONS DESCRIBED ON CITY STANDARD 03.01.03-1, A SEWER MAY BE LAID CLOSER THAN 10-FEET HORIZONTALLY OR 18-INCHES VERTICALLY TO A WATER LINE, PROVIDED THE GUIDELINES BELOW ARE FOLLOWED:

UNUSUAL CONDITIONS (PARALLEL SYSTEMS)

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

UNUSUAL CONDITIONS (PERPENDICULAR SYSTEMS)

CONDITION A – GRAVITY SEWERS PASSING UNDER WATER LINES (ALL OF THE FOLLOWING APPLY)

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

   EXAMPLE OF DIMENSION RATIO (DR): OUTSIDE PIPE DIAMETER DIVIDED BY THE WALL THICKNESS OR OD/T.
   FOR 8-INCH SCH. 80 PVC PIPE (T=0.5 INCHES), THE DR IS 8.625/0.5=17.25

CONDITION B – GRAVITY SEWER PASSING OVER WATER LINES

WATER LINES SHALL BE PROTECTED BY PROVIDING:

1. A VERTICAL SEPARATION OF AT LEAST 18-INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER LINE.
2. ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER LINE TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING ON AND BREAKING OF THE WATER LINE.
3. THE SEWER PIPE SHALL BE THE LONGEST STANDARD SEWER PIPE LENGTH AVAILABLE FROM THE MANUFACTURER WITH THE WATER AND SEWER PIPES CENTERED TO MAXIMIZE JOINT SEPARATION.
4. THE SEWER LINE CASING EQUIVALENT TO THAT SPECIFIED IN A(2) ABOVE.

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION — DATE SEALED: 2/5/2018

WATER MAIN CROSSING OTHER UTILITIES (NOTES) (NOT TO SCALE) — CITY STANDARD 03.01.03-2

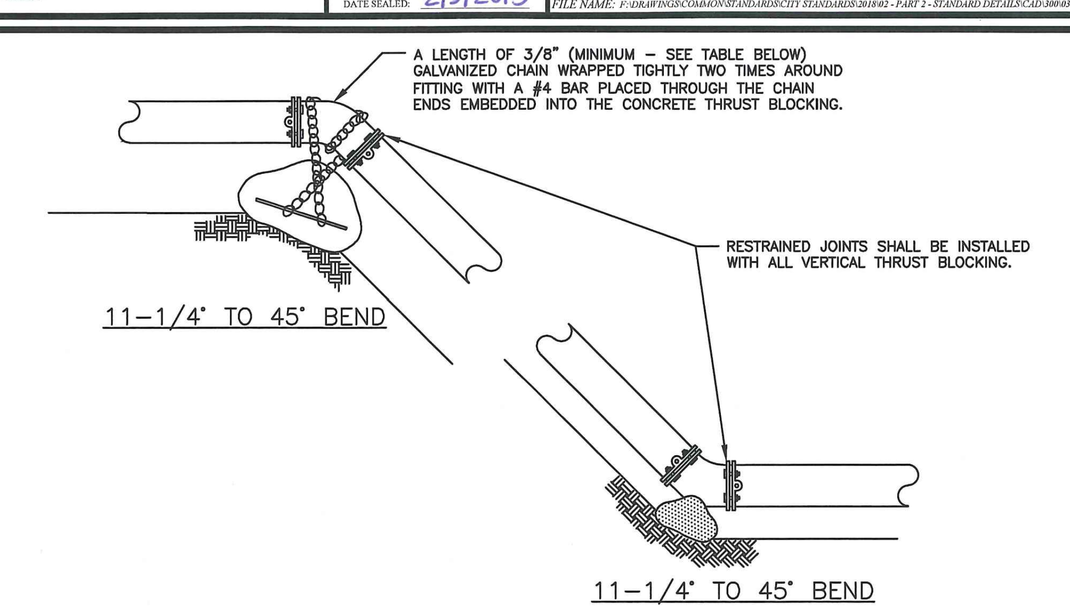


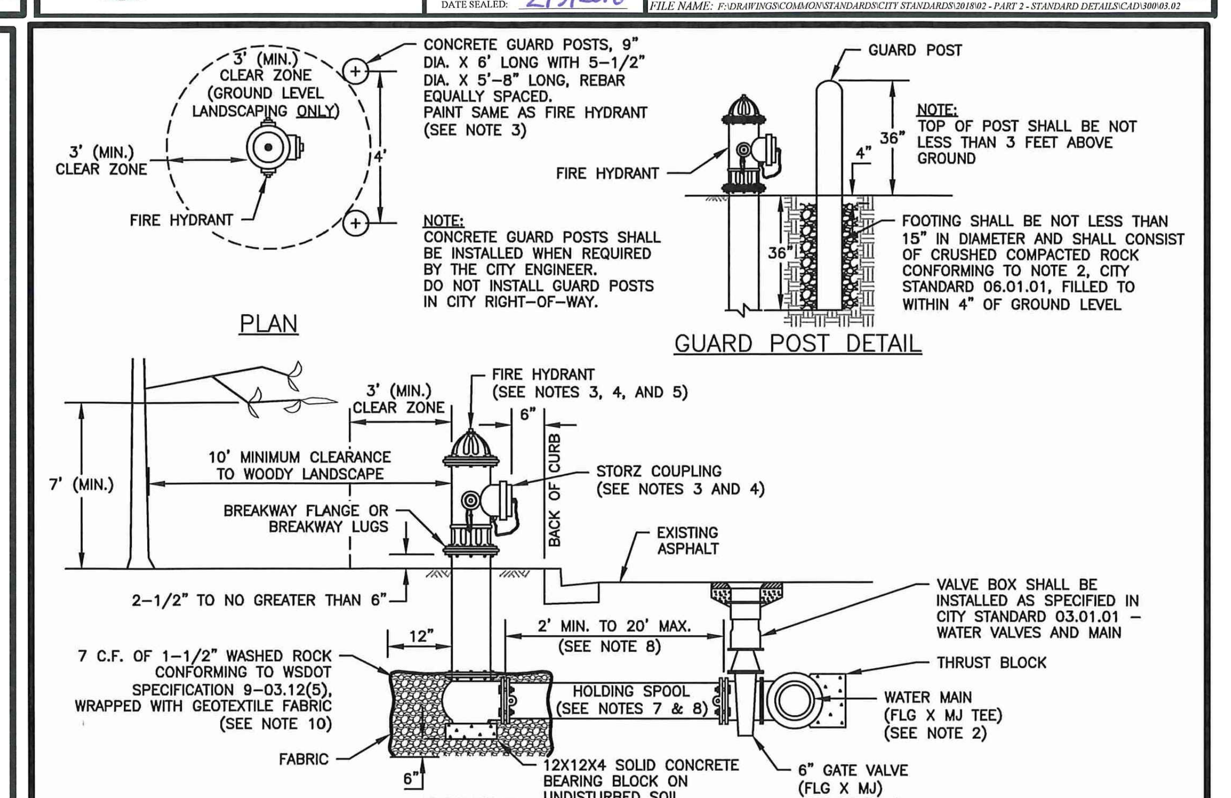
TABLE 1: CONCRETE BLOCKING FOR VERTICAL BENDS

PIPE DIAMETER (INCHES)	TEST PRESSURE (PSI)	BEND ANGLE (DEG)	CONCRETE VOLUME (FT^3)	CUBE SIZE (FEET)	CHAIN SIZE (INCHES)	CHAIN EMBEDMENT (INCHES)
4"	200	11.25°	6	1.8	3/8"	17"
		22.5°	12	2.3		
		45°	22	2.8		
6"	200	11.25°	14	2.4	3/8"	17"
		22.5°	27	3.0		
		45°	50	3.7		
8"	200	11.25°	25	2.9	3/8"	17"
		22.5°	48	3.6		
		45°	89	4.5		
10"	200	11.25°	38	3.4	3/8"	17"
		22.5°	75	4.2		
		45°	139	5.2		
12"	200	11.25°	55	3.8	3/8"	17"
		22.5°	108	4.8		
		45°	200	5.8	1/2"	24"
14"	200	11.25°	75	4.2	3/8"	17"
		22.5°	147	5.3	1/2"	20"
		45°	272	6.5	1/2"	27"
16"	200	11.25°	98	4.6	3/8"	17"
		22.5°	192	5.8	1/2"	24"
		45°	355	7.1	3/4"	30"

ALL NOTES ON CITY STANDARD 03.02.01-1 SHALL APPLY TO THIS DETAIL.
SEE CITY STANDARD 03.02.01-3 FOR ADDITIONAL INFORMATION.

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION — DATE SEALED: 2/5/2018

VERTICAL THRUST BLOCKING (NOT TO SCALE) — CITY STANDARD 03.02.01-2

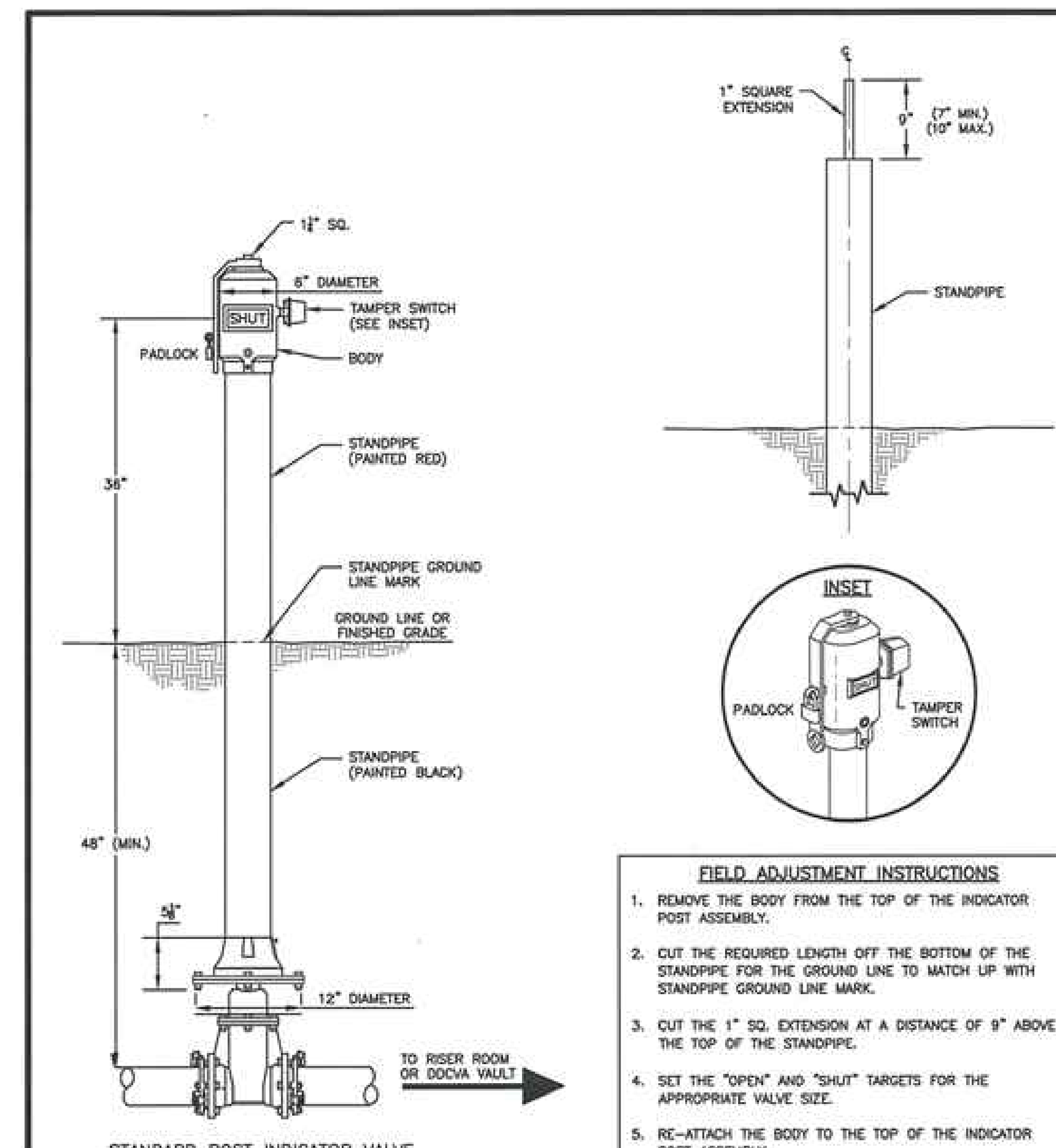


NOTES:

1. ALL MATERIALS AND FITTINGS SHALL BE AS SPECIFIED OR APPROVED EQUAL.
2. WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" IN IMPROVED RIGHT-OF-WAY AND IMPROVED EASEMENTS, AND A MINIMUM 48" IN UNIMPROVED RIGHT-OF-WAY AND UNIMPROVED EASEMENTS.
3. THE FIRE HYDRANT AND CONCRETE GUARD POSTS SHALL BE PAINTED, RUST-OLEUM SAFETY YELLOW #7543 (TWO COATS) OR AN APPROVED EQUAL. THE STORZ FITTING SHALL NOT BE PAINTED.
4. FIRE HYDRANTS SHALL HAVE TWO 2-1/2" HOSE PORTS (NATIONAL STANDARD THREAD) WITH CAPS AND CHAINS AND ONE 4" PUMPER PORT (#8 TACOMA STEAMER PORT THREAD) WITH A 5" 'STORZ' COUPLING AND BLIND CAP INSTALLED ON THE STEAMER PORT, (STEAMER PORT SHALL FACE THE STREET), 1-1/4" PENTAGONAL OPERATING NUT (COUNTER-CLOCKWISE OPENING), O-RING TYPE STUFFING BOX, AUTOMATIC BARREL DRAINS AND 5-1/4" MAIN VALVE OPENING. HYDRANTS SHALL BE DESIGNED IN A MANNER THAT WILL PREVENT BARREL BREAKAGE WHEN STRUCK BY A VEHICLE. HYDRANTS SHALL CONFORM TO THE LATEST REVISION OF AWWA SPECIFICATIONS NO. C 502-73 FOR FIRE HYDRANTS FOR ORDINARY WATER SERVICE. FIRE HYDRANTS SHALL INCLUDE THE ENTIRE ASSEMBLY COMPLETE, INCLUDING HYDRANT, GATE VALVE AND BOX, CONNECTING PIPING, FITTINGS, AND ACCESSORIES.
5. FIRE HYDRANTS SHALL BE AVK, CLOW MEDALLION, M & H 129S, MUELLER CENTURION, OR WATEROUS.
6. GATE VALVES SHALL CONFORM TO THE LATEST AWWA SPECIFICATIONS FOR COLD WATER, RESILIENT SEATED WEDGE GATE VALVES, 200 PSI WORKING PRESSURE. THEY SHALL BE IRON-BODIED BRONZE-MOUNTED, NON-RISING STEM, COUNTER-CLOCKWISE OPENING, MECHANICAL JOINT BY FLANGED. VALVE STEMS SHALL BE PROVIDED WITH O-RING SEALS AND SHALL BE AS MANUFACTURED BY THE MUELLER COMPANY OR APPROVED EQUAL.
7. THE HOLDING SPOOL SHALL BE A MECHANICAL-JOINT (M.J.) HOLDING SPOOL, WITH THE USE OF MEGA-LUG CONNECTORS OR APPROVED EQUAL WITH CLASS 52 DUCTILE IRON PIPE.
8. IF DISTANCE BETWEEN WATER MAIN AND FIRE HYDRANT IS GREATER THAN 17 FEET, RESTRAINED JOINTS ARE REQUIRED ON ANY ADDITIONAL JOINTS. THE MAXIMUM 6-INCH HYDRANT RUN ALLOWED IS 20 FEET. ANY PROPOSED HYDRANT RUN EXCEEDING 20' IN LENGTH SHALL BE SIZED USING AN ENGINEERED HYDRAULIC FIRE FLOW MODEL. ANY HYDRANT RUN EXCEEDING 50 FEET IN LENGTH SHALL BE NO LESS THAN 8-INCHES IN DIAMETER.
9. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 50 FEET FROM A BUILDING OR STRUCTURE.
10. THE CONTRACTOR SHALL PLACE A 6 OZ. GEOTEXTILE FABRIC AROUND THE WASHED ROCK AREA, ENDS TO OVERLAP.
11. A FLUORESCENT ORANGE BAG MUST COVER AND BE SECURED TO THE FIRE HYDRANT UNTIL APPROVED FOR USE BY CITY ENGINEER.
12. A MINIMUM THREE FOOT (3') RADIUS UNOBSTRUCTED CLEAR ZONE (WORK AREA) SHALL BE PROVIDED AROUND ALL FIRE HYDRANTS. ADDITIONALLY, NO WOODY LANDSCAPE SHALL BE PLANTED WITHIN TEN FEET (10') OF ANY FIRE HYDRANT. OVERREACHING BRANCHES OF TREES ADJACENT TO HYDRANTS SHALL HAVE A MAINTAINED VERTICAL CLEARANCE OF SEVEN (7') FEET ABOVE FINISHED GRADE OF THE FIRE HYDRANT.

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION — DATE SEALED: 11/17/2020

FIRE HYDRANT ASSEMBLY (NOT TO SCALE) — CITY STANDARD 03.05.01



STANDARD POST INDICATOR VALVE

FIELD ADJUSTMENT INSTRUCTIONS

1. REMOVE THE BODY FROM THE TOP OF THE INDICATOR POST ASSEMBLY.
2. CUT THE REQUIRED LENGTH OFF THE BOTTOM OF THE STANDPIPE FOR THE GROUND LINE TO MATCH UP WITH STANDPIPE GROUND LINE MARK.
3. CUT THE 1" SQ. EXTENSION AT A DISTANCE OF 9" ABOVE THE TOP OF THE STANDPIPE.
4. SET THE "OPEN" AND "SHUT" TARGETS FOR THE APPROPRIATE VALVE SIZE.
5. RE-ATTACH THE BODY TO THE TOP OF THE INDICATOR POST ASSEMBLY.
6. ALL POST INDICATOR VALVES SHALL BE INSTALLED WITH AN ELECTRONIC UL LISTED TAMPER SWITCH.
7. THERE SHALL BE 36" OF UNOBSTRUCTED CLEARANCE AROUND THE PERIMETER OF ALL POST INDICATOR VALVES.
8. POST INDICATOR VALVE SHALL BE LOCATED AT A MINIMUM 5-ft FROM BUILDING.

CITY OF PUYALLUP OFFICE of THE CITY ENGINEER — APPROVED FOR PUBLICATION

POST INDICATOR VALVE (NOT TO SCALE) — CITY STANDARD 03.10.03

APPROVED

BY ____________

CITY OF PUYALLUP
ENGINEERING DEPARTMENT

DATE 10/10/2023

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

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

REVISION BLOCK

NO.	DATE	DESCRIPTION	BY
1	8/1/2023	ADDRESS CITY COMMENTS	GJM
		AND ADD NEW "OPEN"	
		STORAGE SHED OVER	
		EXISTING PAVEMENT AS	
		SHOWN.	

GRANT J. MIDDLETON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 9/12/2023

JOB NUMBER 9575

SCALE HOR. N/A VERT. N/A

DESIGNED JLC DRAWN DNN CHECKED GJM

PROPONENT: RICK VELASQUEZ
13615 122ND ST E
PUYALLUP, WA 98374
PH: (253) 224-4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA 98444 (253) 474-3404

DETAILS & SPECIFICATIONS

C2.2

DATE 9/12/2023

DRAWING NO. 9575BASE

CIMCO SALES

NE 1/4, SW 1/4, SEC.26, TWN.20 N., RNG. 4 E., W.M.

WATER SYSTEM NOTES

1. ALL WORK IN CITY RIGHT–OF–WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING 841–5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.

2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.

3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS"), OR AS DIRECTED BY FRUITLAND MUTUAL WATER COMPANY (FMWC), VALLEY WATER (VW), OR TACOMA CITY WATER (TCW) IS THE PURVEYOR.

4. A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.

5. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER, THE ENGINEERING SERVICES STAFF, AND THE FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR, PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.

6. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.

7. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.

8. BACTERIOLOGICAL (COLIFORM AND IRON BACTERIA) TEST SAMPLES WILL BE TAKEN BY THE CITY (OR FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR) AND PAID FOR BY THE CONTRACTOR, EXCEPT FOR CAPITAL IMPROVEMENT PROJECTS (CIP) WHICH SHALL BE PAID FOR BY THE CITY.

9. WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES FROM PAVED FINAL GRADE IN IMPROVED RIGHT–OF–WAY AND IMPROVED EASEMENTS, AND A MINIMUM OF 48 INCHES IN UNIMPROVED RIGHT–OF WAY AND UNIMPROVED EASEMENTS.

10. PIPE FOR WATER MAINS SHALL BE DUCTILE IRON CONFORMING TO SECTION 7–09 OF THE STANDARD SPECIFICATIONS, CLASS 52 WITH TYTON OR APPROVED EQUAL JOINTS. PIPE SHALL BE CEMENT LINED IN ACCORDANCE WITH A.S.A. SPECIFICATION A 21.4–1964.

11. CONNECTIONS TO EXISTING WATER MAINS TYPICALLY SHALL BE WET TAPS THROUGH A TAPPING TEE AND TAPPING VALVE AND SHALL BE MADE BY A CITY APPROVED CONTRACTOR. THE TAPPING SLEEVE SHALL BE ROMAC SST ALL STAINLESS STEEL TAPPING SLEEVE OR APPROVED EQUAL. A TWO–PIECE EPOXY COATED OR DUCTILE IRON TAPPING SLEEVE MAY BE USED ON DUCTILE IRON PIPE, WHEN THE TAP IS SMALLER THAN THE WATER MAIN SIZE I.E. 6–INCH TAP ON 8–INCH PIPE. THE CITY (OR FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR) SHALL APPROVE THE TIME AND LOCATION FOR THESE CONNECTIONS.

12. ALL WATER MAINS AND APPURTENANCES SHALL BE HYDROSTATICALLY TESTED AT 200 PSI IN ACCORDANCE WITH STANDARD SPECIFICATION 7–09.3(23). PRESSURE TESTING SHALL NOT BE PERFORMED UNTIL SATISFACTORY PURITY SAMPLES HAVE BEEN RECEIVED, EXCEPT WHEN NEW WATER MAINS ARE INSTALLED INDEPENDENTLY FROM THE WATER SYSTEM PIPING.

13. FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAIL 03.05.01 AND AS DIRECTED BY THE CITY OF PUYALLUP FIRE CODE OFFICIAL.

14. VALVE MARKER POSTS SHALL BE INSTALLED WHERE VALVE BOXES ARE HIDDEN FROM VIEW OR IN UNPAVED THE INSTALLATION SHALL BE IN ACCORDANCE WITH CITY STANDARD DETAIL 03.01.02.

15. RESILIENT SEATED WEDGE GATE VALVES SHALL BE USED FOR 10–INCH MAINS AND SMALLER. BUTTERFLY VALVES SHALL BE USED FOR MAINS GREATER THAN 10 INCHES.

16. PIPE FITTING FOR WATER MAINS SHALL BE DUCTILE IRON AND SHALL BE MECHANICAL JOINT CONFORMING TO AWWA SPECIFICATION C111–72.

17. WATER MAIN PIPE AND SERVICE CONNECTIONS SHALL BE A MINIMUM OF 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.

18. WHERE A WATER MAIN CROSSES THE NORTHWEST GAS PIPELINE, THE WATER LINE SHALL BE CASED WITH PVC PIPE A MINIMUM OF 10 FEET BEYOND EACH SIDE OF THE GAS LINE EASEMENT. CONTACT WILLIAMS NORTHWEST PIPELINE BEFORE THE CROSSING IS MADE.

19. TRENCHING, BEDDING, AND BACKFILL FOR WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAIL 06.01.01.

20. ALL COMMERCIAL AND INDUSTRIAL DEVELOPMENTS, IRRIGATION SYSTEMS, AND MULTI–FAMILY WATER SERVICE CONNECTIONS SHALL BE PROTECTED BY A DOUBLE CHECK VALVE ASSEMBLY OR A REDUCED PRESSURE BACKFLOW ASSEMBLY AS DIRECTED BY THE CITY (OR FMWC, VW OR TCW WHEN SERVED BY THAT PURVEYOR) CONFORMING TO CITY STANDARD DETAILS 03.04.01, 03.04.02, AND 03.04.03.

21. ANY LEAD JOINT FITTING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH A MECHANICAL JOINT FITTING AT THE CONTRACTOR'S EXPENSE.

22. WHEN HYDRAULIC FIRE FLOW MODELING IS REQUIRED FOR A PROJECT, THE CITY WILL ISSUE A PERMIT. THE HYDRAULIC MODELING CRITERIA IS BASED ON THE PROJECTED 2030 WATER DEMAND, WHILE MAINTAINING A MINIMUM SYSTEM PRESSURE OF 20 POUNDS PER SQUARE INCH AND A MAXIMUM VELOCITY OF 10 FEET PER SECOND.

23. WHEN USING A FIRE HYDRANT FOR NON–FIREFIGHTING PURPOSES, A CITY HYDRANT METER MUST BE USED. COORDINATE THE ACQUISITION OF THE HYDRANT METER WITH THE CITY'S UTILITY BILLING DIVISION AT PUYALLUP CITY HALL. A CITY APPROVED BACKFLOW PROTECTION ASSEMBLY SHALL BE INSTALLED BY THE PERSON REQUESTING USE OF A FIRE HYDRANT. THE ASSEMBLY SHALL BE ACCOMPANIED BY A CURRENT BACKFLOW ASSEMBLY TEST REPORT. THE TEST REPORT SHALL BE AVAILABLE AT THE SITE FOR THE DURATION OF THE HYDRANT USE.

24. SHOULD A BREAK OCCUR ON ANY CITY WATER MAIN, THE CONTRACTOR SHALL FOLLOW THE CITY'S ADOPTED "WATER MAIN BREAK PROCEDURE" ISSUED TO THEM AT THE PRE–CONSTRUCTION MEETING AND NOTIFY THOSE CONNECTED TO THE SYSTEM IN THE IMPACTED AREA AS OUTLINED IN THE PROCEDURE.

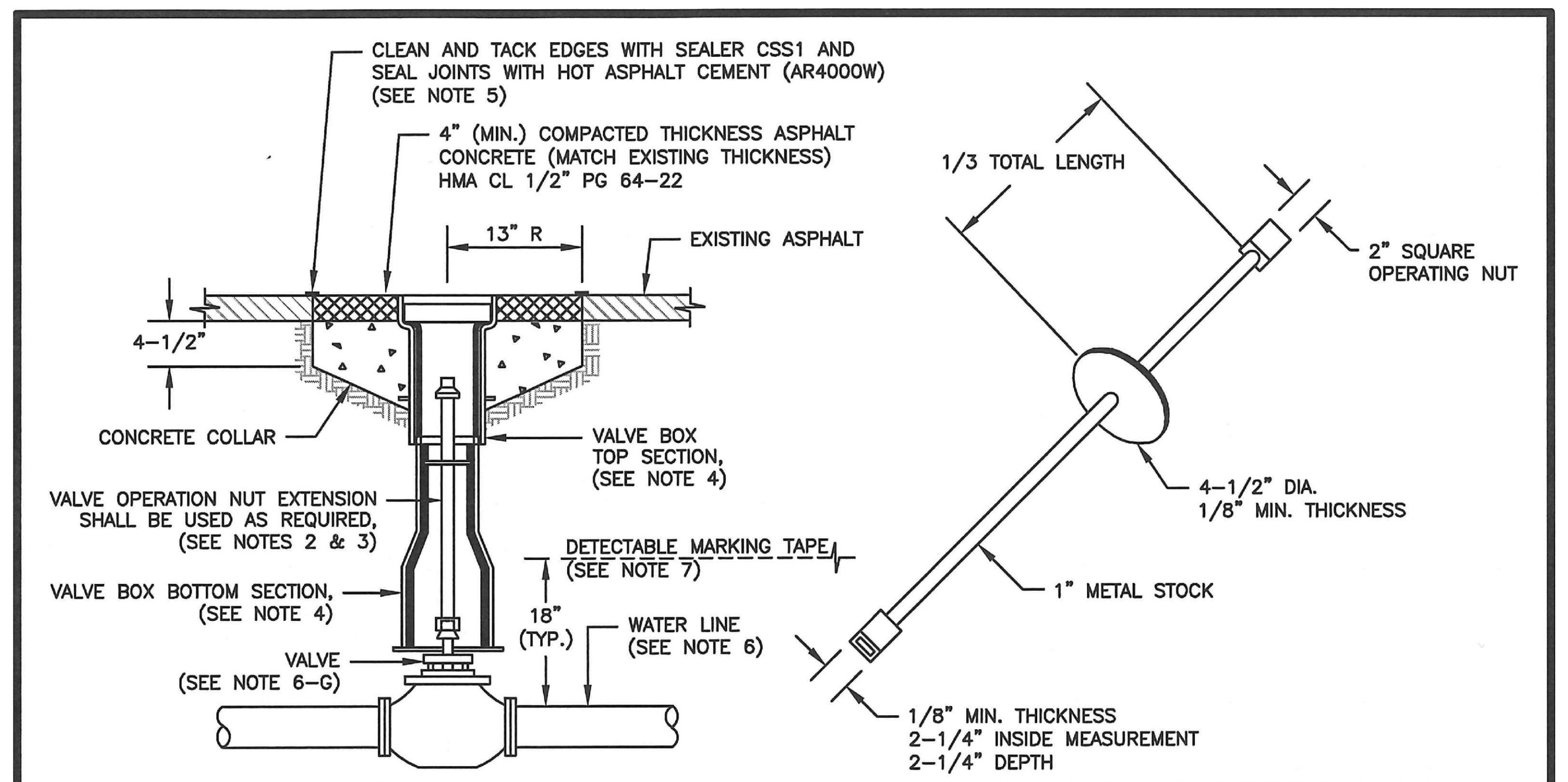
25. WATER MAIN REPAIRS (REFERENCES: AWWA C651–14 AND WSDOT STANDARD SPECIFICATION SECTION 7–09)
(NOTE: A PLANNED WATER MAIN REPAIR SHALL BE APPROVED BY THE CITY INSPECTOR AND/OR WATER DIVISION SUPERVISOR PRIOR TO COMMENCING WORK.)
   a. REPAIR WITHOUT DEPRESSURIZATION –SMALL LEAKS SHALL BE REPAIRED USING REPAIR BANDS WHILE MAINTAINING POSITIVE PRESSURE IN THE WATER MAIN. VALVES SURROUNDING THE LEAK WILL BE PARTIALLY SHUT BY THE CITY WATER DEPARTMENT TO REDUCE THE FLOW AND PRESSURE TO THE AREA. BLOWOFFS AND HYDRANTS IN THE REDUCED PRESSURE AREA MAY BE OPENED AS NEEDED TO FURTHER REDUCE THE PRESSURE. THE WATER MAIN TRENCH SHALL BE OVER–EXCAVATED TO ALLOW WATER IN THE TRENCH TO BE PUMPED OUT AND MAINTAINED BELOW THE LEVEL OF THE WATER MAIN. THE REPAIR SHALL BE COMPLETED WITH THE WATER MAIN PRESSURE REMAINING POSITIVE. AFTER THE REPAIR IS MADE, THE SYSTEM SHALL BE FULLY PRESSURIZED AND A VISUAL LEAK INSPECTION WILL BE COMPLETED. THE WATER MAIN IN THE AFFECTED AREA SHALL BE FLUSHED TO ACHIEVE THREE PIPE VOLUMES PULLED FROM THE PIPE (DISTANCE MEASURED FROM VALVE OPENED FOR FLUSHING TO THE EXIT HYDRANT OR BLOWOFF).
   b. REPAIR/CUT–IN WITH DEPRESSURIZATION – TRENCH SHALL BE OVER EXCAVATED AND DEWATERED BELOW THE WATER MAIN. FLUSH WATER FROM PIPE FROM EACH DIRECTION UNTIL IT RUNS CLEAR. IMMEDIATELY PRIOR TO INSTALLATION OF A NEW PIPE SECTION FOR REPAIR OR CUT IN TEE, ALL NEW FITTINGS AND PIPE SPOOLS SHALL BE SWABBED WITH A FIVE PERCENT (5%) CHLORINE SOLUTION (MINIMUM). THE INTERIOR OF THE EXISTING PIPE SHALL BE SWABBED WITH A FIVE PERCENT (5%) CHLORINE SOLUTION AT LEAST 6 FEET IN EACH DIRECTION FROM EXPOSED CUT ENDS. THE WATER MAIN IN THE AFFECTED AREA SHALL BE FLUSHED TO ACHIEVE THREE PIPE VOLUMES PULLED FROM THE PIPE (DISTANCE MEASURED FROM THE VALVE OPENED FOR FLUSHING TO THE EXIT HYDRANT OR BLOWOFF). CUSTOMERS SHALL BE NOTIFIED AFTER THE WATER MAIN IS FLUSHED AND REPAIRS HAVE BEEN COMPLETED, AS OUTLINED IN THE "WATER MAIN BREAK PROCEDURE."

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

65% Calcium Hypochlorite Addition per Pipe Section

Pipe Diameter (Inches)	Pipe Volume per 18 feet (gal)	5-gram tablets per pipe section	Hypochlorite Granules: Ounces per 500 feet	Hypochlorite Granules: Teaspoons per 18 feet	Maximum Fill Rate (gpm)_
4	35	1	1.7	0.2	40
6	53	1	3.8	0.4	90
8	70	2	6.7	0.7	150
12	106	4	15.1	1.4	350
16	141	6	27	2.5	600

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



WATER VALVE DETAIL
NOT TO SCALE

VALVE OPERATING NUT EXTENSION DETAIL
NOT TO SCALE

NOTES:

1. WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" FROM PAVED FINAL GRADE IN IMPROVED RIGHT–OF–WAY AND IMPROVED EASEMENTS, AND A MINIMUM OF 48" IN UNIMPROVED RIGHT–OF–WAY AND UNIMPROVED EASEMENTS.
2. VALVE OPERATING NUT EXTENSIONS ARE REQUIRED WHEN THE VALVE NUT IS MORE THAN FIVE (5) FEET BELOW FINISHED GRADE. EXTENSIONS ARE TO BE A MINIMUM OF TWO (2) FEET LONG, ONLY ONE EXTENSION TO BE USED PER VALVE. TOP OF EXTENSION SHALL BE 2 FEET 6 INCHES TO 3 FEET BELOW FINISHED GRADE.
3. ALL VALVE OPERATING NUT EXTENSIONS ARE TO BE MADE OF STEEL, SIZED AS NOTED, AND PAINTED WITH TWO COATS OF METAL PAINT.
4. VALVE BOXES SHALL BE TWO–PIECE, ADJUSTABLE, CAST IRON WITH EXTENSION PIECES (IF NECESSARY), AS MANUFACTURED BY THE VANRICH #940 SEATTLE OR APPROVED EQUAL. THE WORD "WATER" SHALL BE CAST IN RELIEF ON THE VALVE BOX COVER. VALVE BOX TOPS INSTALLED IN ARTERIAL ROADWAYS SHALL BE MANUFACTURED BY EAST JORDAN (EJ) IRONWORKS MODEL 8555 WITH VALVE BOX COVER MODEL 6800 OR APPROVED EQUAL.
5. NEAT LINE CUTS SHALL BE SEALED WITH A HOT PAVING GRADE ASPHALT AND FACE OF CUT TACKED.
6. WATER MAINS SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH DIVISION 7 OF THE WSDOT STANDARD SPECIFICATIONS SUPPLEMENTED WITH THE FOLLOWING:
   A. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C 151, THICKNESS CLASS 52, AND THE EXTERIOR SHALL BE COATED WITH COAL TAR VARNISH. PIPE AND FITTINGS SHALL BE MORTOR LINED AND SHALL CONFORM TO AWWA C 104. THE THICKNESS OF THE LINING SHALL BE NOT LESS THAN 1/16" THICK FOR 3" TO 12" PIPE, 3/32" THICK FOR 14" TO 24" PIPE, AND 1/8" THICK FOR 30" TO 54" PIPE. THE CEMENT LINING SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 150.
   B. JOINTS SHALL BE TYTON PUSH–ON JOINTS, OR APPROVED EQUAL, OR MECHANICAL JOINT TYPE PER AWWA C 111 EXCEPT WHERE FLANGED JOINTS ARE REQUIRED TO CONNECT TO VALVES OR OTHER EQUIPMENT.
   C. BOLTS AND NUTS FOR BURIED FLANGES LOCATED OUTDOORS, ABOVE GROUND, OR IN OPEN VAULTS IN STRUCTURES SHALL BE TYPE 316 STAINLESS STEEL COMFORMING TO ASTM A 193, GRADE B8M FOR BOLTS, AND ASTM A 194, GRADE 8M FOR NUTS. BOLTS AND NUTS LARGER THAN ONE AND ONE–QUARTER (1–1/4) INCHES SHALL BE STEEL, ASTM A 307, GRADE B, WITH CADMIUM PLATING, ASTM A 165, TYPE NS.
   D. BOLTS USED IN FLANGE INSTALLATION SETS SHALL CONFORM TO ASTM B 193, GRADE B7. NUTS SHALL COMPLY WITH ASTM A 194, GRADE 2H.
   E. PROVIDE A WASHER FOR EACH NUT, WHERE NEEDED. WASHERS SHALL BE OF THE SAME MATERIAL AS THE NUTS.
   F. ALL FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AWWA C 110 AND AWWA C 111.
   G. RESILIENT SEATED WEDGE GATE VALVES SHALL BE USED FOR TEN (10) INCH MAINS AND SMALLER. BUTTERFLY VALVES SHALL BE USED FOR MAINS GREATER THAN TEN (10) INCHES.
      1) RESILIENT SEATED WEDGE GATE VALVE: GATE VALVES SHALL CONFORM TO THE LATEST AWWA SPECIFICATIONS FOR COLD WATER, DOUBLE–DISK GATE VALVES, 200 PSI WORKING PRESSURE. THEY SHALL BE IRON–BODIED, BRONZE MOUNTED, NON–RISING STEM, WITH TWO (2) INCH SQUARE NUT. COUNTER–CLOCKWISE OPENING, MECHANICAL JOINT AND / OR FLANGED ENDS (6" VALVES ON FIRE HYDRANT LINES WHICH SHALL BE MECHANICAL JOINTS BY FLANGED). VALVE STEMS SHALL BE PROVIDED WITH O–RING SEALS AND SHALL BE AS MANUFACTURED BY THE MUELLER COMPANY OR APPROVED EQUAL.
      2) BUTTERFLY VALVES: BUTTERFLY VALVES CONFORMING WITH AWWA C 504, CLASS 150 AND SHALL HAVE STANDARD AWWA TWO (2) INCH SQUARE NUT.
7. DETECTABLE MARKING TAPE SHALL BE INSTALLED 18" ABOVE PIPE, BE BLUE IN COLOR, AND READ "CAUTION WATER LINE BELOW" MEETING WSDOT SPEC. 9–15.18.

CITY OF PUYALLUP
OFFICE of THE CITY ENGINEER

APPROVED FOR PUBLICATION
DATE SEALED: 2/5/2018

WATER VALVES AND MAINS
(NOT TO SCALE)
CITY STANDARD 03.01.01

APPROVED
BY
CITY OF PUYALLUP ENGINEERING DEPARTMENT
DATE 10/10/2023

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

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

JOB NUMBER 9575
SCALE HOR. N/A VERT. N/A
DESIGNED JLC DRAWN DNN CHECKED JLC

PROPONENT: RICK VELASQUEZ 13615 122ND ST E PUYALLUP, WA 98374 PH: (253) 224–4428

LARSON and ASSOCIATES
surveyors, engineers & planners
9027 PACIFIC AVENUE, SUITE 4
TACOMA, WA 98444 (253) 474–3404

WATER DETAILS AND SPECIFICATIONS

REVISION BLOCK

NO.	DATE	DESCRIPTION	BY
1	8/1/2023	ADDRESS CITY COMMENTS AND ADD NEW "OPEN" STORAGE SHED OVER EXISTING PAVEMENT AS SHOWN.	GJM

9/12/2023

C2.3

DATE 9/12/2023
DRAWING NO. 9575BASE
SHEET 7 OF 7