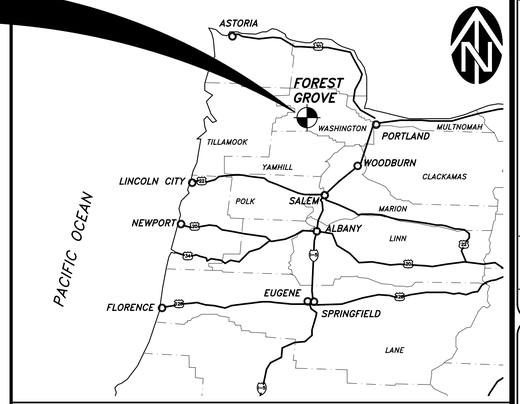
DRAWINGS FOR:

1930 23RD AVE
FOREST GROVE, OR 97116

FOR:

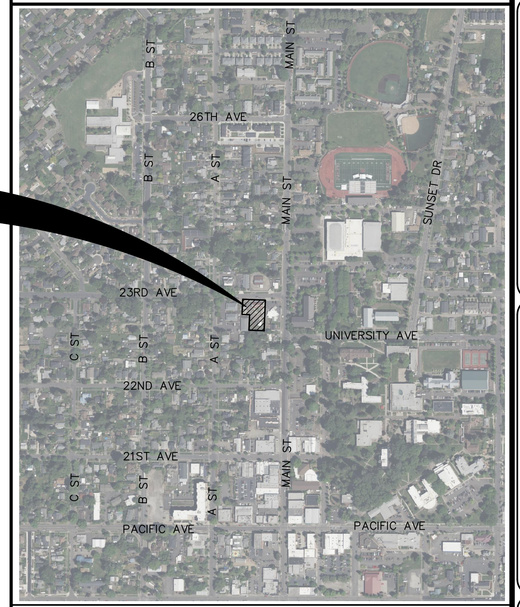
MR. SCOTT MCDONALD, AIA
STUDIO 3 ARCHITECTURE
275 COURT ST
SALEM, OR 97301
503.390.6500

PROJECT LOCATION



VICINITY MAP

PROJECT LOCATION



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

SHEET INDEX

NO.	DESCRIPTION	DATE	BY
1	REVISIONS		

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
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DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REVIEW
REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
RENEWS: 6/30/2026

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

COVER SHEET, VICINITY AND LOCATION MAPS, DRAWING INDEX

DRAWING
C0.0

JOB NUMBER
3547.0000.0

NOTES:

1. *BENCH MARK: THE ELEVATIONS ARE BASED ON THE NAVD 88 VERTICAL DATUM FROM A STATIC GPS OBSERVATION AS COMPUTED BY TRIMBLE POST-PROCESSING SERVICE BASED ON RTX TECHNOLOGY. THE STATIC OBSERVATION WAS PERFORMED ON MARCH 5, 2024.*
2. *CONTOURS ARE AT ONE-FOOT INTERVALS AND ARE COMPUTER GENERATED.*
3. *UNDERGROUND UTILITIES ARE SUBJECT TO ACTUAL FIELD LOCATION.*
4. *ALL UTILITIES MAY NOT BE SHOWN.*
5. *NO TITLE REPORT WAS PROVIDED THEREFORE ALL EASEMENTS MAY NOT BE SHOWN.*
6. *DUE TO DEBRIS ONSITE, SOME UTILITIES MAY NOT BE SHOWN.*

LEGEND:

TC = TOP OF CURB
G = GUTTER OF CURB
PP = POWER POLE
GA = GUY ANCHOR
WM = WATER METER
CO = CLEAN OUT
DS = DOWN SPOUT
GM = GAS METER
FF = FINISH FLOOR ELEVATION
EM = ELECTRIC METER
BOL = BOLLARD

LINE TYPES

CATV LINE
COMMUNICATION LINE
EASEMENT LINE
FENCE LINE
FIBER OPTIC LINE
GAS LINE
EDGE OF GRAVEL LINE
OVERHEAD LINE
PHONE LINE
POWER LINE
SANITARY SEWER LINE
STORM DRAIN LINE
WATER LINE

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EROSION CONTROL LEGEND

- SILT SACK.
- BIO BAGS.
- SILT FENCE.

DEMOLITION LEGEND

- (S) SAWCUT.
- (R) CONTRACTOR TO REMOVE.
- (P) CONTRACTOR TO PROTECT

SILT FENCE (TYP.)

SILT FENCE (TYP.)

SILT FENCE (TYP.)

CHAIN LINK FENCE

N 02°23'39" E 100.00'

NO ACCESS TO SEARCH FOR THIS CORNER

N 87°52'25" W 50.00'

N 87°52'50" W 100.00'

S 02°23'39" W 201.80'

(R) CONCRETE

(R) FENCE

(R) GATE

(R) BOLLARDS

(R) SIDEWALK

(R) CURB

(P) CURB

(S)

(R) ASPHALT

(R) BUILDING

EXISTING BUILDING 1930 23RD AVENUE

LEAN TO NOT SHOWN

FF EL=195.3

FF EL=195.2

FF EL=195.5

FF EL=195.7

CONCRETE (DEBRIS COVERS PAD)

CHAIN LINK GATE

EDGE OF CONCRETE

EDGE OF ASPHALT

GAS LINE AS PAINTED

PP W/ UNDERGROUND

PVC PIPE UNDERGROUND

POSSIBLE CLEAN OUT FOR DOWN SPOUT

CO FLUSH WITH GROUND

FD 5/8" IRON ROD

FD 5/8" IRON ROD (POSSIBLY DISTURBED BY LARGE BOULDER)

GRAVEL

ASPHALT

CONCRETE SIDEWALK

STORM LINE PER CITY AS-BUILTS

SEWER LINE PER CITY AS-BUILTS

WATER LINE AS PAINTED

GUTTER

TAX LOT 5500

TAX LOT 5600

1981

23RD AVENUE

0 5 10 20
FEET

GRAVEL CONSTRUCTION ENTRANCE

REVIEW
REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
RENEWS: 6/30/2026

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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

EXISTING CONDITIONS, EROSION CONTROL, AND DEMOLITION PLAN

DRAWING
C1.0

JOB NUMBER
3547.0000.0

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EROSION CONTROL LEGEND

- SILT SACK.
- BIO BAGS.
- SILT FENCE.

SILT FENCE (TYP.)

SILT FENCE (TYP.)

SILT SACKS (TYP.)

SILT FENCE (TYP.)

FF=196.15

FF=196.12

23RD AVENUE

CHAIN LINK FENCE

N 02°25'39" E 150.00'

N 87°34'21" W 50.00'

S 02°23'39" W 201.80'

N 87°25'25" W 100.00'

NO ACCESS TO SEARCH FOR THIS CORNER

1.5%

5%±MAX

EDGE OF CONCRETE

TAX LOT 5500

TAX LOT 5600

0 5 10 20
FEET

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REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
RENEWS: 6/30/2026

REVIEW

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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

POST-DEVELOPED EROSION CONTROL PLAN

DRAWING
C1.1

JOB NUMBER
3547.0000.0

NOTES:

1. WHEN RAINFALL AND RUNOFF OCCURS, A KNOWLEDGEABLE AND EXPERIENCED PERSON IN THE PRINCIPLES, PRACTICES, INSTALLATION, AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS WHO WORKS FOR THE PERMITTEE MUST PROVIDE DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROLS AND DISCHARGE OUTFALLS.
2. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER 1 THROUGH MAY 31ST EACH YEAR.
3. DURING WET WEATHER PERIOD, TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY.
4. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION. THEY MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
5. ALL ACTIVE INLETS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
6. SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVES THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PREFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIME FRAME.
7. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
8. SEDIMENT MUST BE REMOVED FROM BEHIND ALL SEDIMENT CONTROL MEASURES WHEN IT HAS REACHED A HEIGHT OF 1/3-RD THE BARRIER HEIGHT AND PRIOR TO THE CONTROL MEASURES REMOVAL.
9. CLEANING OF ALL STRUCTURES WITH SUMPS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 50% AND AT COMPLETION OF PROJECT.
10. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
11. THE PERMITTEE MUST PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION.
12. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE MADE IN APPLICATION OF FERTILIZERS WITHIN ANY WATER WAY RIPARIAN ZONE.
13. OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH CURRENT CLEAN WATER SERVICES STANDARDS AND STATE, AND FEDERAL REGULATIONS.
14. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. UNLESS OTHERWISE APPROVED, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITTEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
15. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPS THAT MUST BE INSTALLED ARE GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPS MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
16. IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1ST; THE TYPE AND PERCENTAGES OF SEED IN THE MIX ARE AS IDENTIFIED ON THE PLANS OR AS SPECIFIED BY THE DESIGN ENGINEER.
17. WATERTIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPS; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
18. ALL PUMPING OF SEDIMENT LADEN WATER MUST BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (I.E. FILTER BAG).
19. THE ESC PLAN MUST BE KEPT ONSITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES.
20. THE ESC MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
21. WRITTEN ESC LOGS ARE SUGGESTED TO BE MAINTAINED ONSITE AND AVAILABLE TO DISTRICT INSPECTORS UPON REQUEST.
22. IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMPS MUST BE USED, WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES.
23. ALL EXPOSED SOILS MUST BE COVERED, AT END OF BUSINESS DAY, DURING WET WEATHER PERIOD, FROM OCTOBER 1 - MAY 31.

STANDARD EROSION CONTROL NOTES FOR SITES LESS THAN 1 ACRE

DRAWING NO. 945 REVISED 10-31-19

Clean Water Services

YEAR: / MONTH:	'25 02	'25 03	'25 04	'25 05	'25 06	'25 07	'25 08	'25 09	'25 10	'25 11	'25 12	'26 01
CLEARING	X	X	X									
EXCAVATION	X	X	X	X								
GRADING	X	X	X	X	X	X	X	X	X	X	X	X
CONSTRUCTION	X	X	X	X	X	X	X	X	X	X	X	X
SEDIMENT CONTROLS:												
Silt Fencing	X	X	X	X	X	X	X	X	X	X	X	X
Sediment Traps	X	X	X	X	X	X	X	X	X	X	X	X
Sediment Basins												
Storm Inlet Protection	X	X	X	X	X							
Drainage Swales												
Check Dams												
Contour Furrows												
Terracing												
Pipe Slope Drains												
Rock Outlet Protection												
Gravel Construction Entrance												
Grass-lined Channel (Turf Reinforcement Mats)												
Protection of trees with construction fences												
Temporary Seeding and Planting												
Permanent Seeding and Planting						X	X	X	X	X	X	X
Other:												

CONTROL MEASURE	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
Silt Fencing	X	X	X	X	
Construction Entrance					
Sediment Traps	X	X	X	X	
Storm Inlet Protection	X	X	X	X	
Concrete Washout					
Rock Outlet Protection					
Permanent Seeding and Planting					X

Phase 1: Prior to Ground Disturbance
Phase 2: After Completion of Rough Grading
Phase 3: After Installation of Storm Facilities
Phase 4: After Paving & Construction
Phase 5: After Project Completion and Cleanup

INSPECTION FREQUENCY FOR BMP

Site Condition	Minimum Frequency
1. Active period	Daily when stormwater runoff, including runoff from snowmelt, is occurring. At least once every 14 days, regardless of whether stormwater runoff is occurring.
2. Prior to the site becoming inactive or in anticipation of site inaccessibility.	Once to ensure that erosion and sediment control measures are in working order. Any necessary maintenance and repair must be made prior to leaving the site.
3. Inactive periods greater than seven (14) consecutive calendar days	Once every month.
4. Periods during which the site is inaccessible due to inclement weather	If practical, inspections must occur daily at a relevant and accessible discharge point or downstream location.
5. Periods during which discharge is unlikely due to frozen conditions	Monthly. Resume monitoring immediately upon melt, or when weather conditions make discharge likely.

BMP Rationale

A comprehensive list of available Best Management Practices (BMP) options based on DEQ's 1200-C Permit Application and ESCP Guidance Document has been reviewed to complete this Erosion and Sediment Control Plan. Some of the above listed BMPs were not chosen because they were determined to not effectively manage erosion prevention and sediment control for this project based on specific site conditions, including soil conditions, topographic constraints, accessibility to the site, and other related conditions. As the project progresses and there is a need to revise the ESCP, an Action Plan will be submitted.

SOIL TYPE(S): PER BENTON CO. SOIL SURVEY THE SITE SOILS INCLUDE "WOODBURN SILT LOAM, 0 TO 3 PERCENT SLOPES"

EROSION HAZARD: PER BENTON CO. SOIL SURVEY EROSION HAZARD IS "SLIGHT".

SITE AREA: 0.58 AC

DISTURBANCE AREA: 0.52 AC

SUPPLEMENTAL WESTECH NOTES:

1. Erosion control measures shall be maintained in such a manner as to ensure that sediment and sediment-laden water does not enter the drainge system, roadways, or violate applicable water quality standards.
2. The erosion control construction, maintenance, replacement and upgrading of the erosion control facilities is the responsibility of the Contractor until all construction is completed and approved, and permanent erosion control (i.e. vegetation/landscaping) is established on all disturbed areas.
3. All recommended erosion control procedures are dependent on construction methods, staging, site conditions, weather and scheduling. During the construction period, erosion control facilities shall be upgraded as necessary due to unexpected storm events and to ensure that sediment and sediment laden water does not leave the site.
4. The Contractor is responsible for control of sediment transport within project limits. If an installed erosion control system does not adequately contain sediment on site, then the erosion control measures shall be adjusted or supplemented by the Contractor as necessary to ensure that sediment laden water does not leave the site. Additional measures shall be provided as required to ensure that all paved areas are kept clean for the duration of the project. Additional interim measures will include, at a minimum, installation of silt fences in accordance with the details shown on the drawings. These measures shall be installed along all exposed embankments and cut slopes to prevent sediment transport.
5. All existing and newly constructed storm inlets and drains shall be protected until pavement surfaces are completed and/or vegetation is established.
6. Erosion control facilities and sediment fences on active sites shall be inspected by the Contractor at least daily during any period with measurable precipitation. Any required repairs or maintenance shall be completed immediately. The erosion control facilities on inactive sites shall be inspected and maintained by the Contractor a minimum of once a month or within 24 hours following the start of a storm event.
7. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment-laden water into the downstream system. The Contractor shall remove all accumulated sediment from all impacted catch basins and storm pipes prior to acceptance by the Owner.
8. The Contractor is solely responsible for protection of all adjacent property and downstream facilities from erosion and siltation during project construction. Any damage resulting from such erosion and siltation shall be corrected at the sole expense of the Contractor.
9. The Contractor shall provide site watering as necessary to prevent wind erosion of fine-grained soils.
10. Unless otherwise indicated on the drawings, all temporary erosion control facilities, including sediment fences, silt sacks, bio-bags, etc. shall be removed by the Contractor within 30 days after permanent landscaping/vegetation is established.
11. Sediment fences shall be constructed of continuous filter fabric to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6-inch overlap, and both ends securely fastened to a post.
12. Sediment fence shall be installed per drawing details. Sediment fences shall have adequate support to contain all silt and sediment captured.
13. The standard strength filter fabric shall be fastened securely to stitched loops installed on the upslope side of the posts, and 6 inches of the fabric shall be extended into the trench. The fabric shall not extend more than 30 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
14. Bio-filter bags shall be clean 100 percent wood product waste. Bags shall be 18-inch x 18-inch x 30-inch, weigh approximately 45 lbs., and be contained in a bag made of 1/2-inch plastic mesh.
15. Sediment barriers shall be maintained until the up-slope area has been permanently stabilized. At no time shall more than 10-inches of sediment be allowed to accumulate behind sediment fences. No more than 2 inches of sediment shall be allowed to accumulate behind bio-filter bags. Sediment shall be removed prior to reaching the above stated depths. New sediment barriers shall be installed uphill as required to control sediment transport.
16. Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to ensure that all paved areas are kept clean for the duration of the project.
17. The Contractor shall verify that all trucks are well sealed when transporting saturated soils from the site. Water drippage from trucks transporting saturated soils must be reduced to less than 1 gallon per hour prior to leaving the site.
18. The entrance shall be maintained in a condition that will prevent tracking or flow of mud onto the public right-of-way or approved access point. The entrance may require periodic top dressing as conditions demand, and repair and/or cleanout of any structures used to trap sediment.
19. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately, and the Contractor shall provide protection of downstream inlets and catch basins to ensure sediment laden water does not enter the storm drain system.
20. Temporary grass cover measures must be fully established by October 15th, or other cover measures (ie. erosion control blankets with anchors, 3-inches minimum of straw mulch, 6 mil HDPE plastic sheet, etc.) shall be in place over all disturbed soil areas until April 30th. To establish an adequate grass stand for controlling erosion by October 15th, it is recommended that seeding and mulching occur by September 1st. Straw mulch, if used, shall not leave any bare ground visible through the straw.
21. Minimum wet weather slope protection. For slopes steeper than 3H:1V but less than 2H:1V, use Tensar/North American Green Type S150 erosion control blanket. For slopes 2H:1V or steeper, use Tensar/North American Green Type SC150 erosion control blanket. Use a minimum of 2-inches straw mulch or Tensar/North American Green Type S150 for slopes flatter than 3H:1V. Slope protection shall be placed on all disturbed areas immediately after completion of each section of construction activity, until the erosion control seeding has been established. As an option during temporary or seasonal work stoppages, a 6-mil HDPE plastic sheet may be placed on exposed slopes. The plastic sheet shall be provided with an anchor trench at the top and bottom of the slope, and shall be sandbagged on the slopes as required to prevent damage or displacement by wind.
22. Permanent erosion control vegetation on all embankments and disturbed areas shall be re-established as soon as construction is completed.
23. Soil preparation. Topsoil should be prepared according to landscape plans, if available, or recommendations of grass seed supplier. It is recommended that slopes be textured before seeding by rack walking (ie. driving a crawling tractor up and down the slopes to leave a pattern of cleat imprints parallel to slope contours) or other method to provide stable areas for seeds to rest.
24. When used, hydromulch shall be applied with grass seed at a rate of 2000 lbs. per acre between April 30 and June 10, or between September 1 and October 1. On slopes steeper than 10 percent, hydroseed and mulch shall be applied with a bonding agent (tackifier). Application rate and methodology to be in accordance with seed supplier recommendations.
25. When used in lieu of hydromulch, dry, loose, weed free straw used as mulch shall be applied at a rate of 4000 lbs. per acre (double the hydromulch application requirement). Anchor straw by working in by hand or with equipment (rollers, cleat trackers, etc.). Mulch shall be spread uniformly immediately following seeding.
26. When conditions are not favorable to germination and establishment of the grass seed, the Contractor shall irrigate the seeded and mulched areas as required to establish the grass cover.
27. Seeding. Recommended erosion control grass seed mix is as follows. Dwarf grass mix (low height, low maintenance) consisting of dwarf perennial ryegrass (80 % by weight), creeping red fescue (20 % by weight). Application rate shall be 100 lbs. per acre minimum.
28. Grass seed shall be fertilized at a rate of 10 lbs. per 1000 S.F with 16- 16-16 slow release type fertilizer. Development areas within 50 feet of water bodies and wetlands must use a non-phosphorous fertilizer.
29. Prior to starting construction contractor shall acquire the services of a DEQ Certified Erosion and Sediment Control Inspector and shall submit an "Action Plan" to DEQ indentifying their names, contact information, training and experience as required in Schedule A.6.b.i-ii of the 1200-C Permit
30. Contractor shall submit "Notice of Termination" to DEQ to end the 1200-C permit coverage once all soil disturbance activities have been completed and final stabilization of exposed soils has occured.

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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

EROSION CONTROL NOTES

DRAWING
C1.2

JOB NUMBER
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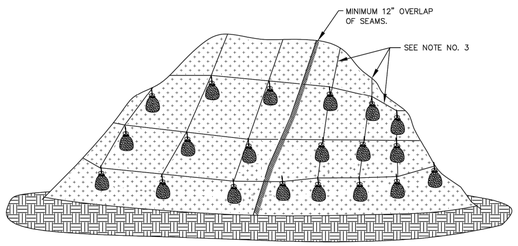
FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



PLASTIC SHEETING

NOTES:

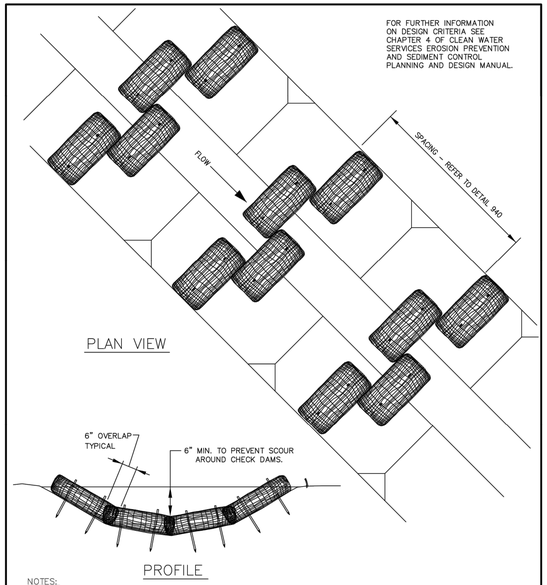
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. PERIMETER SEDIMENT CONTROL BMP TO BE INSTALLED A MIINIMUM OF 3' FROM TOE OF STOCKPILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR APPROVED EQUAL ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.
4. PLASTIC TO EXTEND MINIMUM 1' BEYOND TOE OF SLOPE.
5. AS APPROPRIATE, BMP'S SHALL BE INSTALLED TO CONVEY WATER DISCHARGE FROM STOCKPILE AREAS.

PLASTIC SHEETING

DRAWING NO. 810 REVISED 10-31-19

CleanWater Services

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



PLAN VIEW

PROFILE

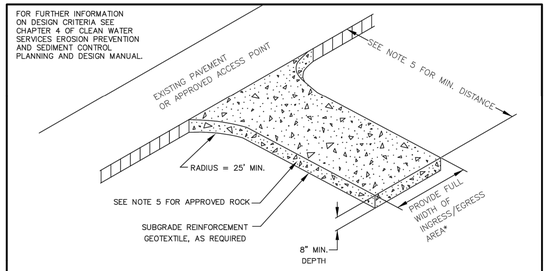
NOTES:

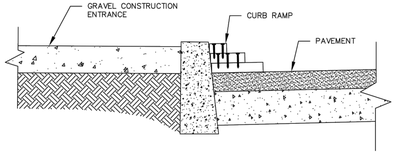
1. STAKING OF BAGS REQUIRED USING (2) 1"X2" WOOD STAKES OR APPROVED EQUAL PER BAG.
2. SURFACE MUST BE SMOOTH BEFORE APPLICATION.
3. CHECK DAMS CAN BE CONSTRUCTED USING STRAW WATTLES OR OTHER MATERIALS AS APPROVED BY THE DISTRICT OR CITY.

CHECK DAM BIO-FILTER BAG

DRAWING NO. 845 REVISED 10-31-19

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.





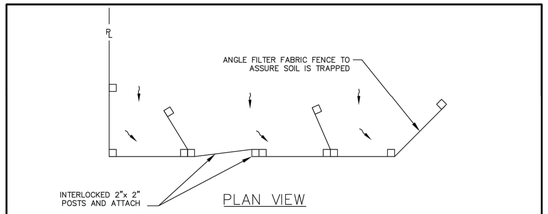
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF- WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
5. DIMENSIONS
   SINGLE FAMILY
   20' LONG BY 20' WIDE 8" DEEP OF ¾" MINUS CLEAN ROCK.
   COMMERCIAL/SITE DEVELOPMENT
   50' LONG BY 20' WIDE 3-6" CLEAN ROCK, GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

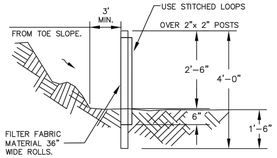
CONSTRUCTION ENTRANCE

DRAWING NO. 855 REVISED 10-31-19

CleanWater Services



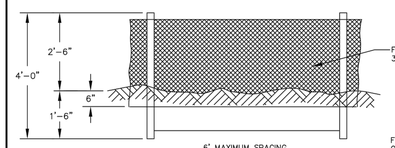
PLAN VIEW



PROFILE

NOTES:

1. SEDIMENT FENCE TO HAVE STITCHED LOOPS AROUND 2" x 2" POSTS.
2. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
3. 2"x 2" FIR, PINE OR STEEL FENCE POSTS.
4. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
5. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
6. PANELS MUST BE PLACED ACCORDING TO SPACING ON DRAWING NO. 940.



FRONT VIEW

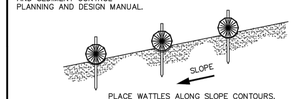
FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SEDIMENT FENCE

DRAWING NO. 875 REVISED 10-31-19

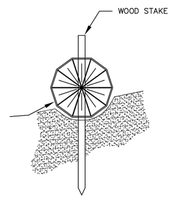
CleanWater Services

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

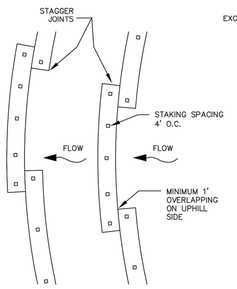


PLACE WATTLES ALONG SLOPE CONTOURS.

PROFILE



SECTION



PLAN VIEW

NOTES:

1. STAKING SPECIFICATIONS:
   a. 1"X2" WOODEN STAKES
   b. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY EROSIVE SOILS.
2. SPACING IN ACCORDANCE WITH DETAIL 940.
3. REMOVE ALL ROCKS, CLODS, VEGETATION OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED WATTLES WILL HAVE DIRECT CONTACT WITH THE SOIL.
4. INSTALL THE WATTLES IN A 2" DEEP TRENCH, INSURING THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE WATTLE. THE ENDS OF ADJACENT WATTLES SHALL BE OVERLAPPED 1 FT. MINIMUM TO PREVENT SEDIMENT PASSING THROUGH THE FIELD JOINT.

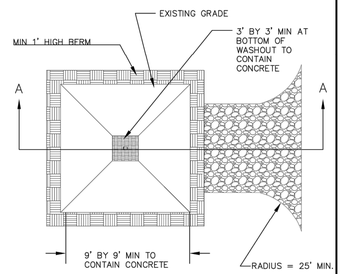
WATTLES

DRAWING NO. 880 REVISED 10-31-19

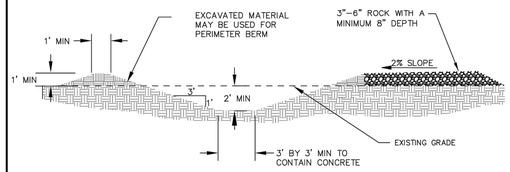
CleanWater Services

NOTES:

1. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
2. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
3. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING OPEN DRAINAGE FACILITIES AND WATER SOURSES.
5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. INSTALL CONCRETE WASHOUT SIGN WITHIN 30 FEET OF TEMPORARY CONCRETE WASHOUT FACILITY.
7. TEMPORARY CONCRETE WASHOUTS MAY BE A PREFABRICATED CONTAINER THAT IS PORTABLE AND REUSABLE.



PLAN

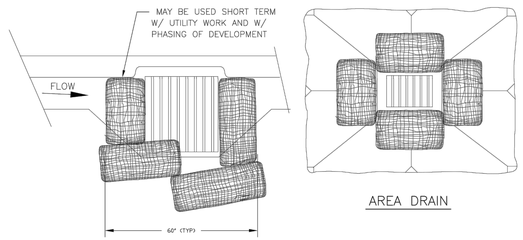


SECTION A-A

CONCRETE WASHOUT

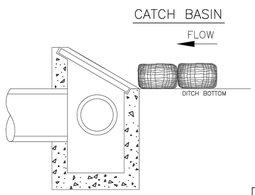
DRAWING NO. 900 REVISED 10-31-19

CleanWater Services

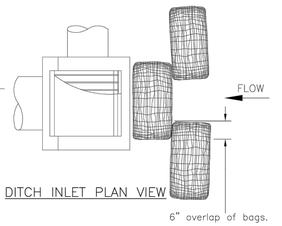


CATCH BASIN

AREA DRAIN



DITCH INLET



DITCH INLET PLAN VIEW

NOTES:

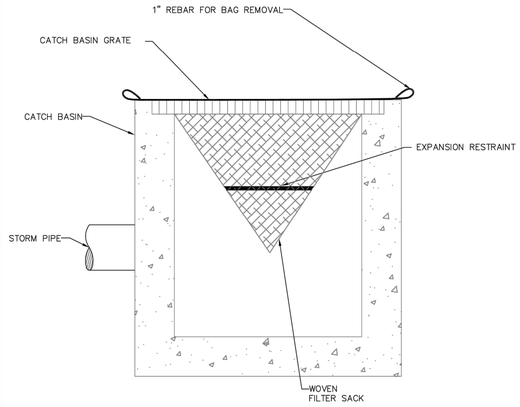
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

INLET PROTECTION TYPE 4

DRAWING NO. 915 REVISED 10-31-19

CleanWater Services



CATCH BASIN INSERT

NOTE:

1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACKS TO BE DETERMINED BY MANUFACTURER.

FOR FURTHER INFORMATION ON DESIGN CRITERIA SEE CHAPTER 4 OF CLEAN WATER SERVICES EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

INLET PROTECTION TYPE 5

DRAWING NO. 920 REVISED 10-31-19

CleanWater Services

NO.	DATE	DESCRIPTION	BY
1		REVISIONS	

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
REVIEW
RENEWS: 6/30/2026

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

EROSION CONTROL DETAILS

DRAWING
C1.3

JOB NUMBER
3547.0000.0

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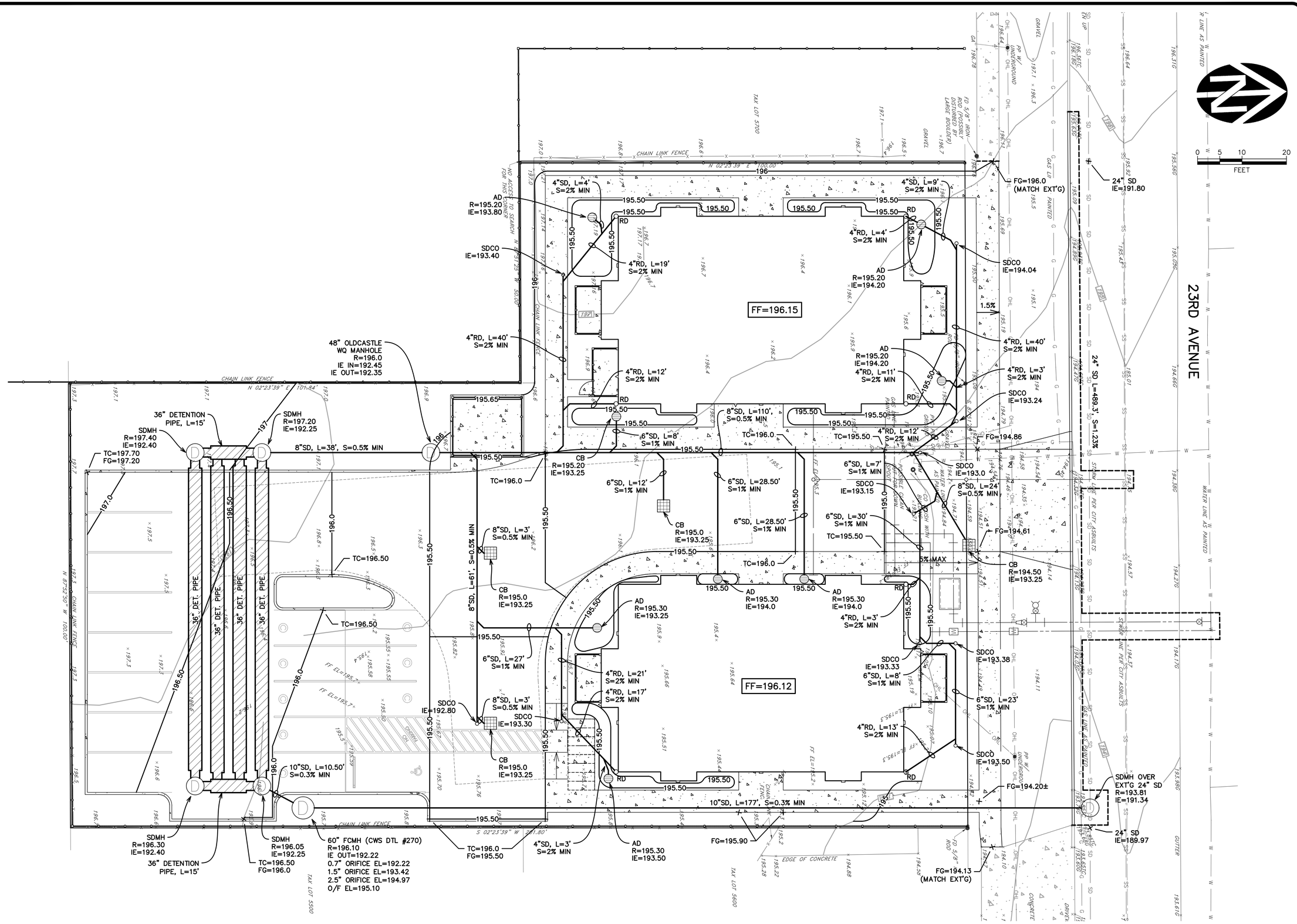

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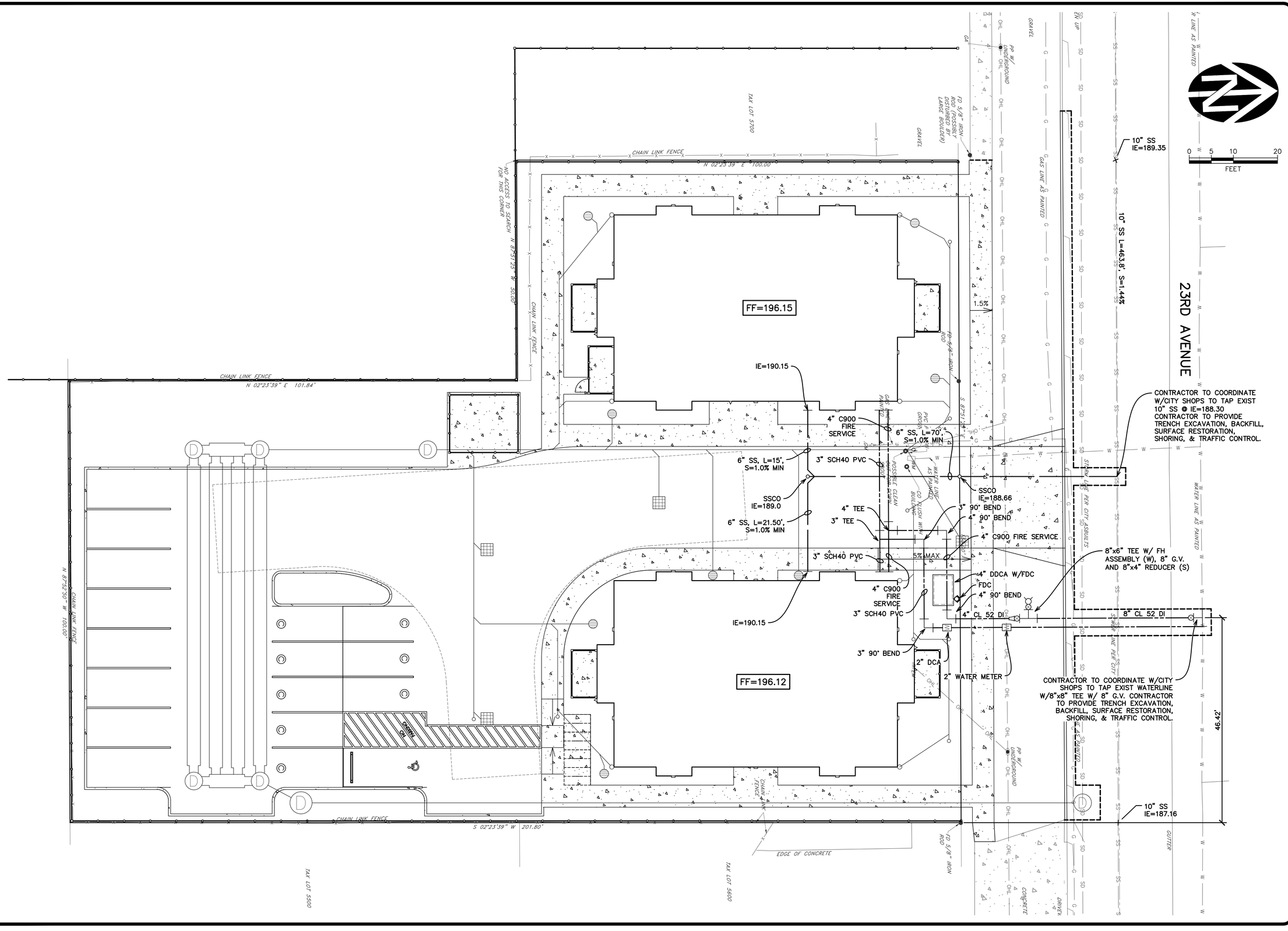
STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

GRADING AND DRAINAGE PLAN

DRAWING
C2.0

JOB NUMBER
3547.0000.0



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VERIFY SCALE
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1"

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DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
RENEWS: 6/30/2026

REVIEW

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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

UTILITY PLAN

DRAWING
C3.0

JOB NUMBER
3547.0000.0

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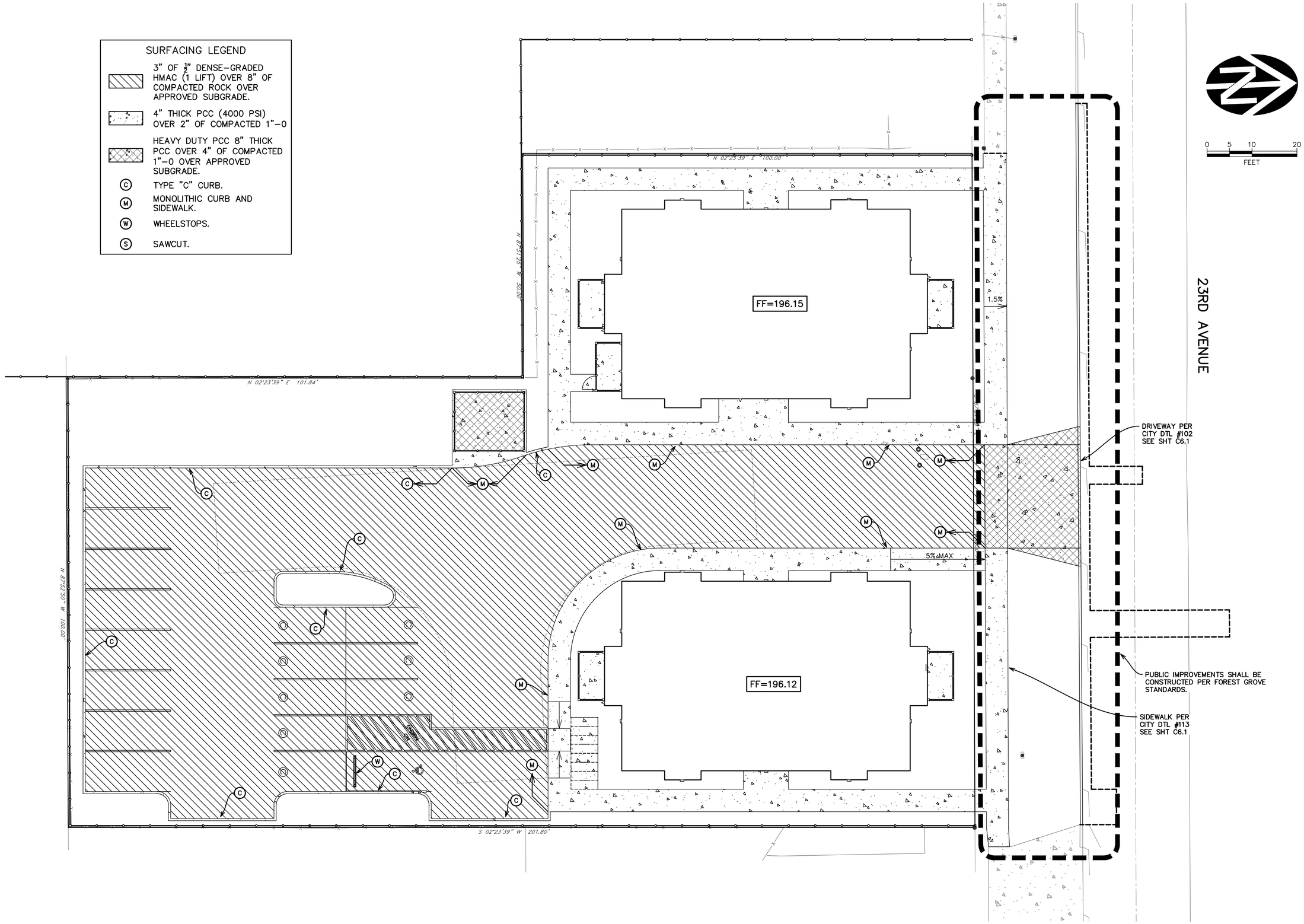
SURFACING LEGEND

- 3" OF ½" DENSE-GRADED HMAC (1 LIFT) OVER 8" OF COMPACTED ROCK OVER APPROVED SUBGRADE.
- 4" THICK PCC (4000 PSI) OVER 2" OF COMPACTED 1"-0
- HEAVY DUTY PCC 8" THICK PCC OVER 4" OF COMPACTED 1"-0 OVER APPROVED SUBGRADE.
- (C) TYPE "C" CURB.
- (M) MONOLITHIC CURB AND SIDEWALK.
- (W) WHEELSTOPS.
- (S) SAWCUT.



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1"

DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
RENEWS: 6/30/2026

REVIEW

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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

SURFACING PLAN

DRAWING
C4.0

JOB NUMBER
3547.0000.0

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STUDIO 3 ARCHITECTURE

1930 23RD FOREST GROVE

CONSTRUCTION NOTES

JOB NUMBER 3547.0000.0

DRAWING C5.0

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REGISTERED PROFESSIONAL ENGINEER
OREGON
JANUARY 12, 2006
WILLIAM T. WELLS

REVIEW

9/30/2025
RENEWAL

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
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CKD. JW
DATE: NOV 24

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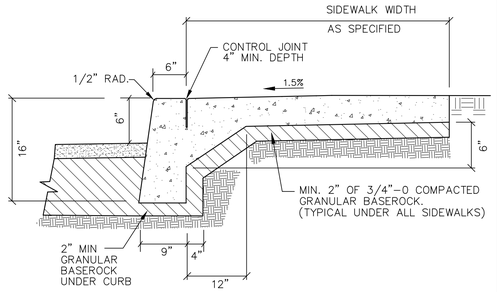
REVISIONS



TYPICAL SECTION

NTS

NOTES:

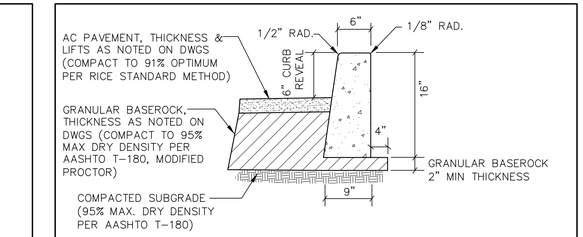
1. CONCRETE THICKNESS. 4" MIN. CONCRETE THICKNESS FOR STANDARD SIDEWALKS. 6" MIN CONCRETE THICKNESS THROUGH RESIDENTIAL DRIVEWAYS (INCLUDING WINGS). 8" MIN CONCRETE THICKNESS THROUGH COMMERCIAL/INDUSTRIAL DRIVEWAYS & ALLEY APPROACHES.
2. CONCRETE SHALL BE 3300 PSI @ 28 DAYS, MAX 5" SLUMP, 4.5% AIR (±1.5%).
3. INSTALL TOOLED CONTRACTION JOINTS AT 5' INTERVALS. SIDEWALKS 10' & WIDER SHALL HAVE A LONGITUDINAL CONTRACTION JOINT AT 5' MAX ON CENTER.
4. INSTALL AT LEAST 2 WEEP HOLES ON ALL LOTS. IN ADDITION TO WEEPHOLES AT DRIVEWAY WINGS, INSTALL ONE WEEPHOLE AT LOW POINT OF LOT, 5' MAX FROM P/L.
5. A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEPHOLE & DRAIN PIPE.
6. SIDEWALKS SHALL BE LOCATED ENTIRELY WITHIN PRIVATE RIGHT-OF-WAYS OR SIDEWALK EASEMENTS, INCLUDING SIDEWALKS AT DRIVEWAY APRONS.

LAST REVISION DATE:	JO #
JAN 2024	STANDARD

MONOLITHIC CURB AND PRIVATE SIDEWALK

(NTS)

WESTECH ENG.	DETAIL NO. 2112



PAVEMENT/TYPE "C" CURB DETAIL

NTS

SEE PLAN

NOTES:

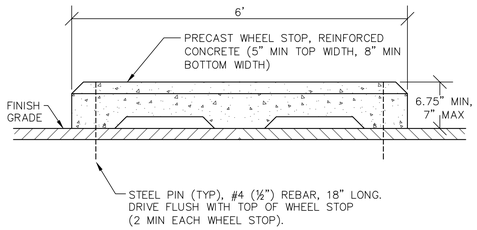
1. SEE GRADING PLAN OR SURFACING PLAN FOR LOCATION OF LIGHT AND HEAVY DUTY PAVEMENT, AS WELL AS PAVEMENT & BASEROCK THICKNESSES.
2. DESIGN SUBGRADES SHALL BE COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF BASEROCK. IF SUBGRADE PASSES PROOF-ROLL BUT FAILS DENSITY TESTING, MIN. 4.5 OZ NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED ON SUBGRADE PRIOR TO PLACEMENT OF BASEROCK. FAILURE OF PROOF-ROLL WILL REQUIRE OVEREXCAVATION.
3. IF SUBGRADE FAILS THE PROOF-ROLL, SUBGRADE SHALL BE OVEREXCAVATED TO UNDISTURBED SOIL AND BACKFILLED WITH BASEROCK OVER MIN. 8.0-OZ. NON-WOVEN FABRIC AS REQUIRED TO ALLOW COMPACTION OF UPPER (DESIGN) BASEROCK SECTION AND TO MAINTAIN STRUCTURAL INTEGRITY OF NATIVE SUBGRADE SOILS. TYPICAL MIN. OVEREXCAVATION REQUIRED IS 12-INCHES. NO RUBBER TIRED EQUIPMENT ALLOWED ON SUBGRADE FOLLOWING OVEREXCAVATION.
4. SUBGRADE TO BE PROOFROLLED IMMEDIATELY PRIOR TO PLACING BASEROCK. BASEROCK TO BE PROOFROLLED IMMEDIATELY PRIOR TO PAVING.
5. CONTRACTION JOINTS SHALL BE PLACED AT 15' MIN. INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE CURB SECTION.
6. CURBS TO CURE A MINIMUM OF 7 DAYS PRIOR TO PLACING FINAL BASEROCK AND PAVING. USE TYPE 1 OR 1-D CLEAR CURING COMPOUND.
7. ALL CONCRETE SHALL BE 3300 PSI @ 28 DAYS, MAX 5" SLUMP, 4.5% AIR (±1.5%).

LAST REVISION DATE:	JO #
FEB 2024	X

PAVEMENT AND TYPE 'C' CURB DETAIL

(NTS)

WESTECH ENG.	DETAIL NO. 2390



SECTION

NTS

NOTES:

1. SEE DRAWINGS FOR LOCATION & NUMBER OF WHEEL STOPS, INCLUDING DIMENSION FROM CURB, EDGE OF PAVEMENT OR BUILDING AS APPLICABLE.
2. UNLESS OTHERWISE SPECIFIED OR SHOWN ON SITE PLAN, SET WHEEL STOPS 2 FEET FROM FACE OF CURB OR EDGE OF PAVEMENT, MEASURED FROM THE FACE OF THE WHEEL STOP (VEHICLE SIDE) TO FACE OF CURB (OR EDGE OF PAVEMENT). SET BACK FROM PROPERTY LINES PER CITY STANDARDS (3' MIN). MIN SETBACK FROM BUILDINGS AS SHOWN ON DWGS.

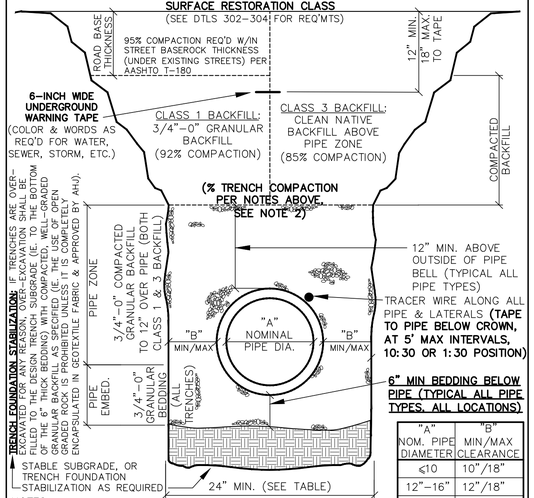
LAST REVISION DATE:	JO #
FEB 2024	STANDARD

PRECAST WHEELSTOP DETAIL

(NTS)

WESTECH ENG.	DETAIL NO. 2396

TRENCH COMPACTION: CLASS 1 GRANULAR BACKFILL - 92% OPTIMUM PER AASHTO T-180 (MODIFIED PROCTOR)
CLASS 3 NATIVE BACKFILL - 85% OPTIMUM PER AASHTO T-180



"A" NOM. PIPE DIAMETER	"B" MIN/MAX CLEARANCE
≤10	10"/18"
12"-16"	12"/18"
18"-21"	16"/24"
24"-30"	18"/30"
>30"	24"/36"

(SEE NOTE 5)

NOTES:

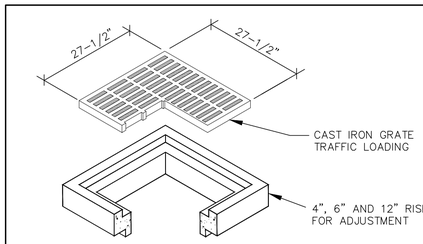
1. CLASS 1 GRANULAR BACKFILL REQUIRED UNDER ALL EXISTING OR FUTURE IMPROVED AREAS, INCLUDING STREETS, SHOULDERS, PARKING, SIDEWALKS, ETC.
2. SUBMIT WRITTEN BACKFILL COMPACTION TEST RESULTS PRIOR TO INSTALLING AC PAVEMENT OR CONCRETE SURFACE RESTORATION.
3. WHERE NEW PIPING IS IN SAME ALIGNMENT AS EXISTING PIPING, GRANULAR PIPE EMBEDMENT SHALL EXTEND TO A MIN. OF 6" BELOW THE NEW PIPING OR 6" BELOW EXISTING PIPING, WHICHEVER IS DEEPER.
4. SHORING NOTE, PIPE ZONE: FOR FLEXIBLE PIPE, BOTTOM OF TRENCH SHORING SHALL BE ABOVE PIPE SPRINGLINE PRIOR TO COMPACTING BACKFILL BELOW THE PIPE SPRINGLINE AND UNDER THE PIPE HAUNCHES (TO AVOID LOSS OF PIPE SIDE SUPPORT).
5. MINIMUM CLEARANCES SHOWN ("B") ASSUMES STANDARD 6" WALL TRENCH BOXES SET ON TRENCH BOTTOM, AND REPRESENTS WIDTH REQUIRED TO CONSOLIDATE GRANULAR MATERIAL UNDER PIPE HAUNCHES (TO AVOID LOSS OF SIDE SUPPORT WHEN TRENCH BOX IS MOVED OR PULLED FORWARD). TRENCH WIDTH REDUCTION REQUIRES PRIOR APPROVAL BASED ON ACTUAL TRENCH SHORING PROPOSED.

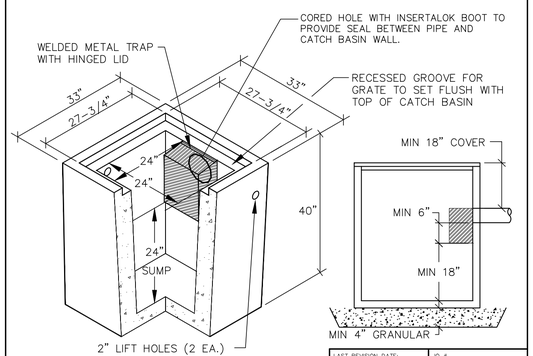
LAST REVISION DATE:	STANDARD
MAR 2024	

TRENCH BACKFILL, BEDDING, AND PIPE ZONE

(NTS)

WESTECH ENG.	DETAIL NO. 3010





NOTES:

1. SEE CONSTRUCTION DRAWINGS FOR PIPE SIZE, LOCATION AND INVERT ELEVATION.
2. CONCRETE SHALL BE 4000 PSI @ 28 DAYS.
3. SET CB SQUARE WITH BUILDINGS OR WITH EDGE OF PARKING LOT, ALLEY OR DRIVEWAY WHEREIN IT LIES.
4. ADJUST PAVING SO WATER FLOWS TO CB WITH NO PONDING.

LAST REVISION DATE:	JO #
MAR 2024	STANDARD

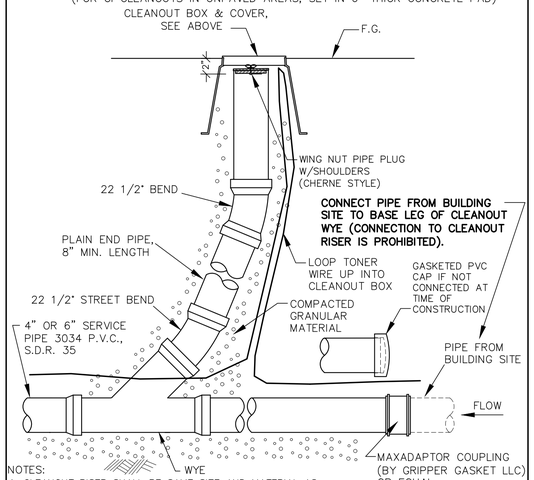
PARKING LOT CATCH BASIN or PUBLIC ALLEY CATCH BASIN (PRECAST CONCRETE)

(NTS)

WESTECH ENG.	DETAIL NO. 3150

CLEANOUT COVERS: ALL SEWER CLEANOUT LIDS TO READ "SEWER".
ALL STORM CLEANOUT LIDS TO READ "STORM" OR "C/O".

1. NON-TRAFFIC AREAS:
   CARSON MODEL 910 T-COVER OR EQUAL (GREEN FOR SEWER, GREY FOR STORM).
2. TRAFFIC AREAS, INCLUDING DRIVEWAYS:
   8" X 4" CAST IRON FRAME & COVER, OLYMPIC M1007 OR EQUAL.
   8" X 6" CAST IRON FRAME & COVER, OLYMPIC M1018 OR EQUAL.
   (FOR CI CLEANOUTS IN UNPAVED AREAS, SET IN 6" THICK CONCRETE PAD)



NOTES:

1. CLEANOUT RISER SHALL BE SAME SIZE AND MATERIAL AS LATERAL PIPE.
2. PROVIDE CONCRETE PAD FOR CLEANOUTS LOCATED IN UNPAVED DRIVEWAYS OR TRAFFIC AREAS (6" THICK PAD TO BE 6" LARGER THAN CLEANOUT BOX FRAME ON ALL SIDES).
3. CLEANOUT PIPE SHALL BE LEFT A MINIMUM OF 18" ABOVE EXISTING GRADE UNTIL ALL CURBING IS INSTALLED AND ALL PRIVATE UTILITY TRENCHES ARE BACKFILLED. CLEANOUTS SHALL THEN BE SET NO MORE THAN 6" BELOW FINISH GRADE, AND CLEANOUT BOXES SET FLUSH WITH FINISH GRADE.

LAST REVISION DATE:	JO #
MAY 2024	STANDARD

STANDARD SERVICE LATERAL CLEANOUT (ON PRIVATE PROPERTY)

(NTS)

WESTECH ENG.	DETAIL NO. 4161

BY	DESCRIPTION	DATE	NO.
	REVISIONS		1

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
REVIEW
RENEWS: 6/30/2026

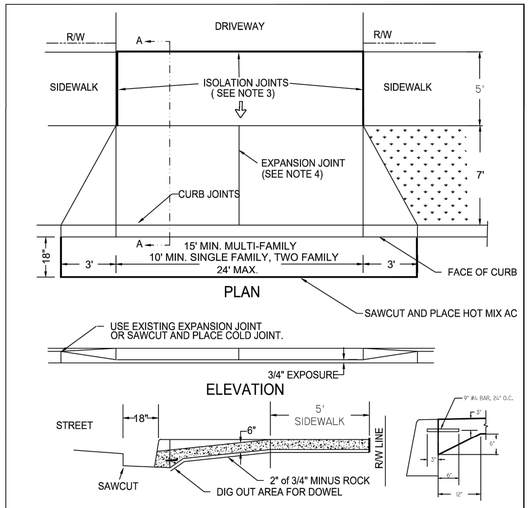
WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

CONSTRUCTION DETAILS (WESTECH)

DRAWING
C6.0

JOB NUMBER
3547.0000.0



SECTION A-A

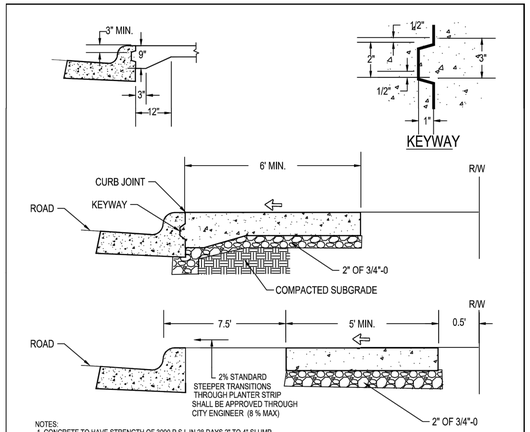
NOTES:

1. CONCRETE TO HAVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2" RADIUS ALONG BACK OF CURB.
3. ISOLATION JOINTS SHALL BE 1/2" PREMOLDED ASPHALT IMPREGNATED MATERIAL EXTENDING FROM SUBGRADE TO FINISHED GRADE, NO WOOD PRODUCTS ALLOWED.
4. EXPANSION JOINT SPACING SHALL BE A MAXIMUM OF 12'.
5. SUB GRADE SHALL BE FIRM WITH NO SOFT SPOTS WITH A MINIMUM OF 2" OF 3/4-0" ROCK.
6. STEEL TIES 9" LONG DRILL HOLE 3" INTO EXISTING CURB 4# BAR 24" ON CENTER.

LEGEND:

⇩ CROSS SLOPE 1.5% MAX (MAX 2.0 % FINISHED SURFACE SLOPE)

FOREST GROVE OREGON	RESIDENTIAL DRIVEWAY WITH STREET SAW CUT	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 102
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\100s SIDEWALKS\RESIDENTIAL DRIVEWAY W SAW CUT.dwg			LAST REV. 7/20/22



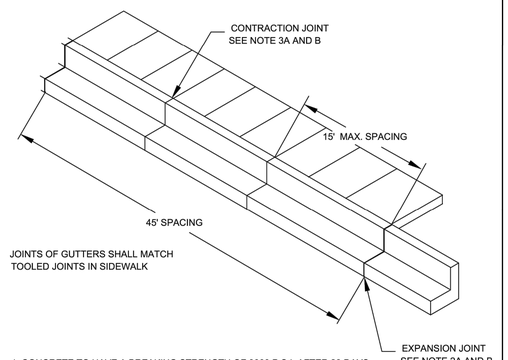
NOTES:

1. CONCRETE TO HAVE STRENGTH OF 3000 P.S.I. IN 28 DAYS 2" TO 4" SLUMP.
2. KEYED COMBINATION CURB & SIDEWALK WILL ONLY BE PERMITTED TO BE USED WHEN THE ENGINEER DETERMINES THAT IT IS NOT FEASIBLE TO CONSTRUCT MONOLITHIC COMBINATION CURB & SIDEWALK.
3. PANELS TO BE 5' LONG.
4. EXPANSION JOINTS TO BE PLACED AT SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS & AT SPACING NOT TO EXCEED 90' OR AS DIRECTED BY THE ENGINEER.
5. FOR SIDEWALKS ADJACENT TO THE CURB & POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS.
6. DRAIN BLOCKOUTS IN CURBS SHALL BE EXTENDED TO BACK OF SIDEWALK WITH 3" DIA. SCH. 40 ABS OR PVC PIPE AT 2% SLOPE, CONTRACTION JOINT TO BE PLACED OVER PIPE.
7. SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF 8" IF MOUNTABLE CURB IS USED, OR IF THE SIDEWALK IS INTENDED AS A PORTION OF A DRIVEWAY. OTHERWISE, SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF 4 ".
8. BROOM TRANSVERSE TO DIRECTION OF PEDESTRIAN TRAVEL (TYP.)
9. PLACING CONCRETE IN COLD WEATHER: DO NOT PLACE CONCRETE WHEN THE AMBIENT TEMPERATURE IS BELOW 40 DEGREES F. ANY CONCRETE DAMAGED BY FREEZING SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
10. FOR TRANSITION BETWEEN NEW AND EXISTING SIDEWALK SEE STD. DRG. NO. 116

LEGEND:

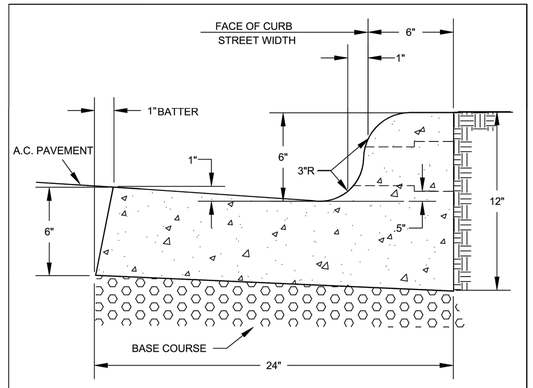
⇩ CROSS SLOPE 1.5% MAX (MAX 2.0 % FINISHED SURFACE SLOPE)

FOREST GROVE OREGON	CONCRETE SIDEWALK	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 113
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\100s SIDEWALKS\SIDEWALK.dwg			LAST REV. 7/20/22



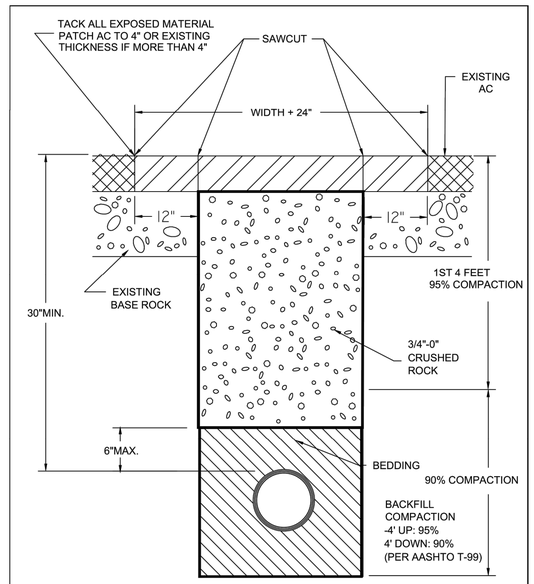
1. CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS.
2. EXPANSION JOINTS
   A. TO BE PROVIDED:
      1) AT EACH POINT OF TANGENCY OF THE CURB.
      2) AT EACH COLD JOINT.
      3) AT EACH SIDE OF INLET STRUCTURES.
      4) AT EACH END OF DRIVEWAYS.
      5) AT LOCATIONS NECESSARY TO LIMIT SPACING TO 45 FEET.
   B. MATERIAL TO BE PRE-MOLDED, ASPHALT IMPREGNATED, NON-EXTRUDING, WITH A THICKNESS OF 1/2 INCH.
3. CONTRACTION JOINTS
   A. SPACING TO BE NOT MORE THAN 15 FEET.
   B. THE DEPTH OF JOINT SHALL BE AT LEAST 1 1/2 INCHES.
4. BASE ROCK-2"-0 OR 3/4"-0, 95% COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4" IN DEPTH, WHICHEVER IS GREATER.
5. DRAINAGE BLOCKOUT- 3" DIAMETER SCH 40 PVC OR ABS PIPE.
   A. I.D. PIPE WITH COUPLING
   B. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED OR CURB SAW CUT VERTICALLY 18" EACH SIDE OF DRAIN AND REPOURED TO FULL DEPTH OF CURB.
6. JOINTS IN CURB AND JOINTS IN CURB SIDE WALK SHOULD LINE UP WHERE POSSIBLE.

FOREST GROVE OREGON	CURB & GUTTER JOINT SPACING	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 302
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\300s STREETS\CURB & GUTTER JOINT SPACING.dwg			LAST REV. 7/20/22



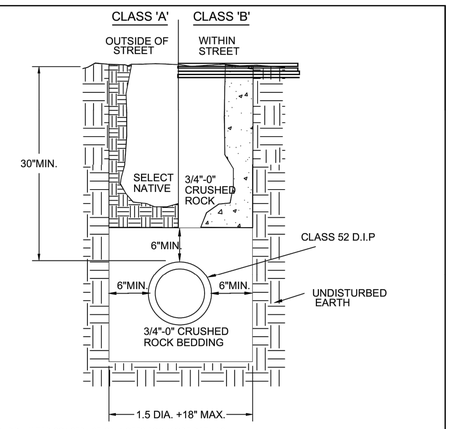
1. CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS.
2. EXPANSION JOINTS
   A. TO BE PROVIDED:
      1) AT EACH POINT OF TANGENCY OF THE CURB.
      2) AT EACH COLD JOINT.
      3) AT EACH SIDE OF INLET STRUCTURES.
      4) AT EACH END OF DRIVEWAYS.
      5) AT LOCATIONS NECESSARY TO LIMIT SPACING TO 45 FEET.
   B. MATERIAL TO BE PRE-MOLDED, ASPHALT IMPREGNATED, NON-EXTRUDING, WITH A THICKNESS OF 1/2 INCH.
3. CONTRACTION JOINTS
   A. SPACING TO BE NOT MORE THAN 15 FEET.
   B. THE DEPTH OF JOINT SHALL BE AT LEAST 1 1/2 INCHES.
4. BASE ROCK-2"-0 OR 3/4"-0, 95% COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STEEL STRUCTURE OR 4" IN DEPTH, WHICHEVER IS GREATER.
5. DRAINAGE BLOCKOUT- 3" DIAMETER SCH 40 PVC OR ABS PIPE.
   A. I.D. PIPE WITH COUPLING
   B. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED OR CURB SAW CUT VERTICALLY 18" EACH SIDE OF DRAIN AND REPOURED TO FULL DEPTH OF CURB.

FOREST GROVE OREGON	EMERGENCY MOUNTABLE P.C.C. CURB & GUTTER	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 304
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\300s STREETS\EMERGENCY MOUNTABLE P.C.C. CURB & GUTTER.DWG			LAST REV. 7/20/22



NOTES: T-CUT TO BE DONE AFTER EXCAVATION AND BACKFILL OF TRENCH
AC DESIGN: LEVEL 2 HMAC (LEVEL 3 Moderate Truck Traffic)

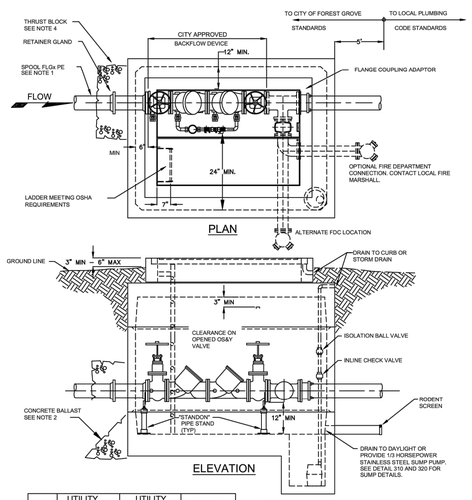
FOREST GROVE OREGON	T-CUT ASPHALT REPAIR OVER TRENCH	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 311
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\300s STREETS\T-CUT ASPHALT REPAIR OVER TRENCH.DWG			LAST REV. 7/20/22



NOTES:

1. SEE STANDARD WATER CONSTRUCTION NOTES FOR MORE DETAILS.
2. WATER MAINS SHALL BE PUSH-ON RESTRAINED JOINT DUCTILE IRON PIPE THAT IS CEMENT-MORTAR LINED, SHALL CONFORM WITH ANSI A21.6 AND ANSI A21.11, AND SHALL BE U.S. TYTON JOINT, AS MANUFACTURED BY UNITED STATES PIPE AND FOUNDRY COMPANY AND PACIFIC STATES CAST IRON COMPANY, OR OTHER MANUFACTURES APPROVED BY THE CITY. THE TYPE AND THICKNESS CLASS SHALL BE PIPE CLASS 52 FOR PIPE DIAMETERS OF 10" AND SMALLER, PIPE CLASS 51 FOR PIPE DIAMETERS BETWEEN 12" AND 16", AND PIPE CLASS 50 FOR DIAMETERS OF 18" AND LARGER. ALL PUSH-ON GASKETS SHALL BE FIELD LOK 350 RESTRAINING GASKETS DESIGNED FOR USE WITH TYTON JOINT MANUFACTURED PIPE OR PUSH-ON RESTRAINING GASKETS DESIGNED FOR USE WITH THE JOINT TYPE OF THE ALTERNATIVE PIPE MANUFACTURER APPROVED BY THE CITY. PUSH-ON RESTRAINED GASKETS SHALL CONFORM TO ANSI/AWWA C11/A21.11. GASKETS FOR PIPE SIZES 4-INCH TO 12-INCH SHALL BE RATED FOR 350 psi. GASKETS FOR 18-INCH TO 24-INCH PIPES SHALL BE RATED FOR 250 PSI. A NON-TOXIC VEGETABLE SOAP LUBRICANT SHALL BE SUPPLIED FROM THE PIPE MANUFACTURER IN SUFFICIENT QUANTITIES FOR INSTALLING THE PIPE FURNISHED.
3. ALL JOINTS (TEES, ELBOWS, BENDS AND BLOW OFFS) TO BE MECHANICALLY RESTRAINED (MEGALUG, FIELD LOK-GRIP RING, OR TUFGRIP). THRUST BLOCKS SHALL NOT BE USED.
4. CITY OF FOREST WATER LINE CORROSION CONTROL METHOD IS AS FOLLOWS:
   A. MIN. 3/4"-0" ROCK BEDDING EXTENDING A MINIMUM OF 6 INCHES IN ALL DIRECTIONS FROM OUTERMOST PORTIONS OF PIPE EXTERIOR
   B. SERVICES SHALL HAVE FULL SAND ENCASEMENT TO PROTECT PIPING

FOREST GROVE OREGON	D.I.P WATERLINE BEDDING AND BACKFILL DETAILS	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 404
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\WATER\DIP BEDDING AND BACKFILL.dwg			LAST REV. 7/18/22



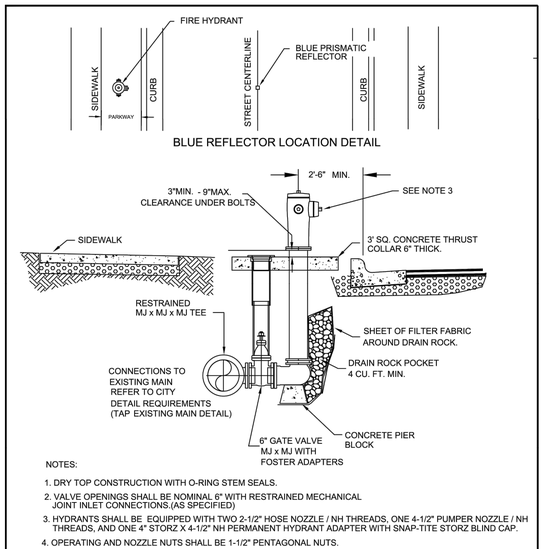
SIZE	UTILITY VAULT WITH FDC *	UTILITY VAULT W/0 FDC *	BILCO DOOR *
3	577-WA	577-WA	J-5AL
4	577-WA	577-WA	J-5AL
6	676-WA	676-WA	J-5AL
8	687-WA	687-WA	JD-3AL
10	5106-LA	5106-LA	JD-3AL

* "OR EQUAL" APPROVED BY CITY ENGINEER

NOTES:

1. CONTRACTOR TO SEAL ALL OPENINGS IN VAULT WITH NON SHRINK GROUT
2. CLEARANCE BETWEEN WALL AND DEVICE 12"x1" MIN., EXCEPT 6"x1" FOR 660-WA VAULT
3. THRUST BLOCK 1'-0" MIN THICKNESS
4. DETECTOR METER TO READ IN CUBIC FEET
5. SET VAULT TOP FLUSH WITH GRADE AROUND EXISTING PEDESTRIAN AREAS (I.E. CURB, SIDEWALK, ETC)
6. PLATE STRAINER REQUIRED AND TO BE INSTALLED PER METER MANUFACTURERS SPECIFICATIONS.
7. CITY STANDARD PIPE: DUCTILE IRON OR TYPE "K" SOFT COPPER TUBING. JOINTS SHALL BE FULL MECHANICALLY RESTRAINED.

FOREST GROVE OREGON	DOUBLE CHECK DETECTOR ASSEMBLY	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 405
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\WATER\DOUBLE CHECK DETECTOR ASSEMBLY.dwg			LAST REV. 7/18/22



NOTES:

1. DRY TOP CONSTRUCTION WITH O-RING STEM SEALS.
2. VALVE OPENINGS SHALL BE NOMINAL 6" WITH RESTRAINED MECHANICAL JOINT INLET CONNECTIONS.(AS SPECIFIED)
3. HYDRANTS SHALL BE EQUIPPED WITH TWO 2-1/2" HOSE NOZZLE / NH THREADS, ONE 4-1/2" PUMPER NOZZLE / NH THREADS, AND ONE 4" STORZ X 4-1/2" NH PERMANENT HYDRANT ADAPTER WITH SNAP-TITE STORZ BLIND CAP.
4. OPERATING AND NOZZLE NUTS SHALL BE 1-1/2" PENTAGONAL NUTS.
5. THE MAIN VALVE SHALL OPEN WHEN TURNED COUNTERCLOCKWISE.
6. HYDRANTS SHALL BE OF THE BREAK-FLANGE OR SAFETY TOP TYPE AND CONFORM TO THE LATEST REVISION OF A.W.W.A. C502.
7. DEPTH OF BURY SHALL BE A MINIMUM OF 3 FEET.
8. COLOR: ACE HARDWARE OIL BASE "SAFETY RED". (APPLY 2 COATS AFTER INSTALLATION)
9. MUELLAR SUPER CENTURIAN 250 A-423, KENNEDY GUARDIAN K81D, M & H STYLE 929,CLOW MEDALLION.
10. 5 FOOT RADIUS OF CLEARANCE AROUND HYDRANT.
11. A BLUE PRISMATIC REFLECTOR (VIEWABLE FROM BOTH DIRECTIONS) PERPENDICULAR TO FIRE HYDRANT ON STREET CENTERLINE IS REQUIRED AT EVERY FIRE HYDRANT INSTALLATION.

FOREST GROVE OREGON	FIRE HYDRANT INSTALLATION WITH WATER MAIN IN PARKWAY	ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116	DRAWING NO. 406
			SCALE NONE
1w2k\eng\Eng Dept\STANDARD DETAILS\400s WATER\FIRE HYDRANT INSTALL W WATER MAIN IN PARKWAY.DWG			LAST REV. 9/21/23

NO.	DATE	DESCRIPTION	BY
1		REVISIONS	

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH, ADJUST THIS SHEET, ADJUST SCALES ACCORDINGLY

DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
RENEWS: 6/30/2026

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

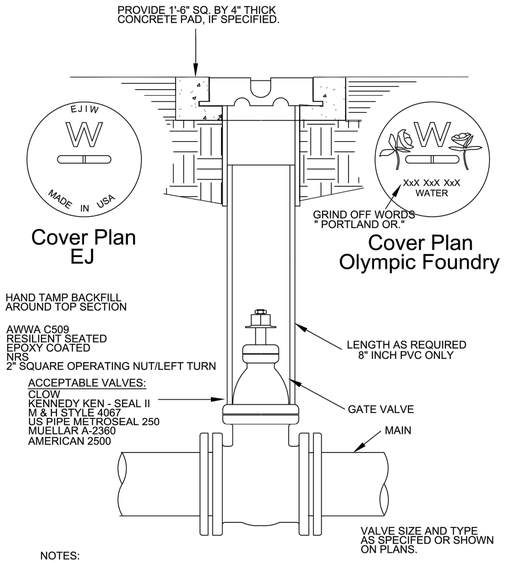
STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

DETAILS (FOREST GROVE)

DRAWING
C6.1

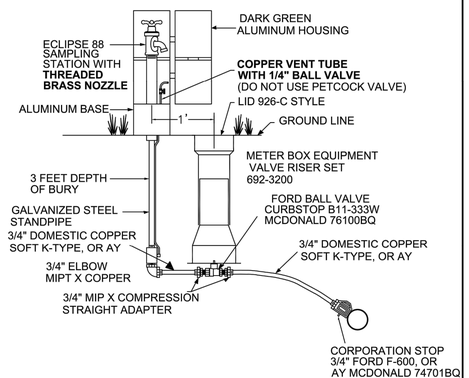
JOB NUMBER
3547.0000.0

3/10/2025 3:37:04 PM
R:\Dwg\Studio3\1930 23rd Forest Grove\Civil\Plots\Notes and Details.dwg, (C6.1 tab)



NOTES:
1. ORDER MJ GATE VALVES WITHOUT ACCESSORIES
2. PORTLAND WATER BUREAU STANDARD VALVE BOX AND COVER AS MANUFACTURED BY OLYMPIC FOUNDRY:
   - 8" CAST IRON VALVE BOX BODY/PORTLAND STYLE PART#15-13-5605
   - 8" CAST IRON VALVE BOX LID /PORTLAND STYLE PART#15-13-5607
   - GRIND OFF WORDS "PORTLAND OR. " LEAVE WORD "WATER".
   - BITUMINOUS COATING ON VALVE BODY + LID.
3. or EJ 8-INCH MODEL 00366310-TOP SECTION AND 00366329-COVER

FOREST GROVE OREGON | GATE VALVE & BOX SETTING DETAIL | ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116 | DRAWING NO. 408 | SCALE NONE | LAST REV. 9/21/23
\\se2k\engr\Eng Dept\STANDARD DETAILS\400s WATERGATE VALVE BOX.DWG



SAMPLING STATIONS SHALL BE 3' BURY, WITH A 3/4" FIP INLET, AND A 3/4" THREADED BRASS HOSE NOZZLE.

ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NONREMOVABLE, ALUMINUM-CAST HOUSING.

WHEN OPENED, THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND THE WATER WILL FLOW IN AN ALL BRASS WATERWAY.

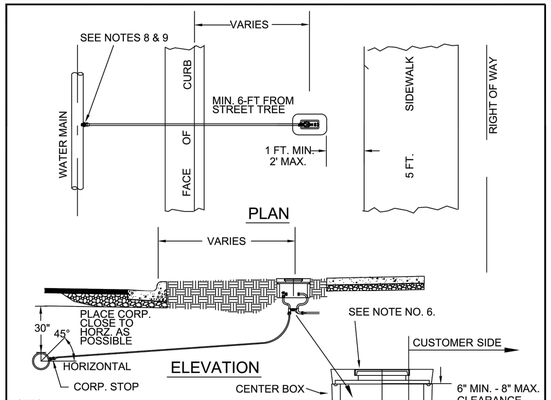
ALL WORKING PARTS WILL ALSO BE OF BRASS AND BE REMOVABLE FROM ABOVE GROUND WITH NO DIGGING. EXTERIOR PIPING SHALL BE GALVANIZED STEEL (BRASS PIPE ALSO AVAILABLE).

A COPPER VENT TUBE WILL ENABLE EACH STATION TO BE PUMPED FREE OF STANDING WATER TO PREVENT FREEZING AND TO MINIMIZE BACTERIA GROWTH.

ECLIPSE NO. 88 SAMPLING STATION SHALL BE MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS, MO 63102.

PAINT SHALL BE DARK GREEN AS PROVIDED BY KUPFERLE FOUNDRY OR EQUAL.

FOREST GROVE OREGON | WATER SAMPLING STATION — ECLIPSE NO. 88 SAMPLING STATION | ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116 | DRAWING NO. 409 | SCALE NONE | LAST REV. 9/21/23
\\se2k\engr\Eng Dept\STANDARD DETAILS\400s WATERSAMPLE STATION.dwg



NOTES:
1. SPECIFICATIONS FOR METER SETTERS FOR NEW SERVICES:
   A. 1" METERS SETTER (3/4" OR 1" CITY STADARD METER FITS THE 1" METER SETTER): FORD VB-74-84W-41-44-G(10" HIGH), MUELLER 399B2478-R/1H14222(12" HIGH), OR AY MCDONALD 739-410WXQQ 44
   B. 1-1/2" METER SETTER: FORD VBH76-86-18B-11-66, MUELLER 1 1/2" COPPERSETTER 096B2429-2, OR AY MCDONALD METER SETTER 739B612WDQQ 665
   C. 2" METER SETTER: FORD VBH77-87-18B-11-77 MUELLER 2" COPPERSETTER 106B2429-2, OR AY MCDONALD METER SETTER 739B718WDQQ 775
2. LOCKING WING NUT, BALL TYPE ANGLE STOP, INLET CTS/PE COMPRESSION OUTLET DUAL PURPOSE NUT.
3. OTHER BRANDS ARE ACCEPTABLE IF THEY MEET THE ABOVE SPECIFICATIONS.
4. SPECIFICATIONS FOR WATER SERVICE TUBING.
   A. COPPER TUBING: ASST. B88, TYPE K SOFT 60'COILS / 40'COILS.
5. INSTALL TUBING WITH 6" SAND (ENCASEMENT ENTIRE OUTSIDE OF TUBING).
6. INSTALL ARMORCAST BRAND WITH MOUSE HOLES. POLYMER CONCRETE P6000485 12" x 20" x 12" ROTOCAST BOX WITH A6000484RCI 12' X 20" X 1 3/4" RPM COVER W/CAST IRON READ LID OR POLYMER CONCRETE P6001534X18 17"X30" X 18" ROTOCAST BOX WITH A6001643RCI 17" X 30" X 2" RPM COVER WITH CAST IRON READ LID.
7. WATER SERVICE SHALL HAVE MINIMUM 6 FEET CLEARANCE FROM STREET TREES.
8. WET TAPPING OF EXISTING PUBLIC WATER MAIN SHALL BE BY A & A DRILLING SERVICES OR CITY APPROVED EQUAL.
9. CONNECTION TO EXISTING PUBLIC WATER MAINS SHALL BE AS FOLLOWS:
   A. WET TAPS FOR1" WATER SERVICES SHALL USE 1" CORP STOPS WITH CC THREADS.
   B. WET TAPS FOR 1 1/2" AND 2" WATER SERVICES SHALL USE DOUBLE STRAP SERVICE SADDLES. DOUBLE STRAP SERVICE SADDLES SHALL BE BY ROMAC INDUSTRIES INC. MODEL NUMBER 202S WITH 2" FIP OUTLET OR FORD IRON SERVICE SADDLES WITH 2" FIP OUTLET.
   C. 1 1/2" OR 2" WATER SERVICES SHALL INCLUDE A 1 1/2" OR 2" BALL CORP STOP WITH MIPTXCTS THREADS, RESPECTIVELY.
   D. WET TAPS LARGER THAN 2" SHALL BE PER CITY'S WET TAP STANDARD DETAIL.

FOREST GROVE OREGON | WATER SERVICE TYPICAL INSTALLATION | ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116 | DRAWING NO. 410 | SCALE NONE | LAST REV. 9/21/23
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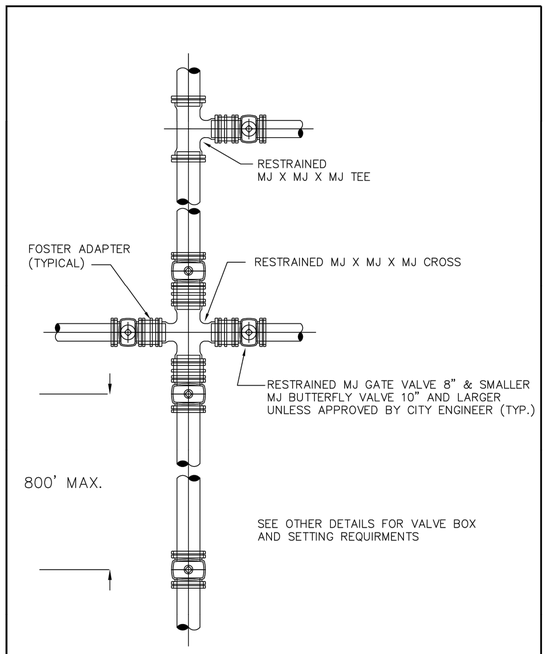

FOREST GROVE OREGON | TYPICAL GATE VALVE LOCATION | ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116 | DRAWING NO. 412 | SCALE NONE | LAST REV. 9/21/23
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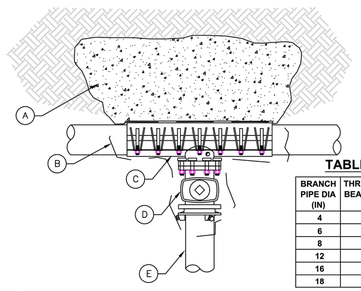

TABLE 1

BRANCH PIPE DIA (IN)	THRUST BLOCK BEARING AREA (SF)
4	1.3
6	2.8
8	5.0
12	11.3
16	20.1
18	26.0

KEYNOTES:
- A. CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH. THRUST BLOCK SIZE SHALL BE PER TABLE 1 AND SHALL NOT BE LESS THAN ONE FOOT IN ANY DIMENSION. CONCRETE SHALL BE CLASS 3500 (6.5 SACK MIN.)
- B. WRAP TAPPING SADDLE AND VALVE WITH 3 LAYERS OF 3 MIL PVC PRIOR TO POURING THRUST BLOCK AND BACKFILLING. EXTEND PVC 6" MINIMUM BEYOND SADDLE AND VALVE AND SECURE TO PIPE WITH DUCT TAPE.
- C. STAINLESS STEEL TAPPING SADDLE WITH GASKET AND FLANGED CONNECTION.
- D. LINE-SIZE GATE VALVE (FLG X MJ) PER CITY OF FOREST GROVE DETAIL AND SPECIFICATION.
- E. CITY STANDARD PIPE: DUCTILE IRON OR TYPE "K" SOFT COPPER TUBING. JOINTS ON BRANCH PIPE SHALL BE FULLY MECHANICALLY RESTRAINED.

GENERAL NOTES:
1. BEFORE INSTALLING TAPPING SADDLE, CONTRACTOR SHALL THOROUGHLY CLEAN PIPE TO REMOVE ALL DIRT, ROCKS, AND OTHER FOREIGN MATERIAL FROM PIPE WHERE SADDLE WILL BE INSTALLED.
2. SADDLE BOLTS SHALL BE TORQUED TO MANUFACTURER'S SPECIFICATIONS.
3. CONTRACTOR SHALL ENSURE THAT GASKET IS PROPERLY ALIGNED AND FREE OF FOREIGN MATERIAL PRIOR TO TIGHTENING SADDLE.
4. SADDLE LOCATION AND INSTALLATION SHALL BE APPROVED BY THE CITY OF FOREST GROVE ENGINEERING DEPARTMENT.
5. CONTRACTOR SHALL AIR TEST SADDLE TO 40 PSI PRIOR TO TAPPING
6. CONTRACTOR SHALL FLUSH AND PRESSURE TEST VALVE FOR PRIOR TO BACKFILLING.
7. APPROVED TAPPING SLEEVES FOR USE IN CITY OF FOREST GROVE JURISDICTION: JCM 432 SS, ROMAC SST WITH STAINLESS STEEL FLANGE, OR CITY OF FOREST GROVE APPROVAL EQUAL.
8. PROPOSED CONNECTION AND TYPE OF CONNECTION TO CITY WATER SYSTEM NEEDS TO BE GIVEN APPROVAL BY THE CITY PRIOR TO ACTUAL CONNECTION WORK. CITY NEEDS TO BE GIVEN ADVANCED NOTIFICATION (at least 24 hours) PRIOR TO CONNECTION, NEEDING TO ISOLATE, OR TAPPING, THE FOREST GROVE WATER SYSTEM. NOTIFICATION SHALL BE TO WATER DEPARTMENT, Lonny Schmidt AT 503.702.5949 OR 503.992.3258 AND ENGINEERING AT 503.992.3228. ALL WET TAPS SHALL BE INSTALLED BY A CONTRACTOR APPROVED BY THE CITY OF FOREST GROVE AND UNDER THE DIRECTION OF A WATER DEPARTMENT REPRESENTATIVE. SEE CITY STANDARD DETAIL FOR WET TAP. CONTACT THE WATER DEPARTMENT FOR A LIST OF APPROVED TAPPING CONTRACTORS.

FOREST GROVE OREGON | WET TAP | ENGINEERING DEPARTMENT 1924 COUNCIL STREET P.O. BOX 326 FOREST GROVE, OR 97116 | DRAWING NO. 414 | SCALE NONE | LAST REV. 9/21/23
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		REVISIONS	

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING 1"
IF NOT ONE INCH, ADJUST THIS SHEET, ADJUST SCALES ACCORDINGLY

DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER OREGON NOV. 12, 2008 WILLIAM J. WELLS
REVIEW
RENEWS: 6/30/2026

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

DETAILS (FOREST GROVE)

DRAWING C6.2

JOB NUMBER 3547.0000.0

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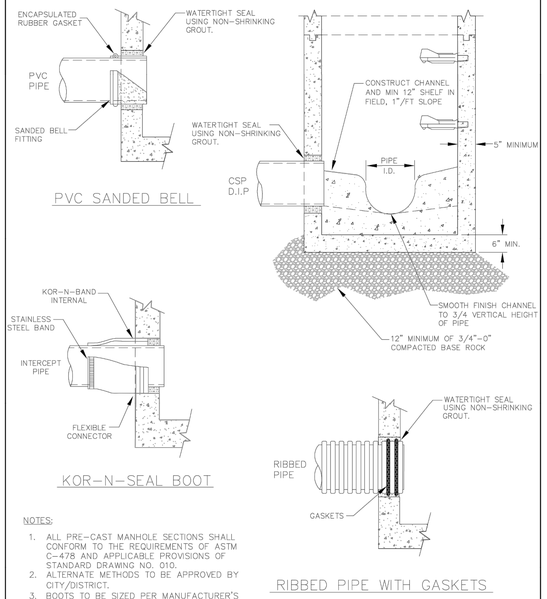


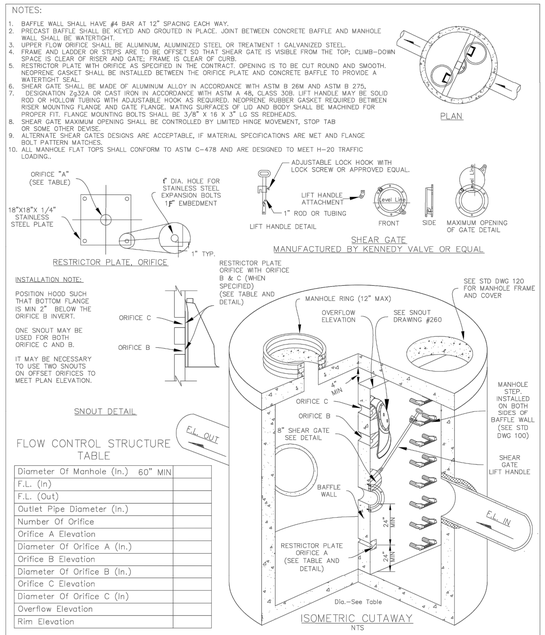
NOTES:

1. ALL PRE-CAST MANHOLE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478 AND APPLICABLE PROVISIONS OF STANDARD DRAWING NO. 010.
2. ALTERNATE METHODS TO BE APPROVED BY CITY/DISTRICT.
3. BOOTS TO BE SIZED PER MANUFACTURER'S RECOMMENDATIONS/SPECIFICATIONS.

MANHOLE CONNECTIONS

DRAWING NO. 030 — REVISED 10-31-19

CleanWater Services



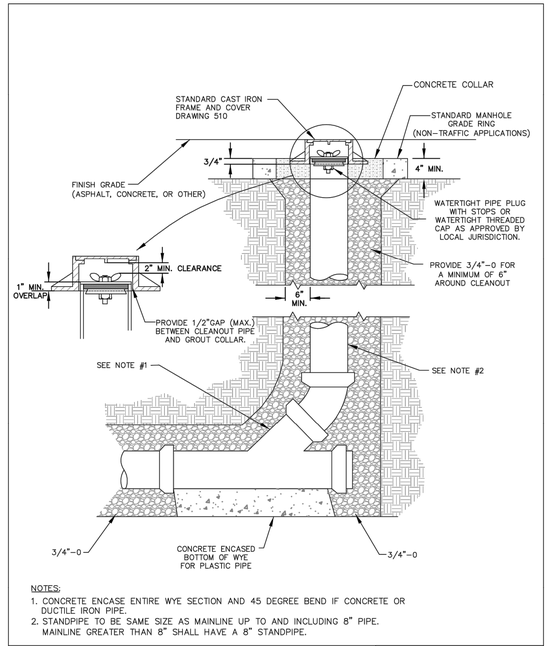
FLOW CONTROL STRUCTURE TABLE

Diameter Of Manhole (In.) 60" MIN	
F.L. (In)	
F.L. (Out)	
Outlet Pipe Diameter (In.)	
Number Of Orifice	
Orifice A Elevation	
Diameter Of Orifice A (In.)	
Orifice B Elevation	
Diameter Of Orifice B (In.)	
Orifice C Elevation	
Diameter Of Orifice C (In)	
Overflow Elevation	
Rim Elevation	

FLOW CONTROL STRUCTURE DETAIL

DRAWING NO. 270 — REVISED 10-31-19

CleanWater Services



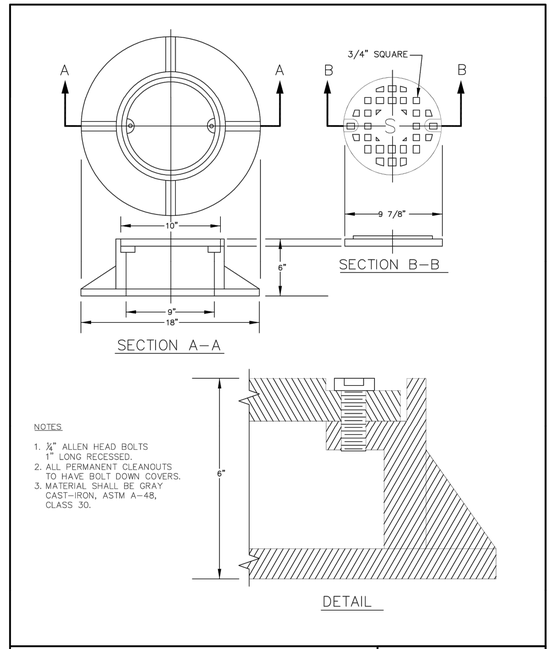
NOTES:

1. CONCRETE ENCASE ENTIRE WYE SECTION AND 45 DEGREE BEND IF CONCRETE OR DUCTILE IRON PIPE.
2. STANDPIPE TO BE SAME SIZE AS MAINLINE UP TO AND INCLUDING 8" PIPE. MAINLINE GREATER THAN 8" SHALL HAVE A 8" STANDPIPE.

STANDARD CLEANOUT

DRAWING NO. 500 — REVISED 10-31-19

CleanWater Services



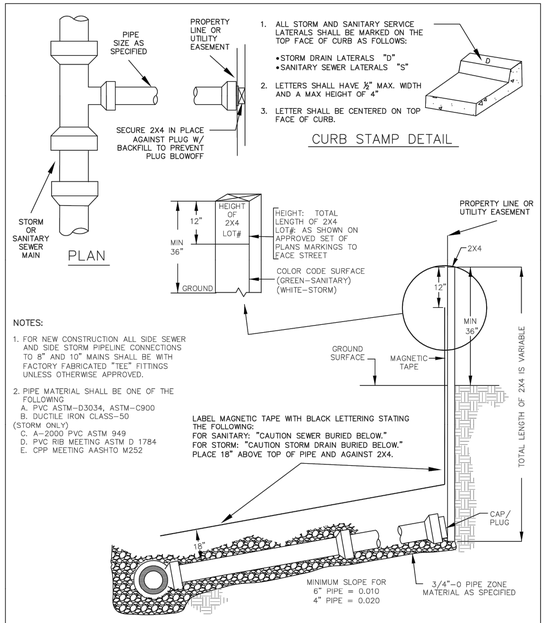
NOTES

1. ¼" ALLEN HEAD BOLTS 1" LONG RECESSED.
2. ALL PERMANENT CLEANOUTS TO HAVE BOLT DOWN COVERS.
3. MATERIAL SHALL BE GRAY CAST-IRON, ASTM A-48, CLASS 30.

CLEANOUT FRAME AND COVER

DRAWING NO. 510 — REVISED 10-31-19

CleanWater Services



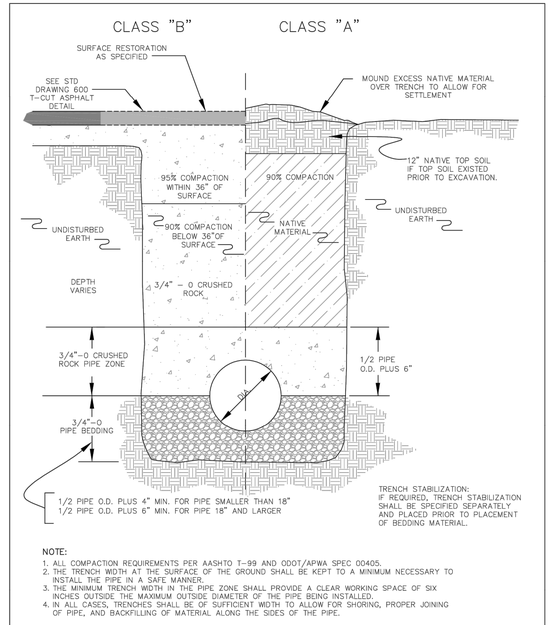
NOTES:

1. FOR NEW CONSTRUCTION ALL SIDE SEWER AND SIDE STORM PIPELINE CONNECTIONS TO 8" AND 10" MAINS SHALL BE WITH FACTORY FABRICATED "TEE" FITTINGS UNLESS OTHERWISE APPROVED.
2. PIPE MATERIAL SHALL BE ONE OF THE FOLLOWING
   A. PVC ASTM-D3034, ASTM-C900
   B. DUCTILE IRON CLASS-50
   (STORM ONLY)
   C. A-2000 PVC ASTM 949
   D. PVC RIB MEETING ASTM D 1784
   E. CPP MEETING AASHTO M252

SIDE SEWER / SIDE STORM PIPELINE

DRAWING NO. 520 — REVISED 10-31-19

CleanWater Services



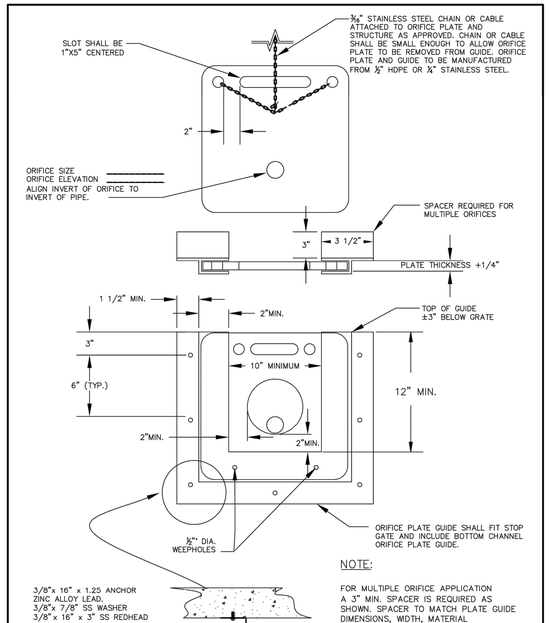
NOTE:

1. ALL COMPACTION REQUIREMENTS PER AASHTO T-99 AND ODOT/APWA SPEC 00405.
2. THE TRENCH WIDTH AT THE SURFACE OF THE GROUND SHALL BE KEPT TO A MINIMUM NECESSARY TO INSTALL THE PIPE IN A SAFE MANNER.
3. THE MINIMUM TRENCH WIDTH IN THE PIPE ZONE SHALL PROVIDE A CLEAR WORKING SPACE OF SIX INCHES OUTSIDE THE MAXIMUM OUTSIDE DIAMETER OF THE PIPE BEING INSTALLED.
4. IN ALL CASES, TRENCHES SHALL BE OF SUFFICIENT WIDTH TO ALLOW FOR SHORING, PROPER JOINING OF PIPE, AND BACKFILLING OF MATERIAL ALONG THE SIDES OF THE PIPE.

TRENCH BACKFILL DETAILS

DRAWING NO. 590 — REVISED 10-31-19

CleanWater Services



NOTE:

FOR MULTIPLE ORIFICE APPLICATION A 3" MIN. SPACER IS REQUIRED AS SHOWN. SPACER TO MATCH PLATE GUIDE DIMENSIONS, WIDTH, MATERIAL WITH A WATERTIGHT SEAL.

ORIFICE PLATE AND GUIDE

DRAWING NO. 711 — REVISED 10-31-19

CleanWater Services

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DSN. JW
DRN. IH
CKD. JW
DATE: NOV 24

REGISTERED PROFESSIONAL ENGINEER
OREGON
NOV. 12, 2008
WILLIAM J. WELLS
REVIEW
RENEWS: 6/30/2026

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS AND PLANNERS
3841 Fairview Industrial Dr. S.E., Suite 100, Salem, OR 97302
Phone: (503) 585-2474 Fax: (503) 585-3986
E-mail: westech@westech-eng.com

STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

DETAILS (CLEAN WATER SERVICES)

DRAWING
C6.3

JOB NUMBER
3547.0000.0

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SITE SPECIFIC DATA	
Structure ID	-
Treatment Flow Rate (gpm/cfs)	-
Peak Flow Rate (cfs)	-
Cartridge Quantity	-
Rim Elevation	-

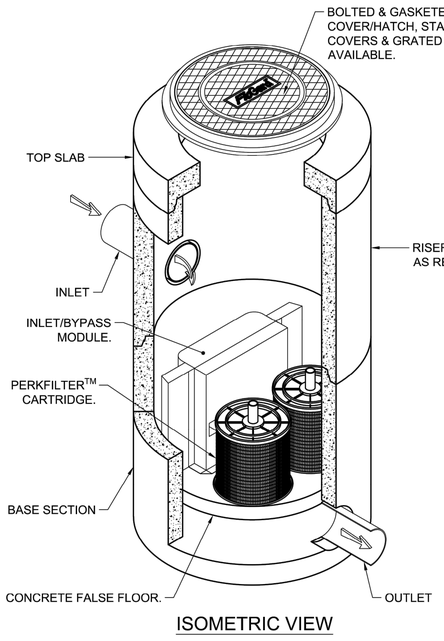
Pipe Data	Pipe Location	Pipe Size	Pipe Type	Invert Elevation
Inlet	-	-	-	-
Outlet	-	-	-	-

Notes:
-

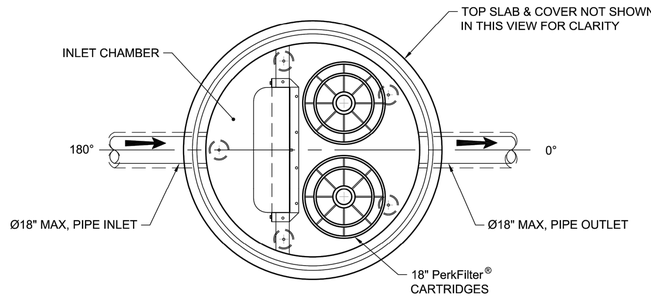
MINIMUM DEPTH	
Outlet Pipe Size	Minimum Rim to Outlet Depth
Ø6"	4.42'
Ø8"	4.67'
Ø10"	4.92'
Ø12"	5.17'
Ø15"	5.42'
Ø18"	5.67'

PERFORMANCE SPECIFICATIONS	
Peak Treatment Capacities: [1]	
Max. Cartridge Quantity	2
NJDEP 80% Removal, 75 micron	40.8 gpm / 0.091 cfs
WA Ecology GULD - Basic & Phosphorus	20.4 gpm / 0.045 cfs
Max. Bypass Capacity	3.05 cfs

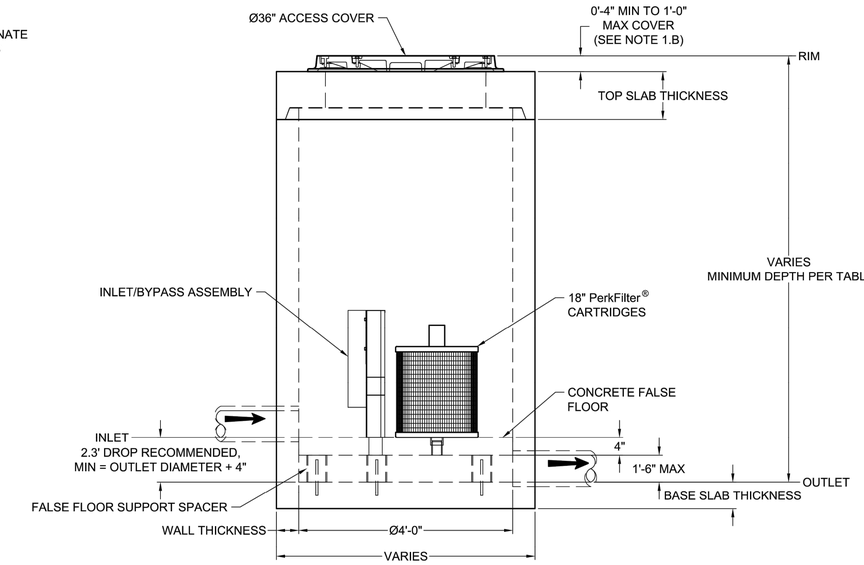
1. Contact Oldcastle for alternative treatment and peak flow capacities.



ISOMETRIC VIEW



PLAN VIEW



ELEVATION VIEW

NOTES:

1. DESIGN LOADINGS:
   A. AASHTO HS-20-44 (WITH IMPACT)
   B. DESIGN SOIL COVER: 1'-0" MAXIMUM
   C. ASSUMED WATER TABLE: BELOW INVERT.
   D. LATERAL EARTH PRESSURE: 45 PCF (DRAINED)
   E. LATERAL LIVE LOAD SURCHARGE: 80 PSF (APPLIED TO 8'-0" BELOW GRADE)
   F. NO LATERAL SURCHARGE FROM ADJACENT BUILDINGS, WALLS, PIERS, OR FOUNDATIONS.
2. CONCRETE 28-DAY MINIMUM COMPRESSIVE STRENGTH: 5,000 PSI MINIMUM.
3. REINFORCING: REBAR, ASTM A615/A706, GRADE 60
4. CEMENT: ASTM C150
5. REQUIRED ALLOWABLE SOIL BEARING CAPACITY: 2,500 PSF
6. REFERENCE STANDARD:
   A. ASTM C 478
   B. ASTM C 497
7. THIS STRUCTURE IS DESIGNED TO THE PARAMETERS NOTED HEREIN. ENGINEER-OF-RECORD SHALL VERIFY THAT NOTED PARAMETERS MEET OR EXCEED PROJECT REQUIREMENTS. IF DESIGN PARAMETERS ARE INCORRECT, REVIEWING ENGINEER/AUTHORITY SHALL NOTIFY OLDCASTLE INFRASTRUCTURE UPON REVIEW OF THIS SUBMITTAL.
8. OVERSIZED HOLES TO ACCOMMODATE SPECIFIC PIPE TYPE MUST BE CONCENTRIC TO PIPE ID. AFTER PIPES ARE INSTALLED, ALL ANNULAR SPACES SHALL BE FILLED WITH A MINIMUM OF 3,000 PSI CONCRETE FOR FULL THICKNESS OF PRECAST WALLS. PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE.
9. CONTRACTOR RESPONSIBLE TO VERIFY ALL SIZES, LOCATIONS, AND ELEVATIONS OF OPENINGS.
10. CONTRACTOR RESPONSIBLE TO ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. COMPACTED AND LEVEL PER PROJECT SPECIFICATIONS).
11. SECTION HEIGHTS, SLAB/WALL THICKNESSES, AND KEYWAYS ARE SUBJECT TO CHANGE AS REQUIRED FOR SITE REQUIREMENTS AND/OR DUE TO PRODUCT AVAILABILITY AND PRODUCTION FACILITY CONSTRAINTS.
12. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT OLDCASTLE INFRASTRUCTURE.
13. MAXIMUM PICK WEIGHTS:
   A. TOP SLAB: XX,XXX LBS
   B. RISER: XX,XXX LBS
   C. BASE: XX,XXX LBS*
   (* COMBINED WEIGHT OF BASE INCLUDES FALSE FLOOR, AND PRODUCT INTERNALS.)
14. INTERNALS SHALL CONSIST OF CARTRIDGES, INLET/BYPASS ASSEMBLIES, FALSE FLOOR AND FALSE FLOOR SUPPORT SPACERS.

Media Filtration

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PerkFilter® Manhole (STANDARD)

Ø48" with 18" Cartridges

CUSTOMER: -

PROJECT NAME: -

SHEET NAME	REVISION	SHEET
Specifier Drawing PFMH-48-18	-	1 OF 1
	REV DATE: -	

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		REVISIONS	
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STUDIO 3 ARCHITECTURE
1930 23RD FOREST GROVE

DETAILS (OLDCASTLE)

DRAWING
C6.4

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