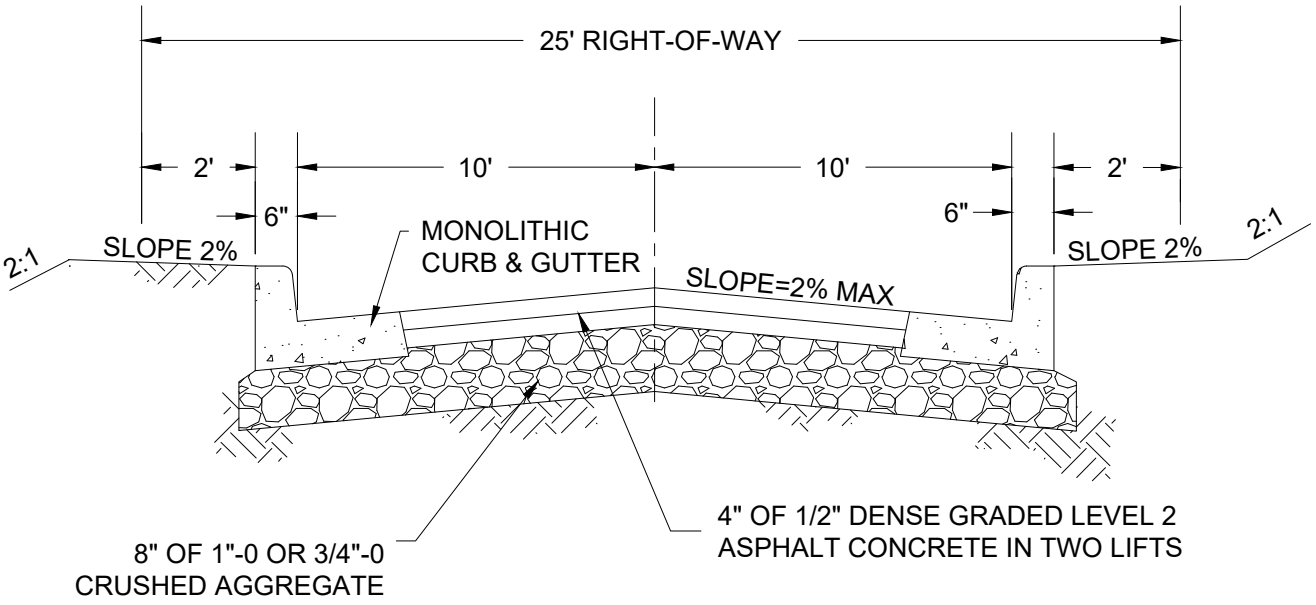


NOTES:

1. ASPHALT CONCRETE SHALL BE COMPACTED TO 91% OF RICE DENSITY.
2. SUBGRADE AND BASEROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY PER ASTM D1557.
3. NO FIRE HYDRANTS ARE TO BE LOCATED ON A MINOR ACCESS STREET.
4. PUBLIC PARKING FOR VISITORS (MIN. 3 SPACES) AND A BRANCH TURNAROUND SHALL BE PROVIDED AT THE END OF THE MINOR ACCESS STREET. SEE STANDARD DETAIL 616. ADDITIONAL RIGHT-OF-WAY SHALL BE DEDICATED TO ACCOMMODATE ADDITIONAL PARKING.
5. A "DEAD END" SIGN SHALL BE POSTED AT THE ENTRANCE TO THE MINOR ACCESS STREET.
6. "NO PARKING" SHALL BE POSTED FOR THE ENTIRE LENGTH OF THE MINOR ACCESS STREET.
7. ONE ADDITIONAL OFF-STREET PARKING SPACE IS REQUIRED FOR EACH RESIDENTIAL UNIT THAT ACCESSES A MINOR ACCESS STREET.
8. ON DEVELOPMENT SITES WITH STEEP SLOPES, A SHED-SECTION MAY BE BUILT RATHER THAN A CROWNED CROSS-SECTION. IN THOSE CASES, THE MAXIMUM CROSS-SLOPE SHALL BE 5% AND NO WEEPHOLES ARE ALLOWED IN THE CURB ON THE UPHILL SIDE.

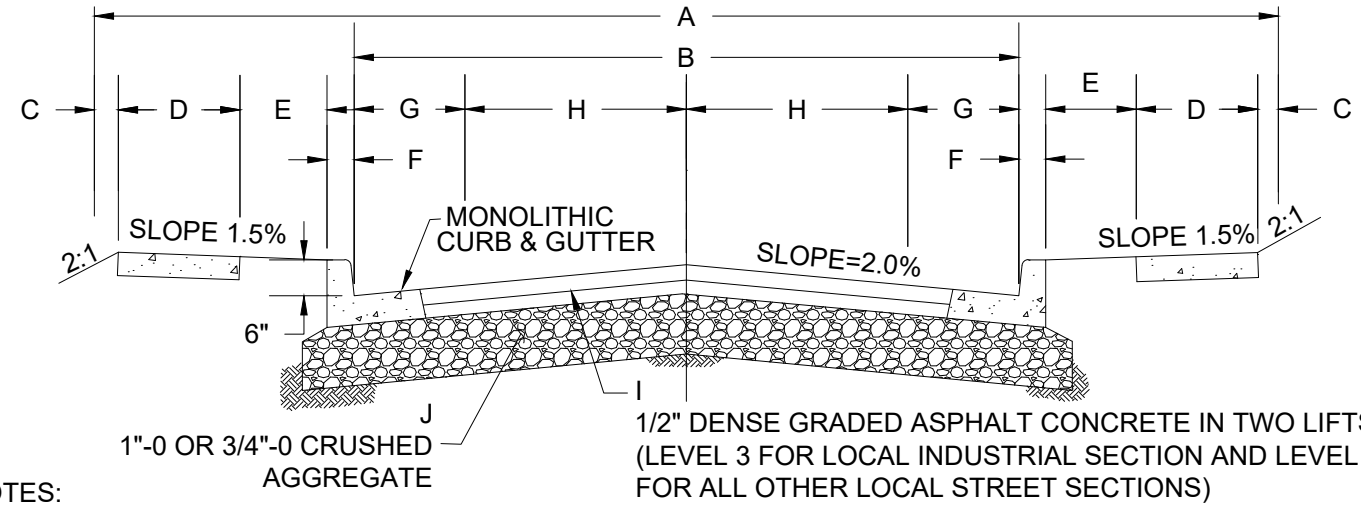
NTS

CITY OF GRESHAM

MINOR ACCESS STREET SECTION

PWS VERSION: JAN 2026

DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	604



NOTES:

1. ASPHALT CONCRETE SHALL BE COMPACTED TO 91% OF RELATIVE DENSITY.
2. SUBGRADE AND BASEROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY PER ASTM D1557.
3. IN HILLSIDE AND GEOLOGIC RISK OVERLAY DISTRICTS, RIGHT-OF-WAY WIDTH MAY BE 40' WITH A PAVEMENT WIDTH OF 28' AND 5' SIDEWALKS ON BOTH SIDES. CROSS SECTION WILL STILL BE REQUIRED TO PROVIDE ONE PARKING LANE TO ASSURE THAT ON-STREET PARKING IS ADEQUATE FOR ADJACENT USES, A REDUCED STREET DESIGN MAY CONSIDER CLUSTERED PARKING BAYS ADJACENT TO THE STREET, IF NEEDED.
4. THE SIDEWALK SHALL HAVE A MINIMUM 5' AREA CLEAR OF ALL OBSTACLES UNLESS APPROVED BY THE ENGINEER.
5. WHEN A HYDRANT IS LOCATED BEHIND THE SIDEWALK A 6' X 6' EASEMENT IS REQUIRED AROUND THE HYDRANT.
6. "NO PARKING" SHALL BE POSTED WITHIN 30 FEET OF THE CURB RETURN ON LOCAL STREETS.
7. MAXIMUM BLOCK LENGTH FOR A QUEUING STREET IS 400 FEET.
8. ON DEVELOPMENT SITES WITH STEEP SLOPES, A SHED-SECTION MAY BE BUILT RATHER THAN A CROWNED CROSS-SECTION. IN THOSE CASES, THE MAXIMUM CROSS-SLOPE SHALL BE 5% AND NO WEEPHOLES ARE ALLOWED IN THE CURB ON THE UPHILL SIDE.

STREET CROSS SECTION DIMENSIONS

FUNCTIONAL CLASSIFICATION	RIGHT-OF-WAY*	CURB TO CURB	MONUMENTATION STRIP	SIDEWALK	LANDSCAPE		CURB	PARKING	TRAVEL LANE	ASPHALT CONCRETE	CRUSHED AGGREGATE
					IN PLEASANT VALLEY, SPRINGWATER AND KELLEY CREEK HEADWATERS SPECIAL DISTRICTS	IN REMAINING CITY					
	A	B	C	D	E		F	G	H	I	J
LOCAL INDUSTRIAL*	60'	40'	6"	5'	6'	4'	6"	8'	12'	8"	16"
LOCAL COMMERCIAL*	56'	36'	6"	5'	6'	4'	6"	7'	11'	5"	16"
LOCAL TRANSITIONAL**	64'	32'	6"	5'	10'	10'	6"	7'	9'	4"	8"
LOCAL QUEUING**	58'	26'	6"	5'	10'	10'	6"	7'	6'	4"	8"

* RIGHT-OF-WAY WIDTH INCREASES BY 4 FEET WHEN IN PLEASANT VALLEY, SPRINGWATER, AND KELLEY CREEK HEADWATERS SPECIAL DISTRICTS.

** WHEN A FULL BLOCK IS NOT BEING CONSTRUCTED, SEE CITY OF GRESHAM PWS SECTION 6.02.05 NTS

CITY OF GRESHAM

LOCAL STREET SECTIONS

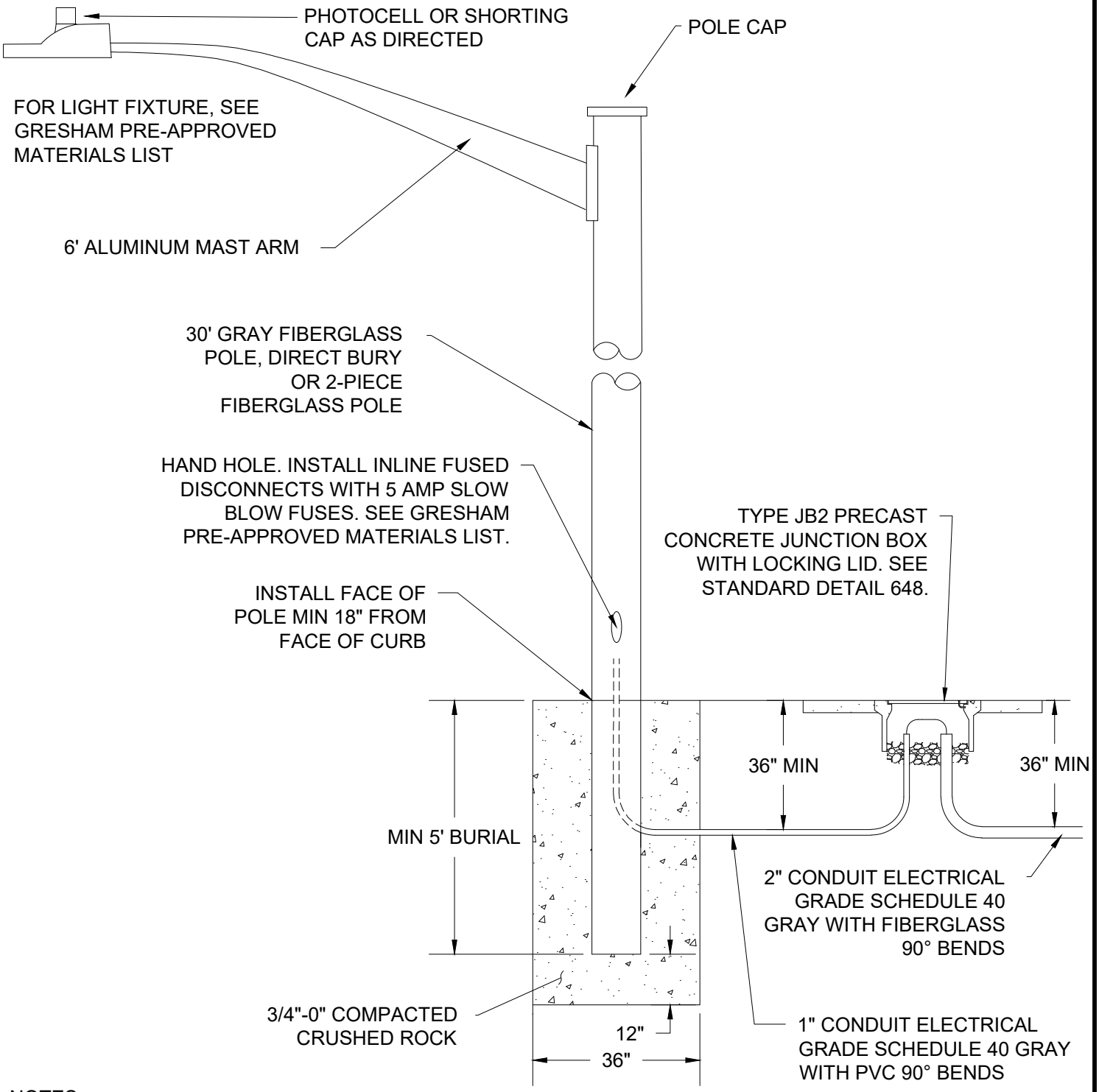
PWS VERSION: JAN 2026

DRAWN AAD

REV. DATE MARCH 2026

APPR.

DETAIL NO. 605



NOTES:

1. LUMINAIRE MOUNTING HEIGHT IS 25' ABOVE GROUND.
2. USE #10 AWG COPPER TC-ER 3-CONDUCTOR CABLE FROM FUSED DISCONNECT TO LIGHT FIXTURE. SEE PGE APPROVED PRODUCTS LIST. COLOR CODE: BLACK/RED/GREEN (240V), BLACK/WHITE/GREEN (120V).
3. INSTALL SHORTING CAP ON NEW STREETLIGHTS INSTALLED ON AN UNMETERED CITY ELECTRICAL SERVICE WITH CENTRAL PHOTO CONTROL.

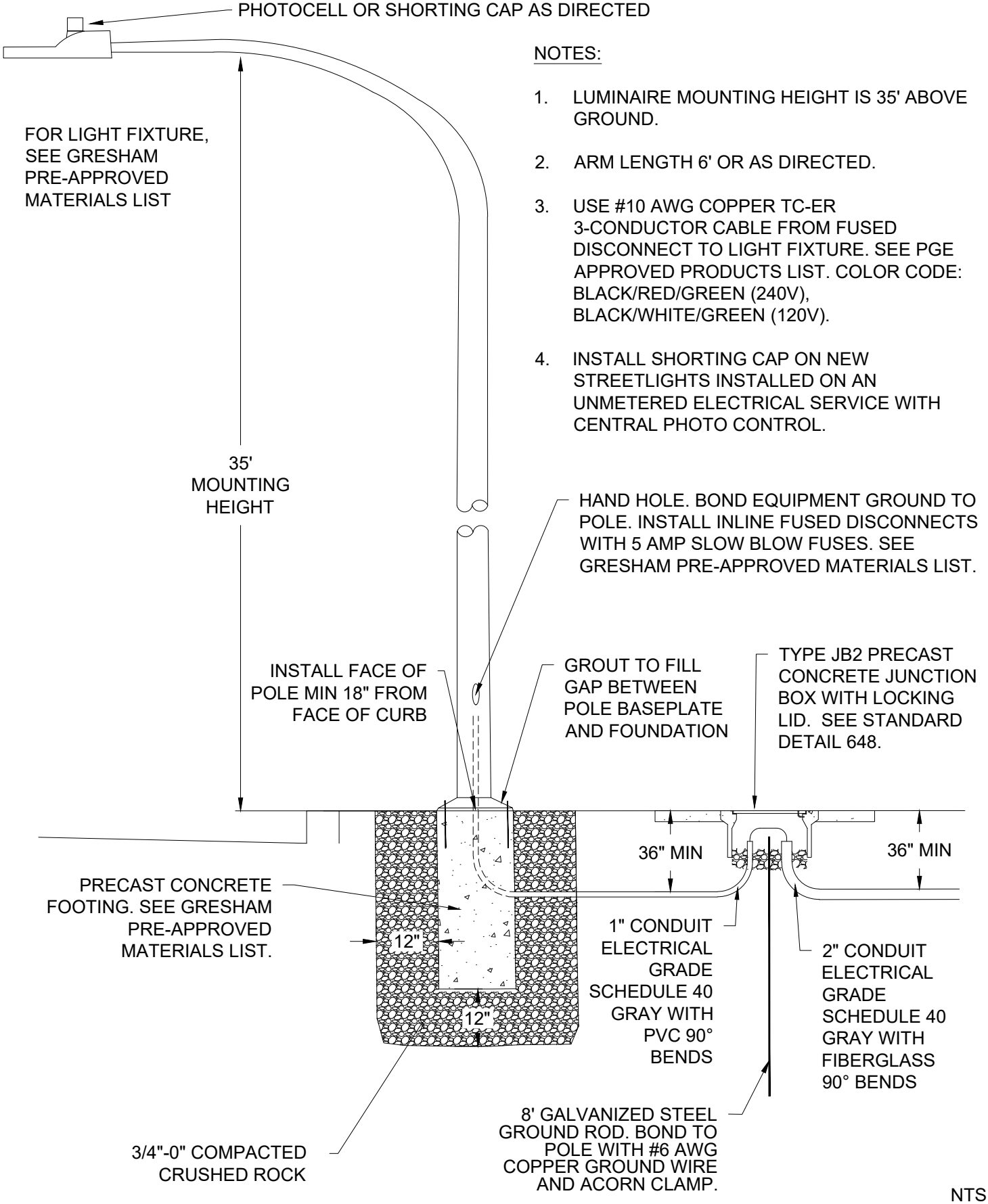
NTS

CITY OF GRESHAM

FIBERGLASS STREETLIGHT

PWS VERSION: JAN 2026

DRAWN	JG
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	643



NOTES:

1. LUMINAIRE MOUNTING HEIGHT IS 35' ABOVE GROUND.
2. ARM LENGTH 6' OR AS DIRECTED.
3. USE #10 AWG COPPER TC-ER 3-CONDUCTOR CABLE FROM FUSED DISCONNECT TO LIGHT FIXTURE. SEE PGE APPROVED PRODUCTS LIST. COLOR CODE: BLACK/RED/GREEN (240V), BLACK/WHITE/GREEN (120V).
4. INSTALL SHORTING CAP ON NEW STREETLIGHTS INSTALLED ON AN UNMETERED ELECTRICAL SERVICE WITH CENTRAL PHOTO CONTROL.

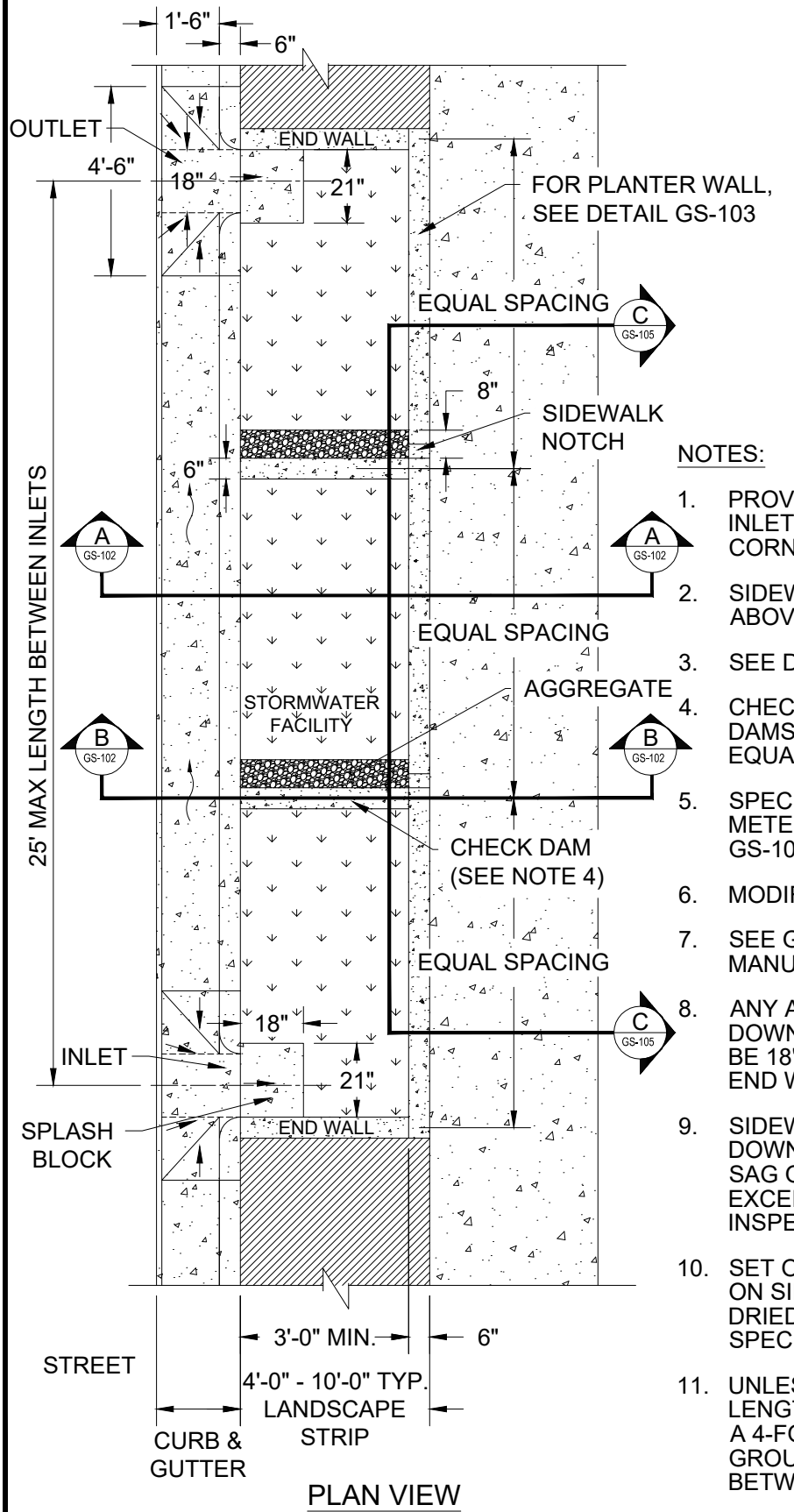
NTS

CITY OF GRESHAM

ALUMINUM DAVIT STREETLIGHT

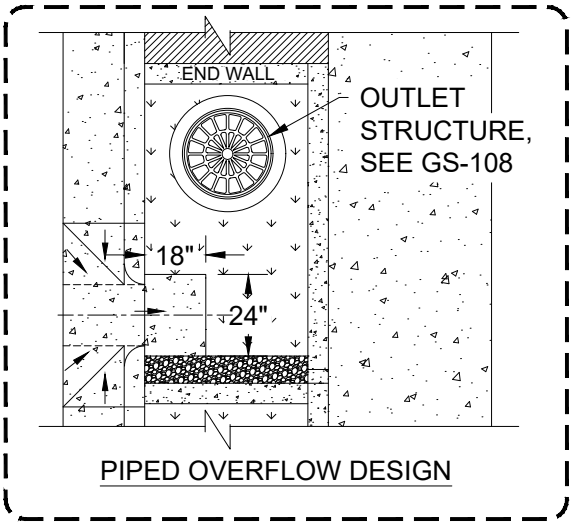
PWS VERSION: JAN 2026

DRAWN	JG
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	644



PLAN VIEW

NTS



PIPED OVERFLOW DESIGN

NOTES:

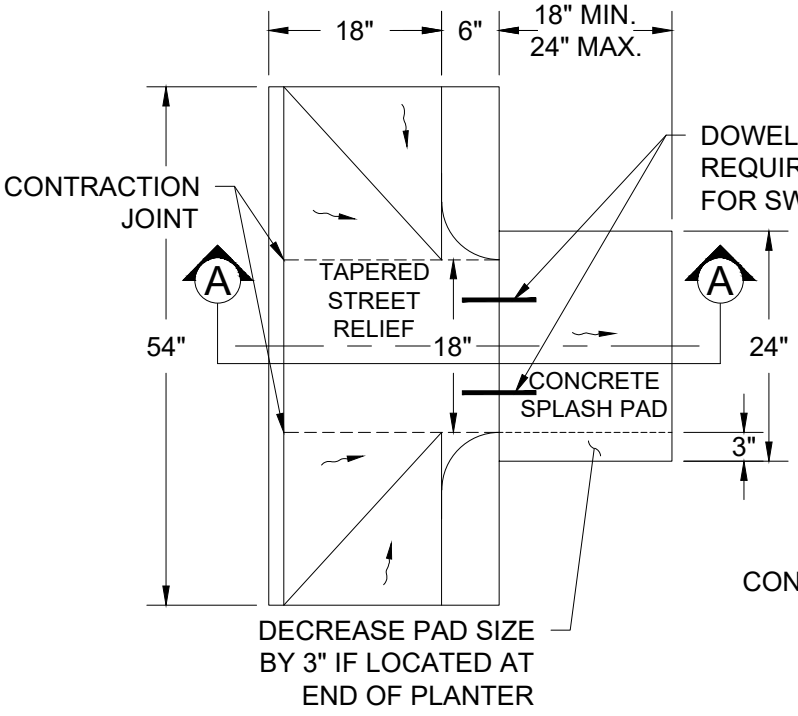
1. PROVIDE STATIONS AND ELEVATIONS AT EVERY INLET, OUTLET, CHECK DAM, PLANTER WALL CORNER, AND SIDEWALK NOTCH.
2. SIDEWALK NOTCH ELEVATION MUST BE SET ABOVE INLET AND OUTLET ELEVATIONS.
3. SEE DETAIL GS-104 FOR INLET DETAILS.
4. CHECK DAMS REQUIRED PER GS-105. CHECK DAMS SHALL BE EQUALLY SPACED TO CREATE EQUALLY SIZED CELLS.
5. SPECIAL REQUIREMENTS FOR WATER LINES, METERS, AND FIRE HYDRANTS; SEE DETAIL GS-109.
6. MODIFIED CURB AND GUTTER: SEE DETAIL GS-103.
7. SEE GRESHAM STORMWATER MANAGEMENT MANUAL FOR PLANTING GUIDANCE.
8. ANY ADDITIONAL INLETS SHALL BE LOCATED ON DOWNSTREAM SIDE OF CHECK DAMS AND SHALL BE 18" X 24" IF NOT LOCATED ADJACENT TO AN END WALL.
9. SIDEWALK NOTCHES TO BE LOCATED AT DOWNSTREAM SIDE OF EACH CHECK DAM, AT ANY SAG OR LOW POINT, AND AT INTERVALS NOT EXCEEDING 15 FEET OR AS DIRECTED BY THE INSPECTOR.
10. SET ONE "DRAINS TO RIVER" BUTTON CENTERED ON SIDEWALK TOE KICK BEFORE CONCRETE HAS DRIED. CONTACT CITY OF GRESHAM FOR BUTTON SPECIFICATIONS (TYPICAL).
11. UNLESS APPROVED BY THE MANAGER, MAXIMUM LENGTH OF SINGLE PLANTER SHALL BE 100 FEET. A 4-FOOT STEP-OUT AREA WITH NO ABOVE GROUND INFRASTRUCTURE SHALL BE PROVIDED BETWEEN ADJACENT PLANTERS.

CITY OF GRESHAM

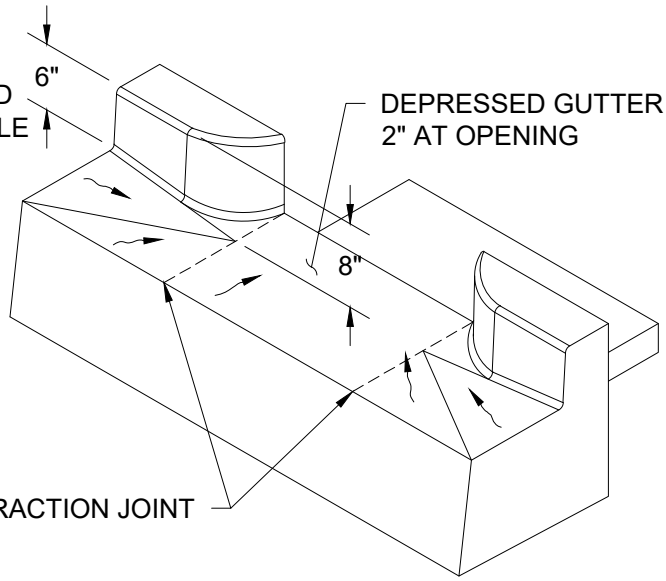
PLANTER PLAN VIEW

PWS VERSION: JAN 2026

DRAWN	KRB
REV. DATE	OCT 2025
APPR.	
DETAIL NO.	GS-101



PLAN



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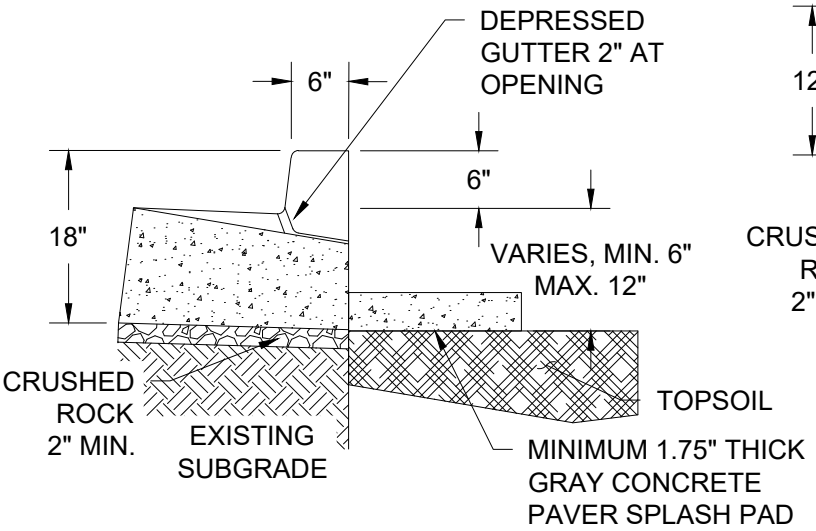
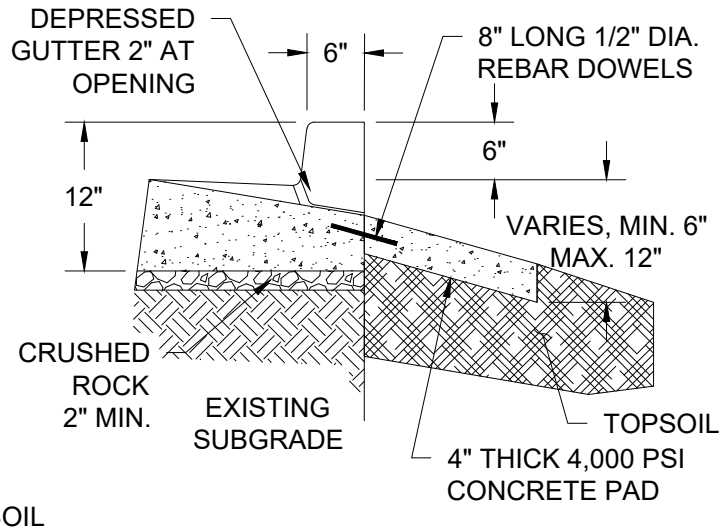


SECTION A-A (PLANTER)



SECTION A-A (SWALE)

NOTES:

1. REFER TO GS-103 FOR THICKENED MONOLITHIC CURB AND GUTTER. IF PRESENT, MATCH GUTTER PAN WIDTH OF ADJACENT CURB AND GUTTER.
2. SEE CHECK DAM DETAIL GS-105 FOR DISTANCE TO TOP OF SPLASH PAD.

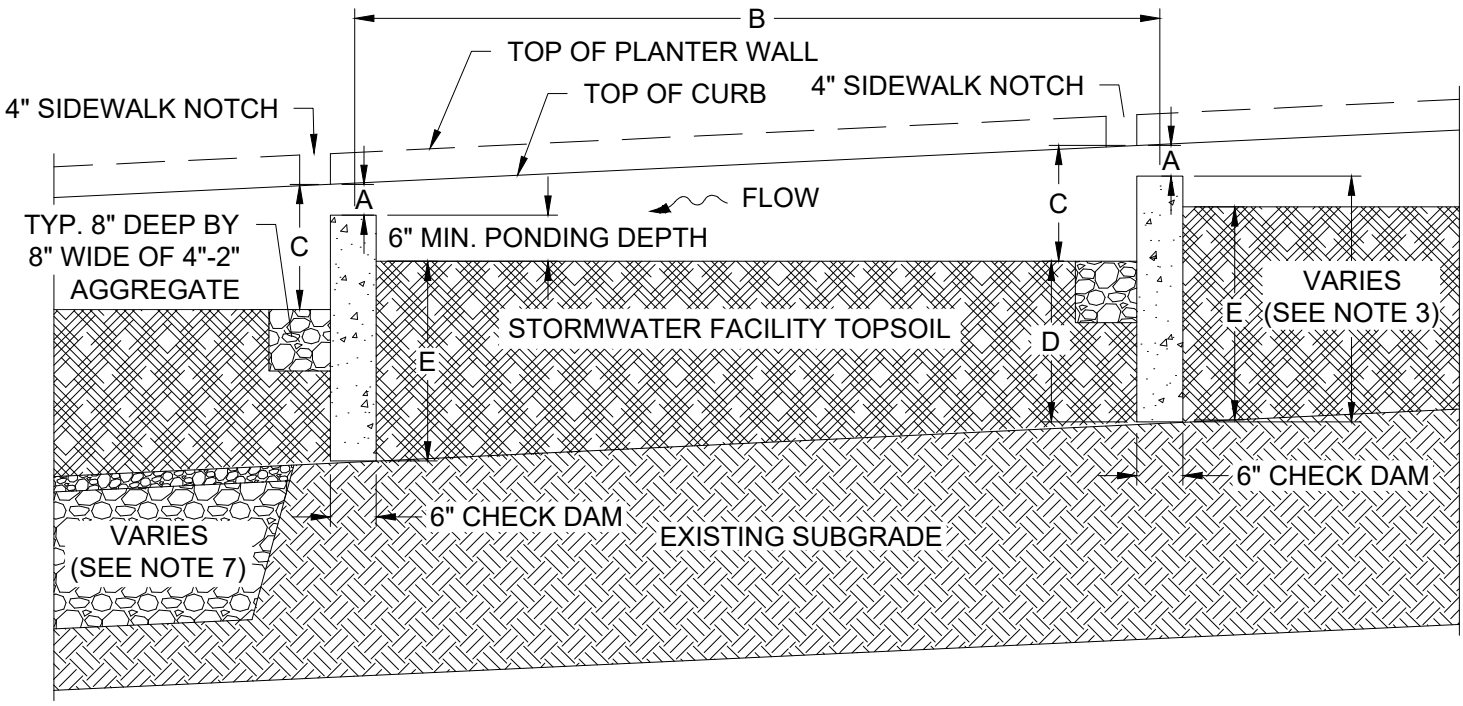
NTS

CITY OF GRESHAM

CONCRETE CURB INLET AND SPLASH PAD

PWS VERSION: JAN 2026

DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-104



SECTION C-C

ROAD GRADE	A (SEE NOTE 2)	MIN B	MAX B	C	D	E
>8%-15%	4"	5'	10'	18"	SEE GS-107 FOR DIMENSIONS	D + 8"
>4%-8%	5"	7.5'	15'	15"		D + 6"
0%-4%	6"	12.5'	25'	12"		D

NOTES:

1. WEIR WALL TO BE PLACED ON UNDISTURBED NATIVE SOIL, OR ON AGGREGATE IF REQUIRED.
2. TOP OF WEIR WALL SHALL BE A MINIMUM OF 1" BELOW THE UPSTREAM INLET GUTTERLINE ELEVATION.
3. WEIR WALL WIDTH IS 6". HEIGHT VARIES DEPENDING ON ROAD GRADE.
4. DIMENSION B VARIES BASED ON EQUAL SPACING REQUIREMENT ON GS-101.
5. SIDEWALK DRAINAGE NOTCHES TO BE LOCATED IMMEDIATELY DOWNSTREAM OF EACH WEIR WALL.
6. SIDEWALK NOTCH TO BE 1" LOWER THAN SIDEWALK AND SLOPED TO FACILITY. WIDTH IS 4" AND MINIMUM DEPTH 5" WHEN 4" TOE KICK PLANNED FOR.
7. SEE GS-107 TO DETERMINE WHEN AGGREGATE AND UNDERDRAIN ARE REQUIRED.

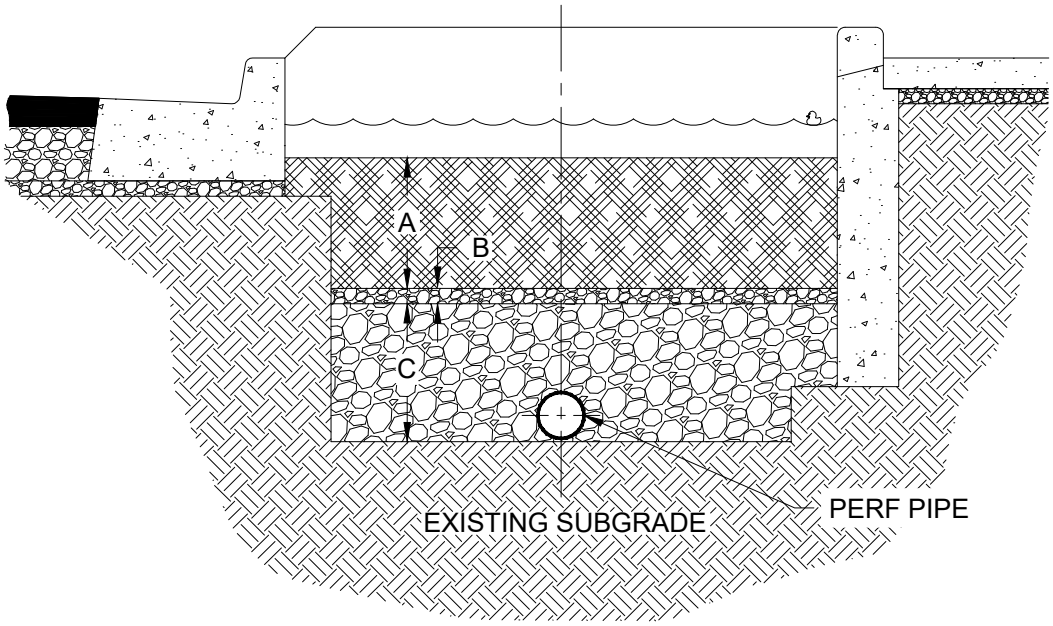
NTS

CITY OF GRESHAM

CONCRETE WEIR WALL FOR PLANTER

PWS VERSION: JAN 2026

DRAWN	KRB
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-105



CONDITION	A	B	C	6" PERF PIPE
GROUP A AND B SOILS	12" (MIN) TOPSOIL	0"	0"	NA
GROUP C AND D SOILS	18" (MIN) TOPSOIL	0"	0"	NA
LINED FACILITIES	24" (MIN) TOPSOIL	3" OF 1/4"-NO. 10 OPEN GRADED AGGREGATE	18" MIN. 1 1/2"-3/4" OPEN GRADED AGGREGATE	REQUIRED

NOTES:

1. SEE STORMWATER MANAGEMENT MANUAL FOR DETAILS ON STORMWATER FACILITY TOPSOIL SPECIFICATIONS.
2. LINED FACILITIES ONLY ALLOWED FOR STEEP SLOPES (>20%), UNCONSOLIDATED FILL (WITH SLOPES OR LOW INFILTRATION SOILS) OR IN CONTAMINATED SOILS, SEE GS-106 FOR DETAILS ON LINED FACILITIES.
3. TREES INCLUDED IN PLANTERS MUST FOLLOW GS-112. TREES ARE NOT ALLOWED IN LINED FACILITIES OR TO HAVE ROCK OR UNDERDRAIN UNDER PORTIONS OF THE FACILITY WHERE TREES WILL BE PLANTED.
4. MAXIMUM LENGTH OF PERFORATED PIPE IS 60 INCHES.

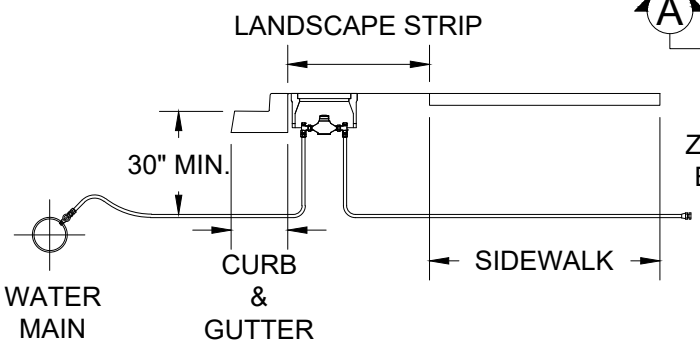
NTS

CITY OF GRESHAM

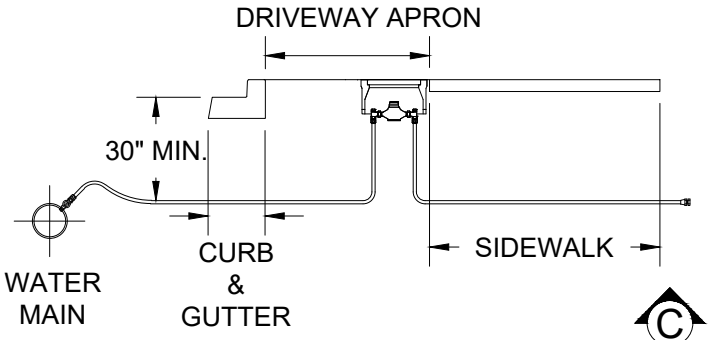
UNDERDRAIN AND ROCK REQUIREMENTS

PWS VERSION: JAN 2026

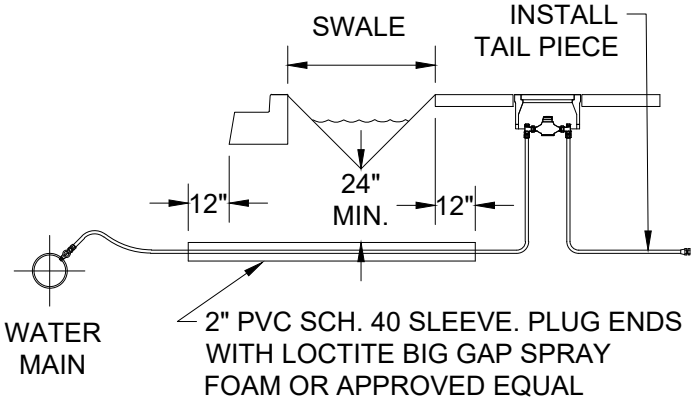
DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-107



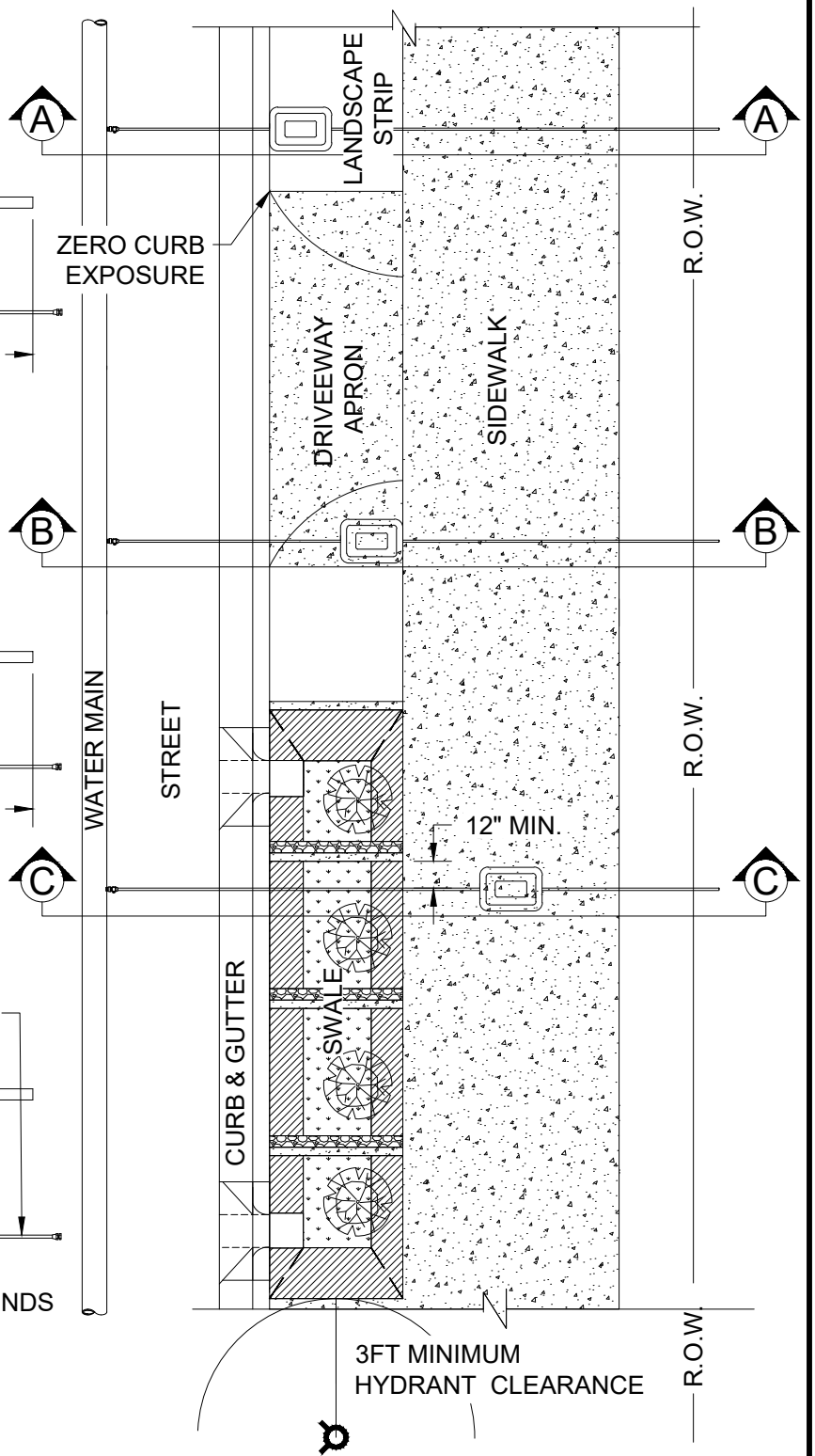
SECTION A-A



SECTION B-B



SECTION C-C



PLAN VIEW

NOTES:

1. REFER TO FIRE HYDRANT ASSEMBLY STANDARD DETAIL 501A. HYDRANTS MUST HAVE MIN 3FT CLEARANCE FROM THE EDGE OF STORMWATER FACILITY.
2. REFER TO 1" SERVICE ASSEMBLY, STANDARD DETAIL 502.

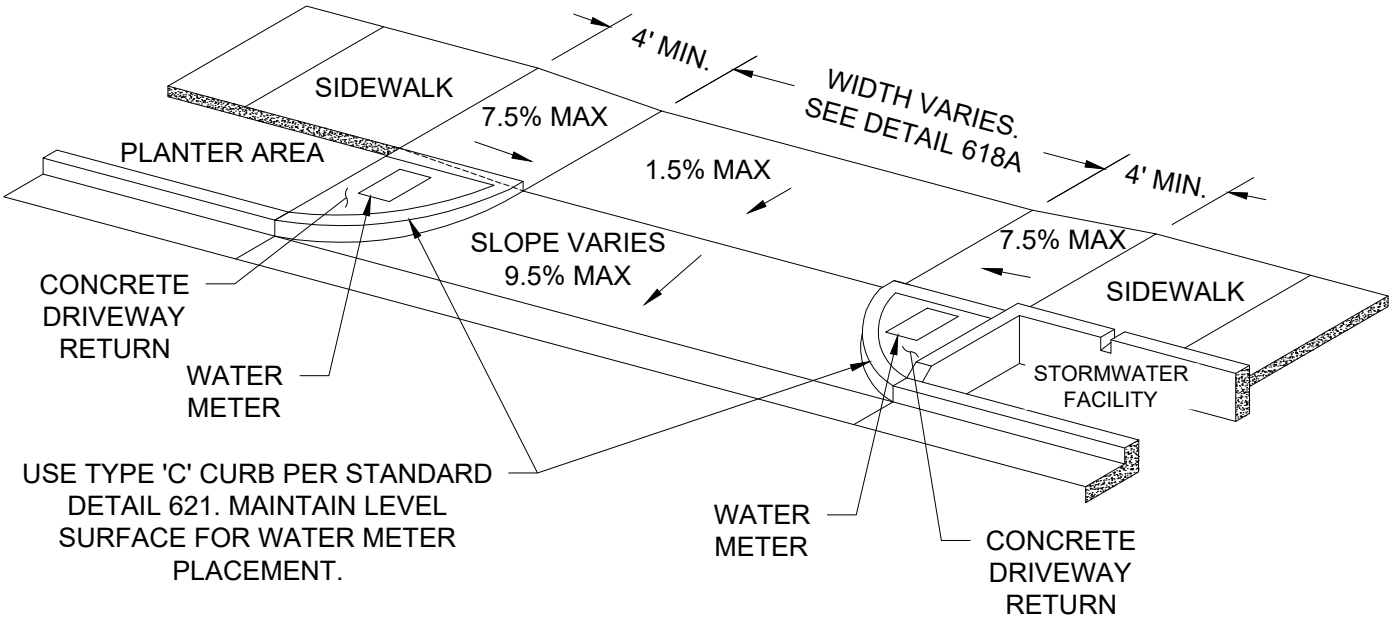
NTS

CITY OF GRESHAM

STORMWATER FACILITY, METER AND HYDRANT LOCATIONS

PWS VERSION: JAN 2026

DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-109



NOTES:

1. SEE ALSO DETAIL 618A
2. STORMWATER FACILITY WIDTH VARIES. SEE STANDARD STREET CROSS SECTIONS. (4' MINIMUM)
3. CURB RADIUS SHALL MATCH STORMWATER FACILITY WIDTH.
4. SLOPES SHOWN ARE RELATIVE TO HORIZONTAL.
5. WATER METER LIDS IN CONCRETE DRIVEWAY RETURN SHALL BE TRAFFIC RATED.

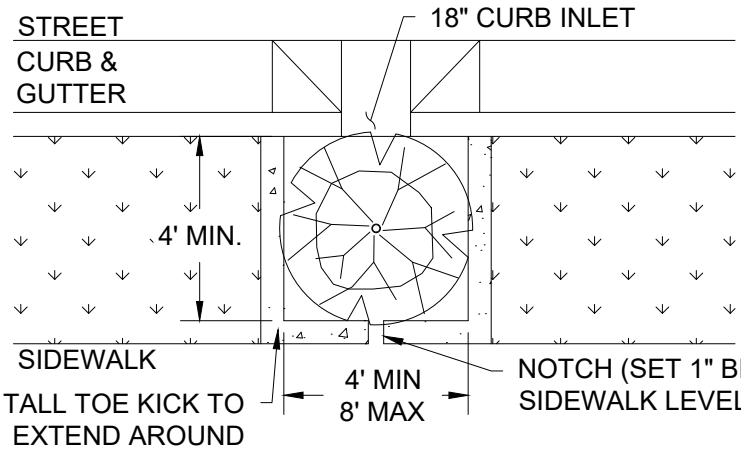
NTS

CITY OF GRESHAM

STORMWATER FACILITY RESIDENTIAL DRIVEWAY APPROACH

PWS VERSION: JAN 2026

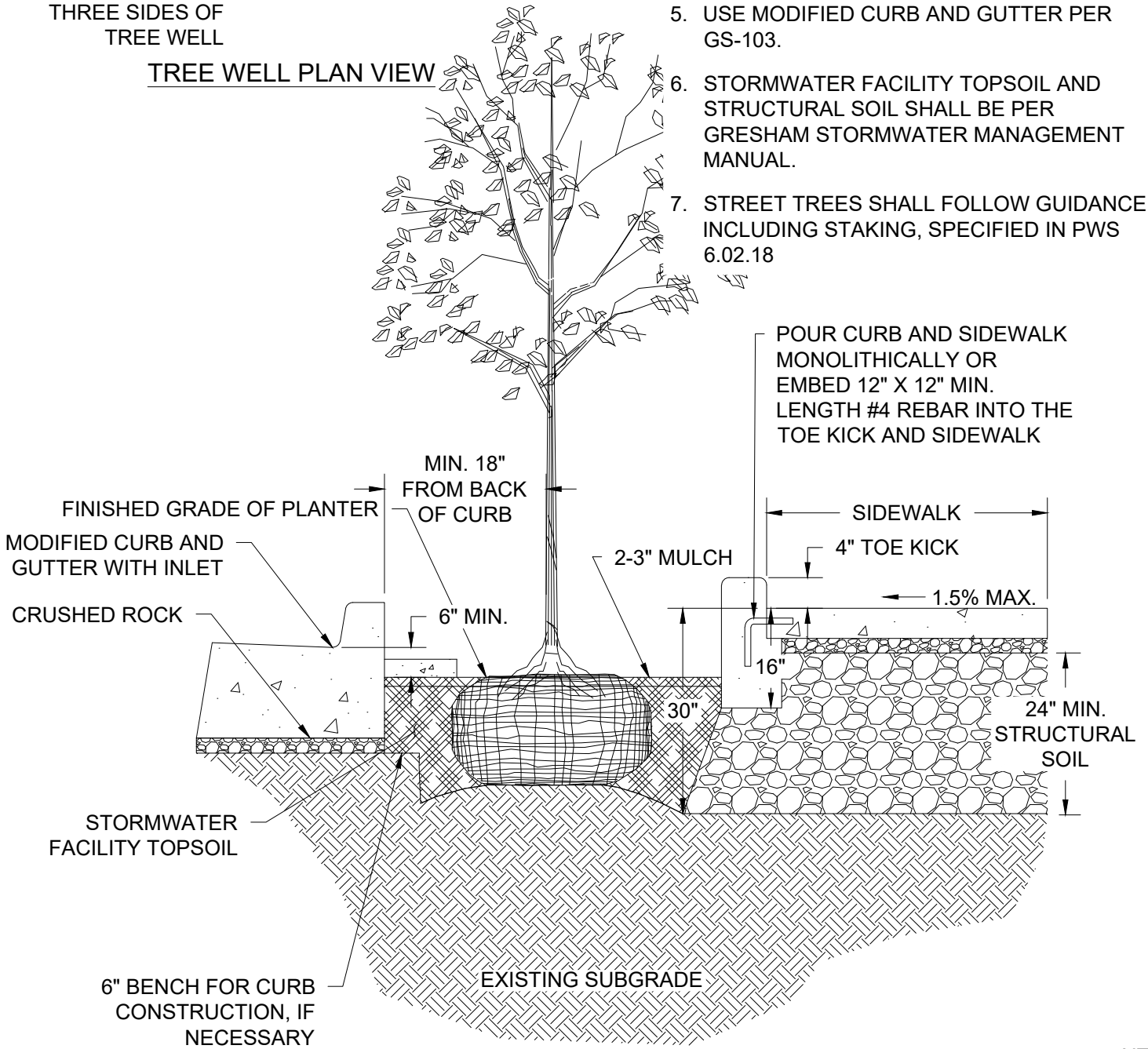
DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-110



TREE WELL PLAN VIEW

NOTES:

1. REMOVE WIRE AND BURLAP FROM ROOT BALL PRIOR TO BACKFILLING.
2. PLANT TREE ON PEDESTAL OF NATIVE SOIL. ADJUST HEIGHT AS NEEDED TO SET TOP OF ROOT BALL A MINIMUM OF 1"-2" ABOVE TOPSOIL SURFACE.
3. SET ONE "DRAINS TO RIVER" BUTTON INTO CURB BEFORE CONCRETE HAS DRIED.
4. SEE GS-104 FOR CURB INLET DETAILS.
5. USE MODIFIED CURB AND GUTTER PER GS-103.
6. STORMWATER FACILITY TOPSOIL AND STRUCTURAL SOIL SHALL BE PER GRESHAM STORMWATER MANAGEMENT MANUAL.
7. STREET TREES SHALL FOLLOW GUIDANCE, INCLUDING STAKING, SPECIFIED IN PWS 6.02.18



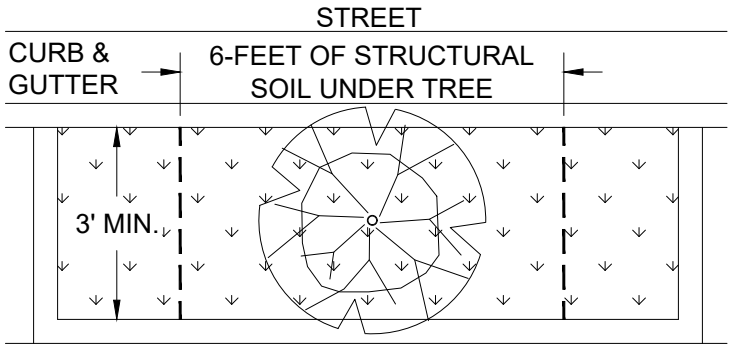
NTS

CITY OF GRESHAM

STORMWATER TREE WELL WITH STRUCTURAL SOIL

PWS VERSION: JAN 2026

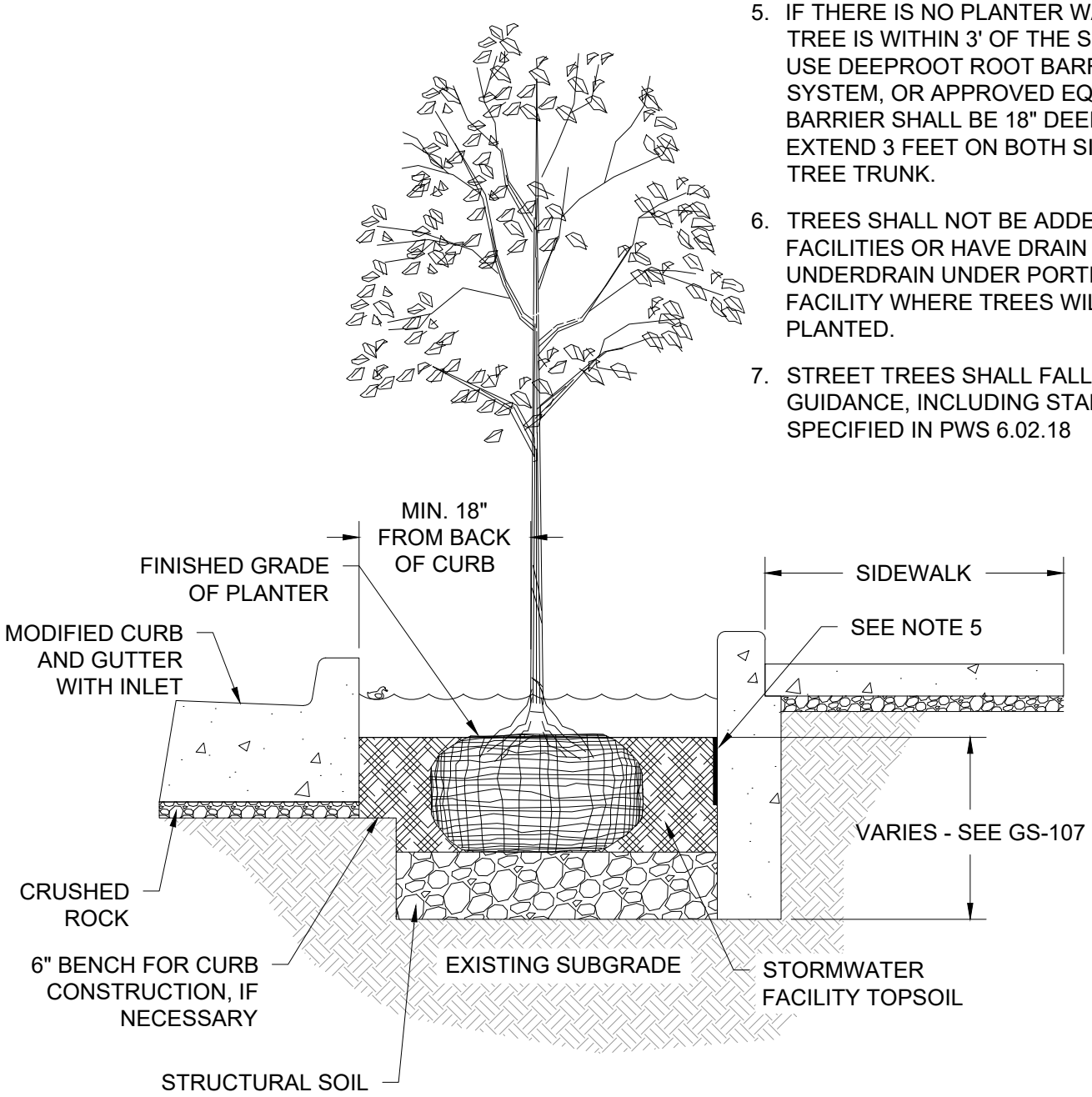
DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-111



STORMWATER PLANTER PLAN VIEW

NOTES:

1. TREES MUST BE SELECTED FROM LIST OF APPROVED STORMWATER TREES, UNLESS APPROVED BY THE CITY.
2. REMOVE WIRE AND BURLAP FROM ROOT BALL PRIOR TO BACKFILLING.
3. SET TOP OF ROOT BALL A MINIMUM OF 1"-2" ABOVE TOPSOIL SURFACE.
4. 3FT MINIMUM WIDTH FOR PLANTERS WITH TREES.
5. IF THERE IS NO PLANTER WALL AND THE TREE IS WITHIN 3' OF THE SIDEWALK, USE DEEPROOT ROOT BARRIER SYSTEM, OR APPROVED EQUAL. ROOT BARRIER SHALL BE 18" DEEP AND EXTEND 3 FEET ON BOTH SIDES OF THE TREE TRUNK.
6. TREES SHALL NOT BE ADDED TO LINED FACILITIES OR HAVE DRAIN ROCK OR UNDERDRAIN UNDER PORTIONS OF THE FACILITY WHERE TREES WILL BE PLANTED.
7. STREET TREES SHALL FALLOW GUIDANCE, INCLUDING STAKING, SPECIFIED IN PWS 6.02.18



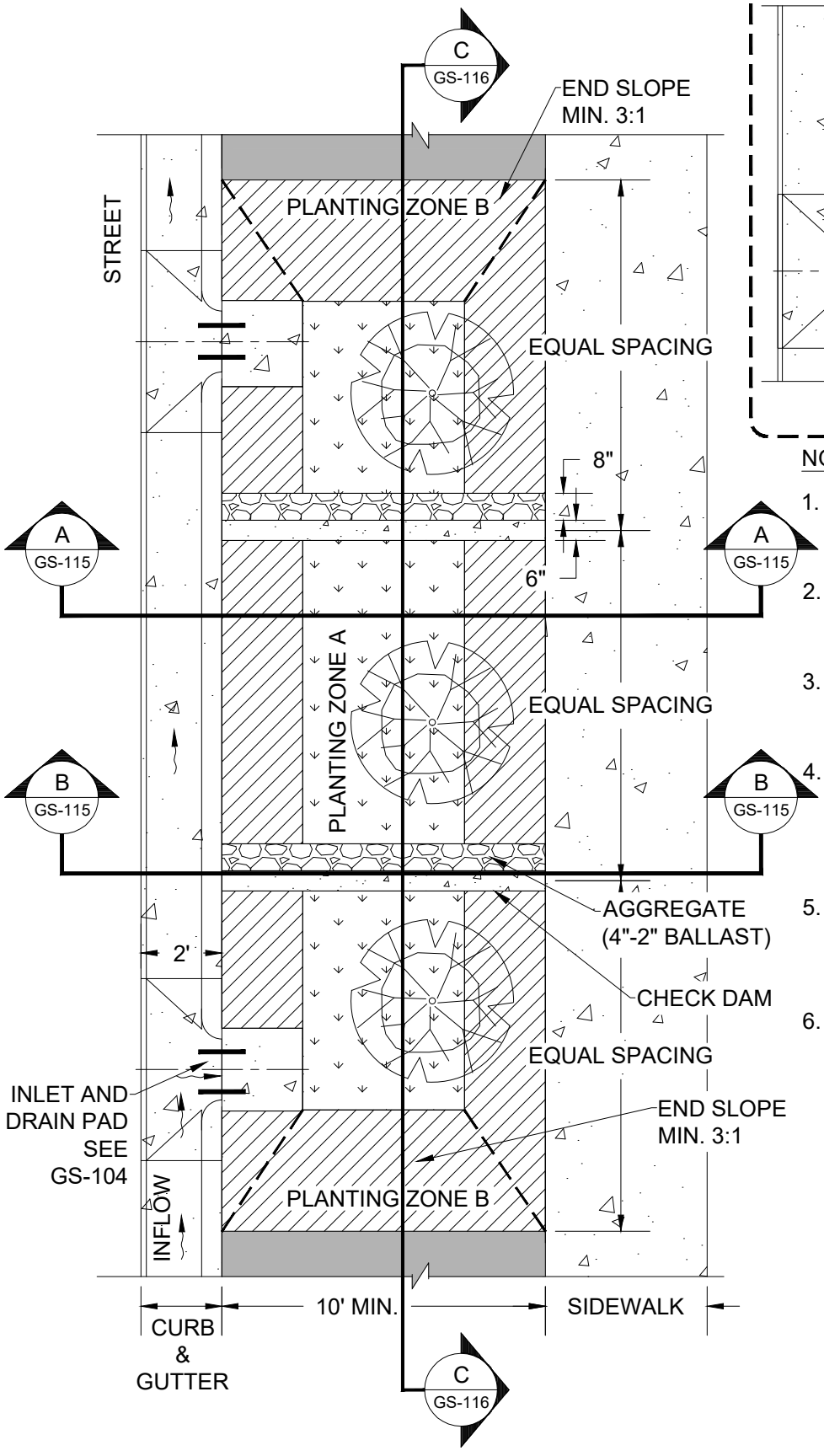
NTS

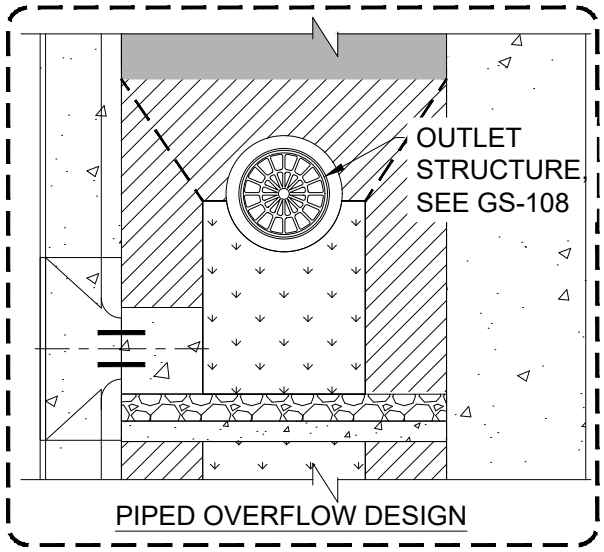
CITY OF GRESHAM

STREET TREE PLANTING WITHIN STORMWATER PLANTER

PWS VERSION: JAN 2026

DRAWN	KRB
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-112





NOTES:

1. SPECIFIC FACILITY DIMENSIONS MUST BE SHOWN ON STORMWATER UTILITY PLAN.
2. LONGITUDINAL SLOPE OF SWALE SHALL MATCH ROAD, SEE GS-116 FOR CHECK DAM REQUIREMENTS.
3. PROVIDE STATIONS AND ELEVATIONS AT EVERY INLET, OUTLET, AND CHECK DAM.
4. SIDEWALK ELEVATION MUST BE SET ABOVE INLET AND OUTLET ELEVATIONS TO ALLOW OVERFLOW TO DRAIN TO STREET BEFORE SIDEWALK.
5. SPECIAL REQUIREMENTS FOR WATER LINES, METERS, AND FIRE HYDRANTS, SEE SHEET GS-109 FOR DETAILS.
6. SEE GRESHAM STORMWATER MANAGEMENT MANUAL FOR PLANTING GUIDANCE.

MAX SPACING

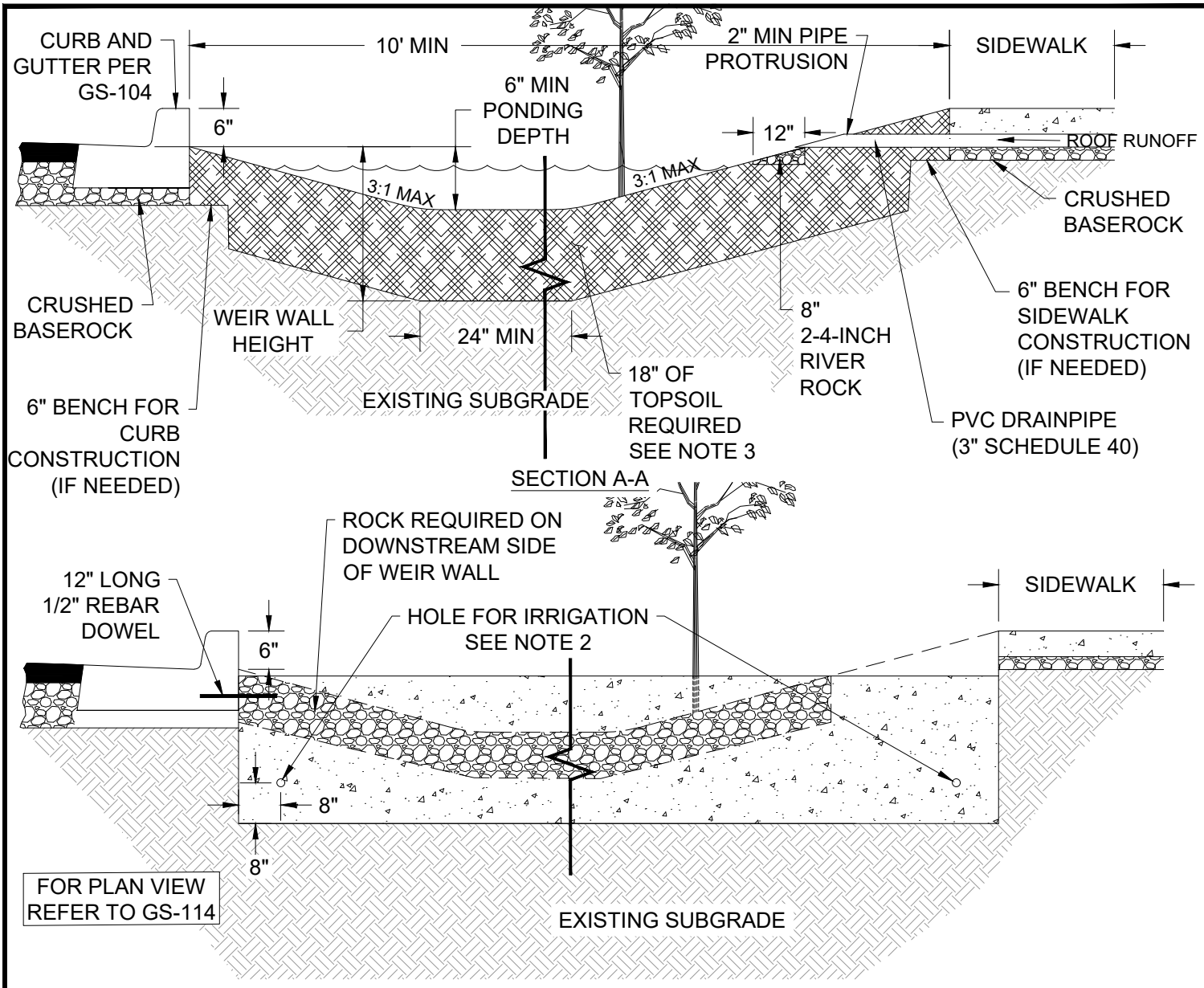
GRADE	CHECK DAM	INLET
0% - 3%	N/A	50'
>3%-8%	15'	30'
>8%-15%	10'	30'

CITY OF GRESHAM

SWALE PLAN VIEW

PWS VERSION: JAN 2026

DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-114



SECTION B-B

NOTES:

1. SEE DETAIL GS-116 FOR WEIR WALL.
2. IF IFFIGATION IS APPROVED TO PASS BETWEEN CELLS, CORE DRILL OR PORM 2" DIA. HOLE AT LOCATIONS(S) SHOWN.
3. FRACTURE AND LOOSEN THE NATIVE SOIL FOLLOWING INITIAL EXCAVATION AND BEFORE INSTALLING TOPSOIL.
4. STORMWATER FACILITY TOPSOIL SHALL BE PER THE CITY'S STORMWATER MANAGEMENT MANUAL.
5. TREES PLANTED IN SWALE SHALL BE CENTERED BETWEEN CURB AND SIDEWALK, OR SHIFTED BACK TOWARDS SIDEWALK SLIGHTLY. PLACE ROOT BALL ON NATIVE SOIL AND ENSURE TOP OF ROOT BALL IS 1-2" ABOVE FINAL TOPSOIL ELEVATION.
6. SIDEWALK ELEVATION MUST BE EQUAL TO OR HIGHER THAN TOP OF CURB TO ENSURE WATER OVERFLOWS TO GUTTER.
7. STREET TREES SHALL FOLLOW GUIDANCE, INCLUDING STAKING, SPECIFIED IN PWS 6.02.18.

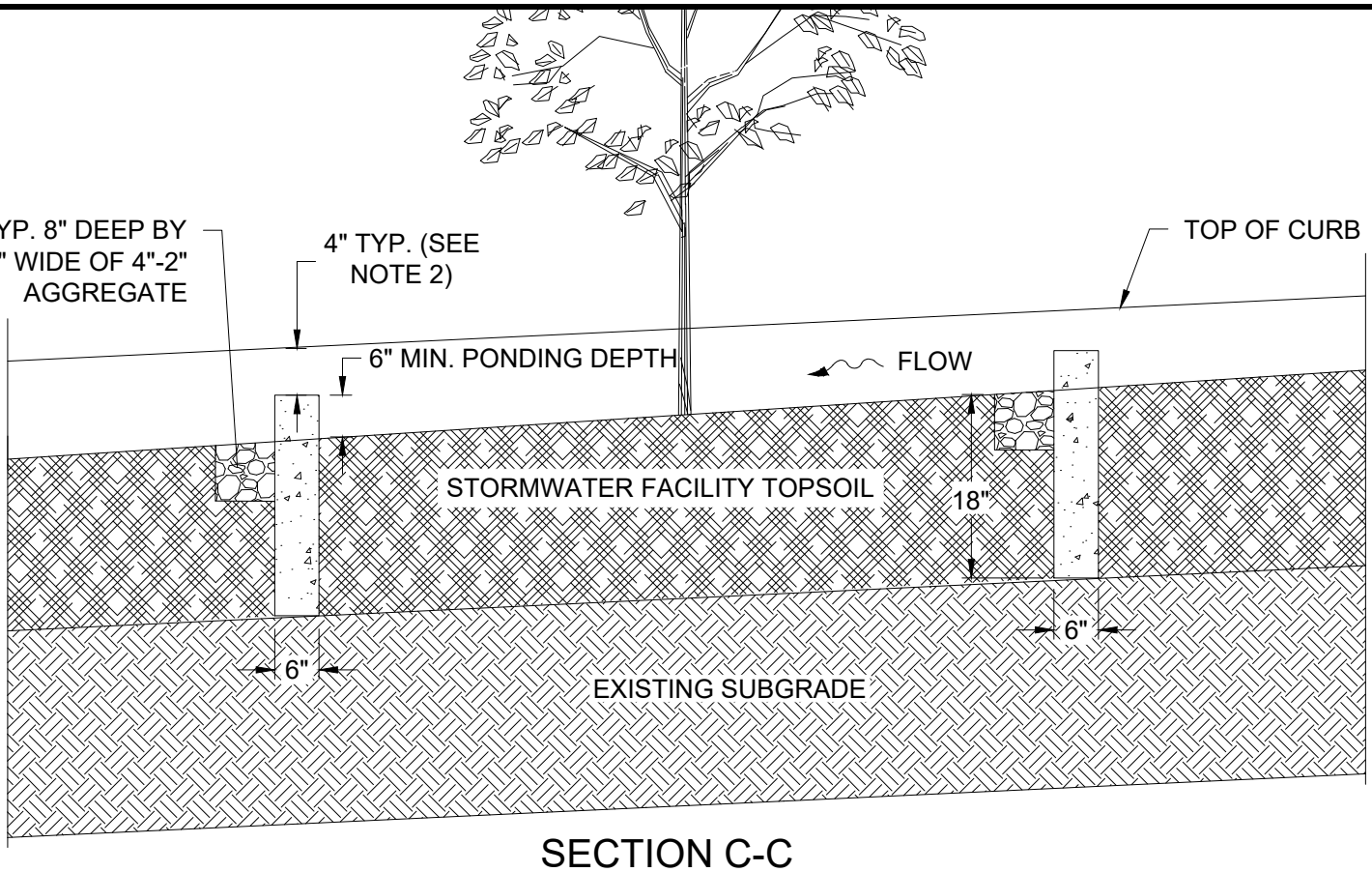
NTS

CITY OF GRESHAM

SWALE SECTION VIEW

PWS VERSION: JAN 2026

DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-115



SECTION C-C
FROM GS-114

MAX SPACING

GRADE	WEIR WALL	INLET
0% - 3%	N/A	50'
>3%-8%	15'	30'
>8%-15%	10'	30'

NOTES:

1. WEIR WALL TO BE PLACED ON UNDISTURBED NATIVE SOIL
2. TOP OF WEIR WALL SHALL BE A MINIMUM OF 1" BELOW THE UPSTREAM INLET GUTTERLINE ELEVATION.

NTS

CITY OF GRESHAM

CONCRETE WEIR WALL FOR SWALE

PWS VERSION: JAN 2026

DRAWN	AAD
REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	GS-116