

PROJECT INFORMATION

PROPERTY OWNER
EDWARD C. BRANHART

APPLICANT/PRIMARY CONTACT
AIDAN WILLIS
4201 NE 66TH AVE, #105
VACOUVER, WA 98661
(503) 957-0966
AWILLIS@TEAMCONSTRUCTION.COM

CIVIL ENGINEER
JOLMA DESIGN, LLC
10 S. PARKWAY AVENUE, STE 102
PO BOX 1281
BATTLE GROUND, WA 98604
(360) 723-0392
ADMIN@JOLMADESIGN.COM

PROJECT NAME
GOERIG APARTMENTS

SITE INFORMATION

PARCEL NO: 50630
ADDRESS: 1776 N GOERIG ST, WOODLAND, WA 98674
PARCEL AREA: 0.90 AC
ZONING: MEDIUM DENSITY RESIDENTIAL (MDR)

NOTES

1. TO THE EXTENT PRACTICABLE, STORMWATER WILL BE MANAGED ON SITE USING LID BMPs.
2. GRADING WILL BE MINIMIZED TO THAT WHICH IS NECESSARY TO PROMOTE DRAINAGE AWAY FROM STRUCTURES AND TOWARD STORMWATER FACILITIES.
3. EROSION CONTROL MEASURES WILL BE DETERMINED AT THE TIME OF CONSTRUCTION PLAN SUBMITTAL. MEASURES WILL BE TAKEN TO ENSURE SEDIMENT OR SEDIMENT-LADEN RUNOFF DOES NOT LEAVE THE SITE.
4. SANITARY SEWER AND WATER SERVICES WILL BE PROVIDED BY THE CITY OF WOODLAND.

SITE DATA:

LOT SUMMARY:
TOTAL AREA= 39,411 ± SF (0.90 ± AC)
(PER SURVEY)

ZONING SUMMARY:
ZONING: MEDIUM-DENSITY RESIDENTIAL (MDR)

PROPOSED BUILDINGS:
BUILDING A: 24-UNIT, 3-STORY APARTMENT
BUILDING B: 6-UNIT, 3-STORY APARTMENT

SETBACKS & LOT DIMENSIONS:
REQ'D SETBACKS WITH VARIANCE:
FRONT = 14'
SIDE (INTERIOR) = 3.5'
REAR = 17.5'

PARKING PROVIDED
STANDARD PARKING (9' X 20') = 43 SPACES
ADA PARKING (9' X 20') = 2 SPACES
TOTAL PARKING PROVIDED = 45 SPACES

LANDSCAPE SUMMARY:
9,674 SF (0.22 ACRES) LANDSCAPING PROVIDED (25%)

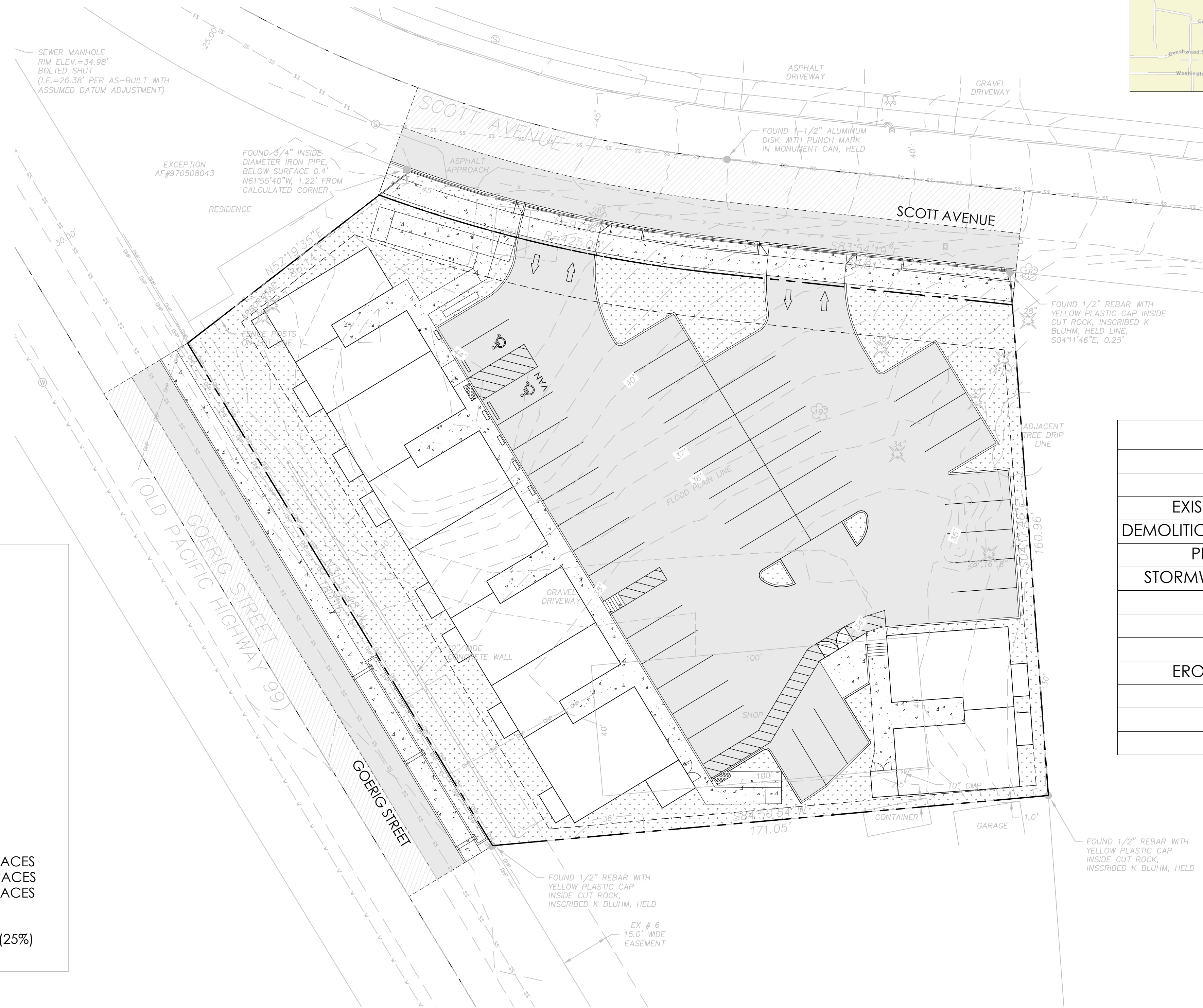
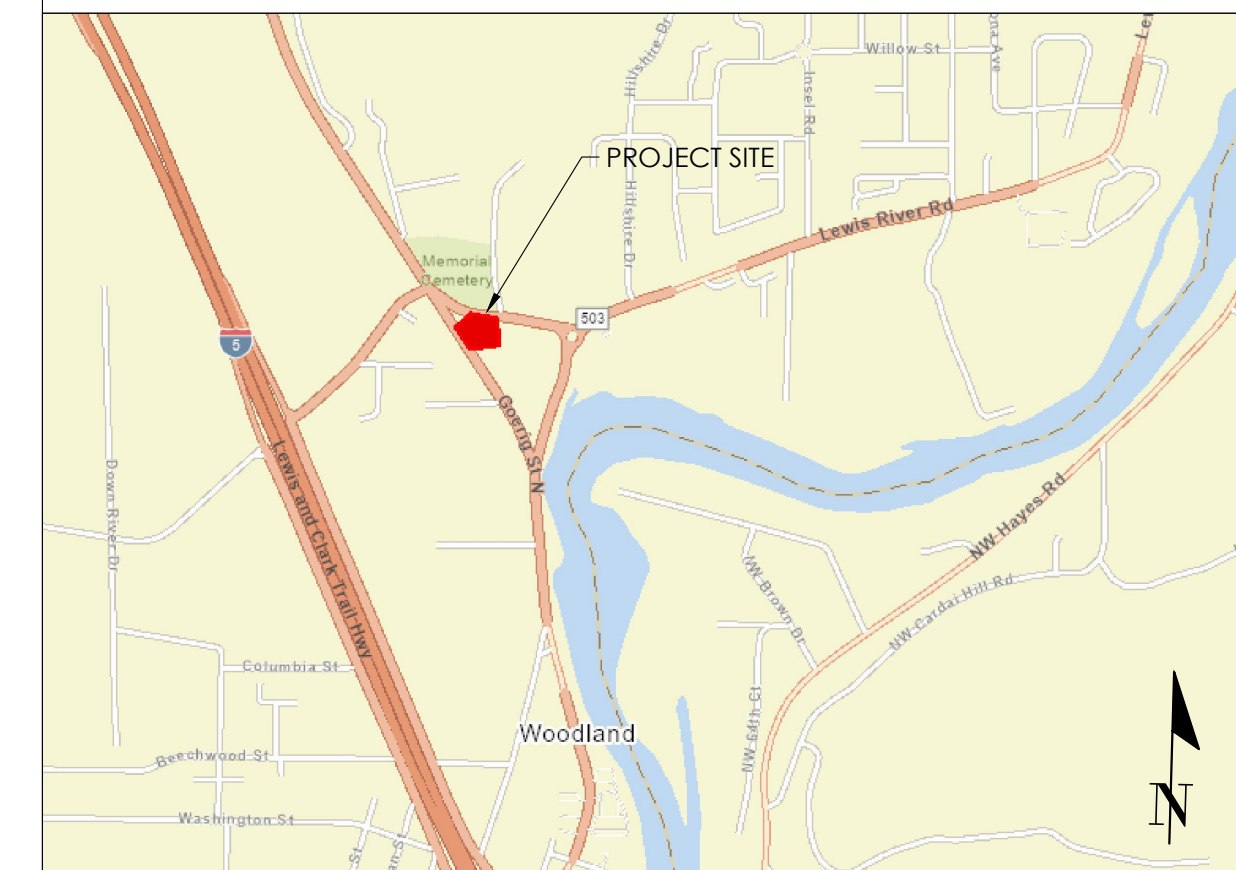
GOERIG APARTMENTS

1776 N. GOERIG ST
WOODLAND, WA 98674

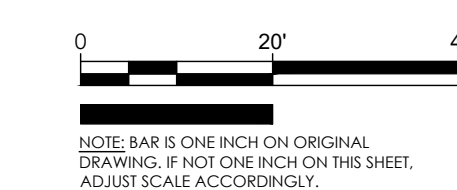
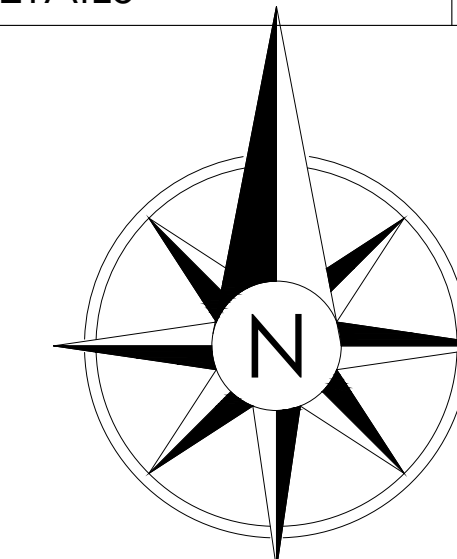
PARCEL NO. 50630

SUBMITTED TO: CITY OF WOODLAND
APPLICATION: PRELIMINARY SITE PLAN REVIEW

SITE VICINITY MAP (NTS)



SHEET INDEX	
SHEET TITLE	SHEET NO.
COVER SHEET	C01.01
EXISTING CONDITIONS PLAN	C01.02
DEMOLITION & EROSION CONTROL PLAN	C01.03
PRELIMINARY SITE PLAN	C01.04
STORMWATER MANAGEMENT PLAN	C01.05
GRADING PLAN	C01.06
UTILITY PLAN	C01.07
LIGHTING PLAN	C01.08
EROSION CONTROL DETAILS	C02.01
STREET DETAILS	C02.02
STREET DETAILS	C02.03
UTILITY DETAILS	C02.04



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6/23/2022

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GOERIG APARTMENTS

CLIENT:
AIDAN WILLIS

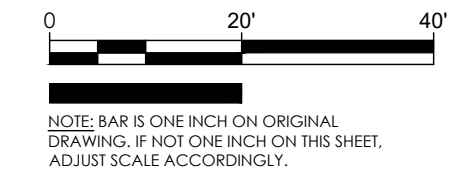
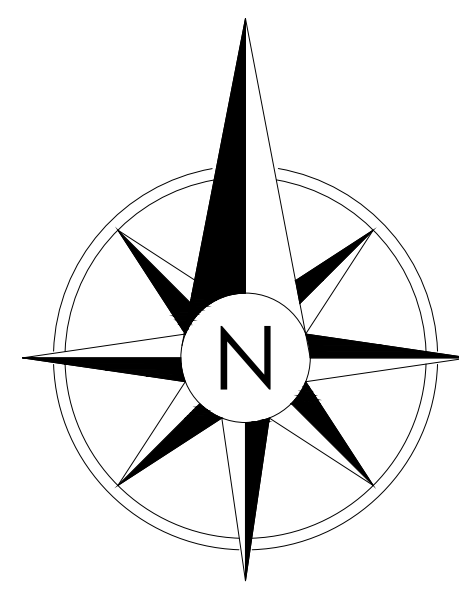
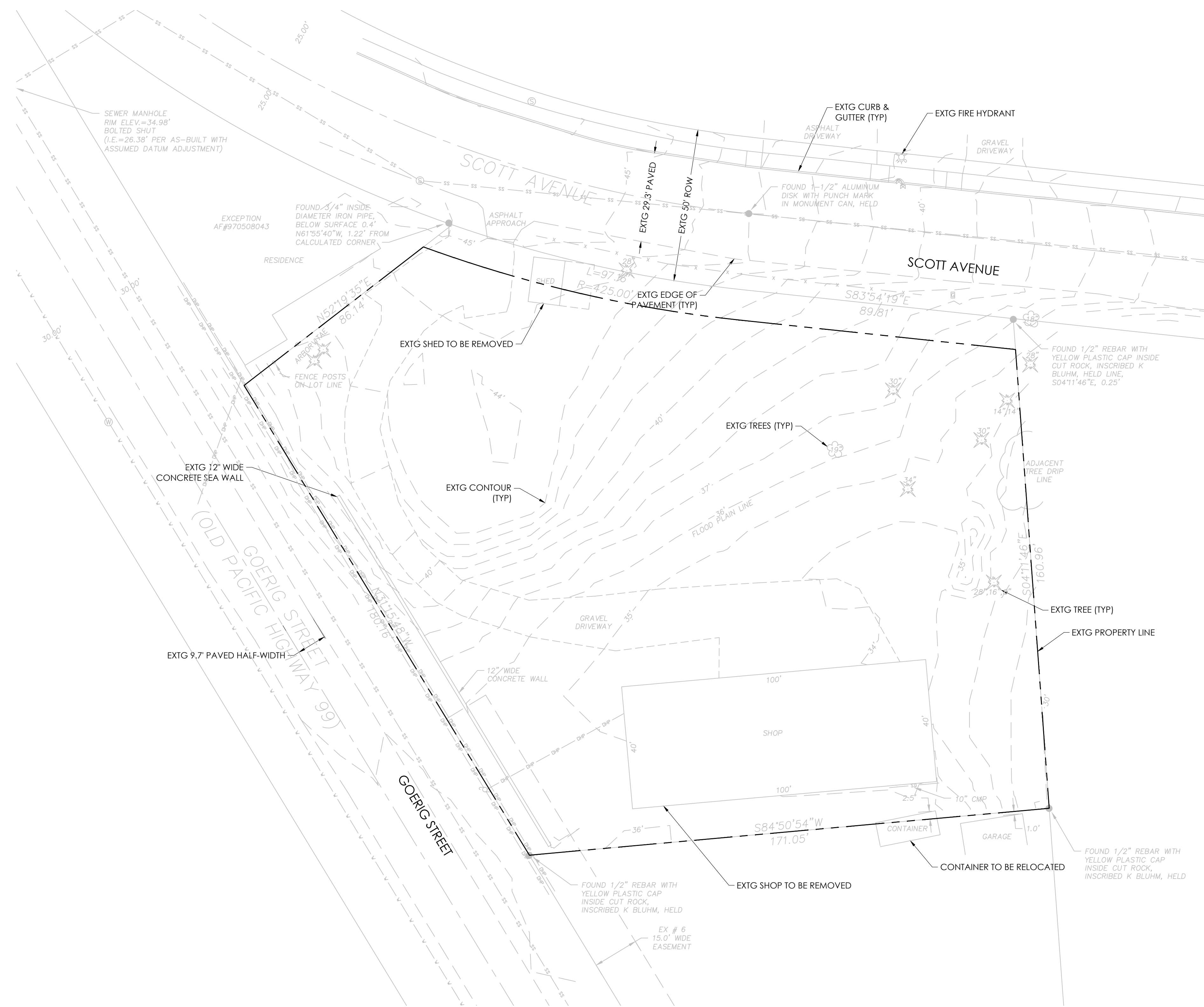
PROJECT LOCATION:
WOODLAND, WA

MARK	DATE	DESCRIPTION
A	6/24/2022	Issued for review.

PROJECT: 22046
DESIGNED: DGS
DRAWN: BDT
CHECKED: DGS
SCALE
SCALE AS NOTED
SHEET TITLE
COVER SHEET
SHEET
C01.01

PRELIMINARY SITE PLAN REVIEW

D
C
B
A



NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING, IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

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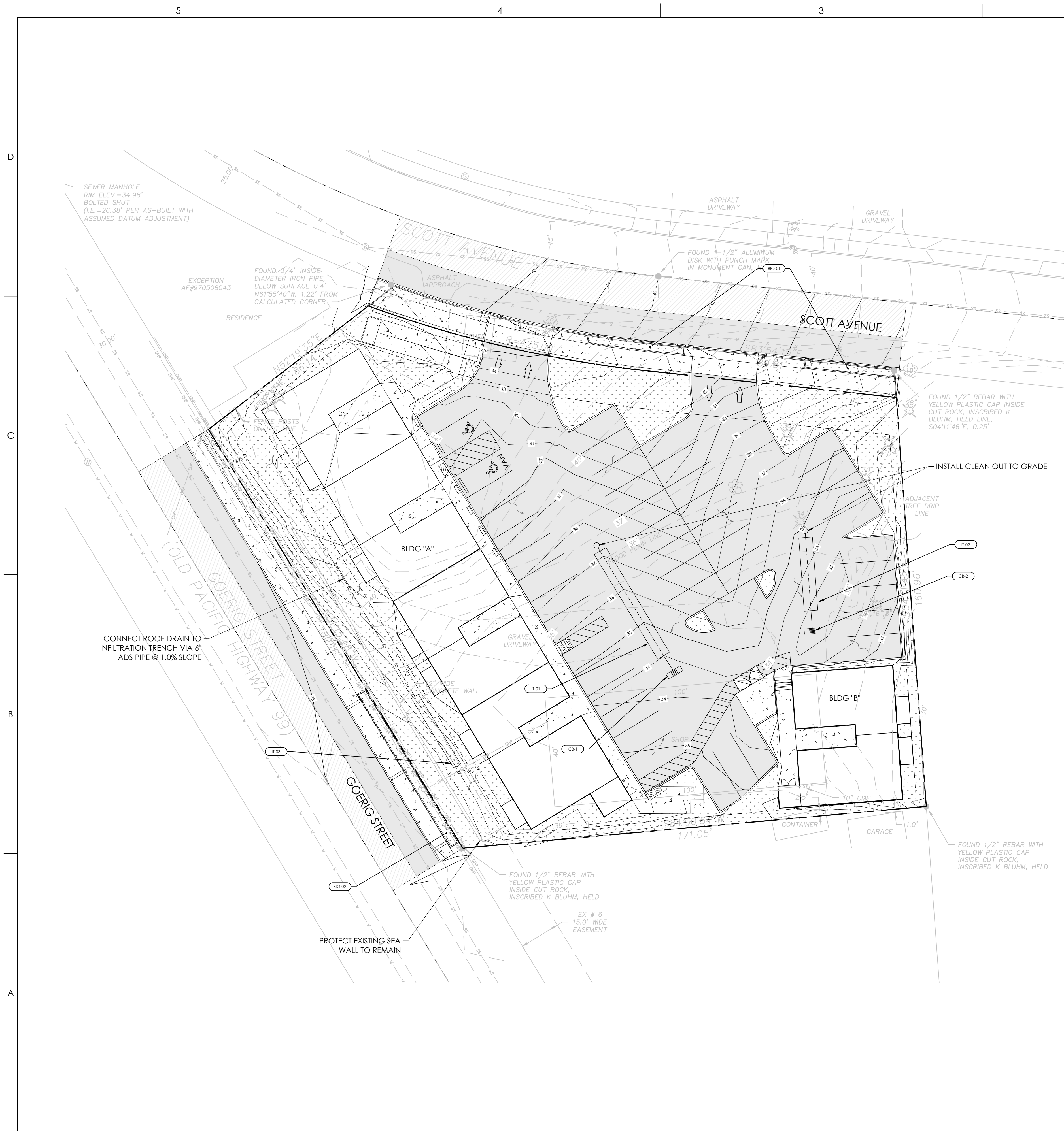
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EXISTING CONDITIONS PLAN

SHEET
 C01.02

PRELIMINARY SITE PLAN REVIEW



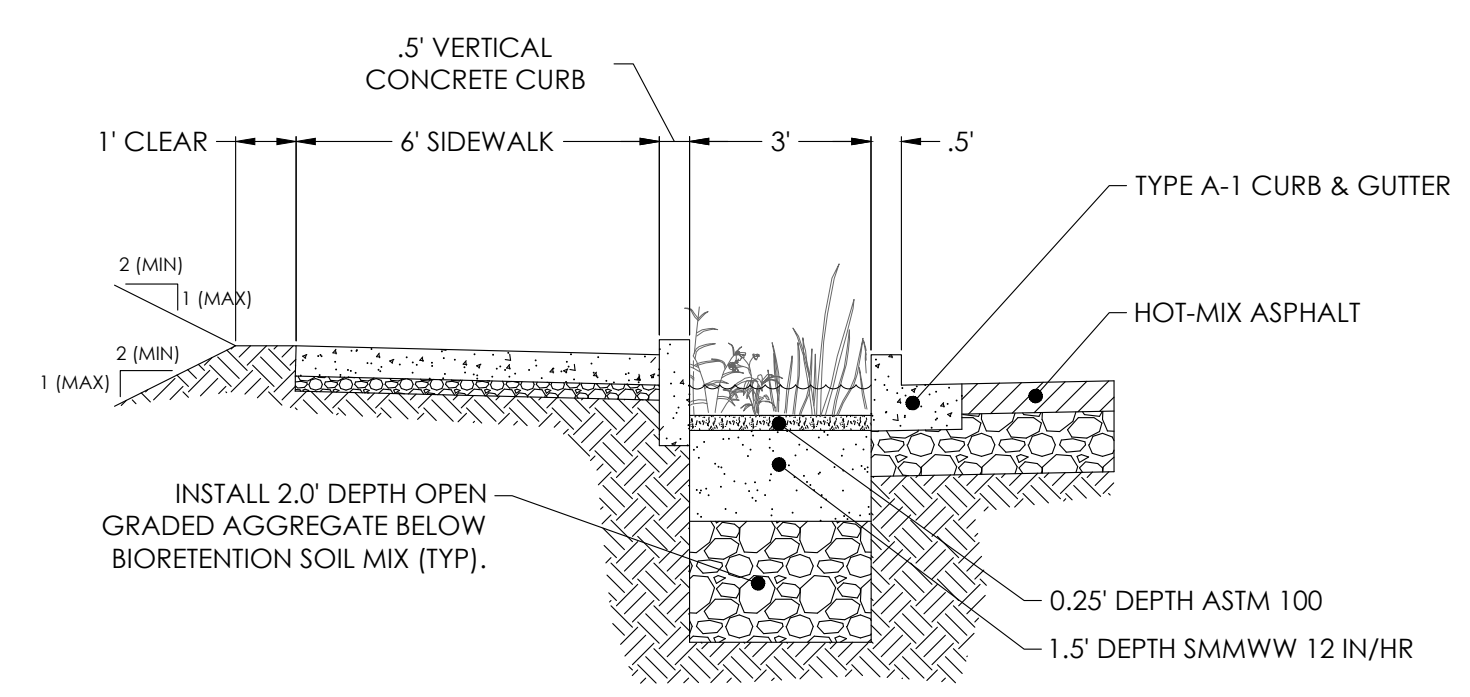
STORMWATER BMP SCHEDULE					
MARK	DESCRIPTION	MANAGED AREA	SURFACE AREA (SF)	BMP NO.	DESIGN DETAILS
BO-1	BIORETENTION FACILITY	SCOTT AVE	195	17.30	REFER TO DETAIL 1 BELOW FOR CROSS SECTION
BO-2	BIORETENTION FACILITY	N GOERIG ST	195	17.30	REFER TO DETAIL 1 BELOW FOR CROSS SECTION
IT-01	INFILTRATION TRENCH	WEST SIDE PARKING LOT	225	17.20	LENGTH = 45' WIDTH = 5' DEPTH = 3' MATERIAL = 1 1/2" - 3/4" WASHED ROCK
IT-02	INFILTRATION TRENCH	EAST SIDE PARKING LOT, BLDG B	135	17.20	LENGTH = 27' WIDTH = 5' DEPTH = 3' MATERIAL = 1 1/2" - 3/4" WASHED ROCK
IT-03	INFILTRATION TRENCH	BLDG A, GRASS	135	17.20	LENGTH = 30' WIDTH = 3' DEPTH = 3' MATERIAL = 1 1/2" - 3/4" WASHED ROCK

STORM STRUCTURE LEGEND				
MARK	DESCRIPTION	RIM	INVERT IN	INVERT OUT
CB-1	TWO-CARTRIDGE STORMFILTER CATCH BASIN	32.36	N/A	30.06 (RW)
CB-2	ONE-CARTRIDGE STORMFILTER CATCH BASIN	32.34	N/A	30.04(N)

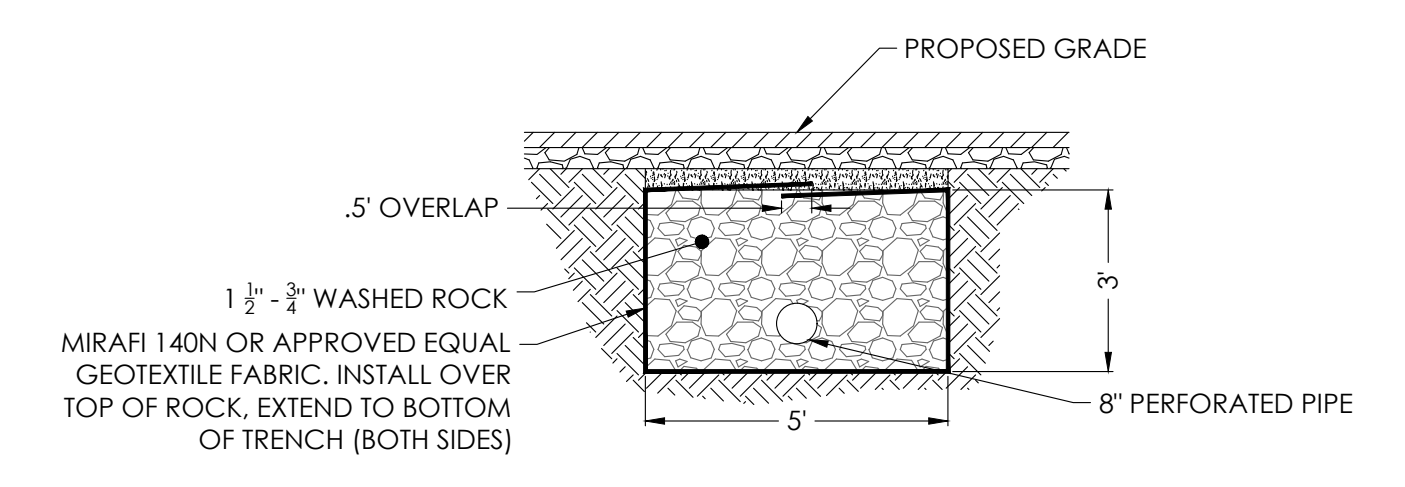
** SEE STORMFILTER CATCH BASIN DETAILS ON SHEET CO2.02

STORMWATER NOTES

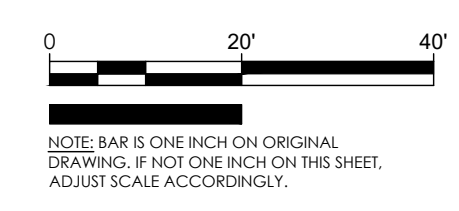
- CONTRACTOR SHALL CONFIRM INFILTRATION RATE AT THE LOCATION OF EACH INFILTRATION TRENCH PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONFIRM NO GROUNDWATER TO A DEPTH OF AT MIN. 6' BELOW EACH TRENCH. PROVIDE INFILTRATION RATE RESULTS AND GROUNDWATER INFORMATION TO THE CITY OF VANCOUVER AND PROJECT ENGINEER TO CONFIRM INFILTRATION FEASIBILITY.
- FLOOD STORAGE VOLUME BELOW 100 YR FLOOD ELEVATION:
EXISTING STORAGE: 1,015 CY
PROPOSED STORAGE: 1,170 CY



1 BIORETENTION DETAIL
NTS



2 INFILTRATION TRENCH DETAIL
NTS



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SCALE:	
SCALE AS NOTED:	
SHEET TITLE:	
STORMWATER MANAGEMENT PLAN	
SHEET:	

PRELIMINARY SITE PLAN REVIEW

C01.05

D
C
B
A

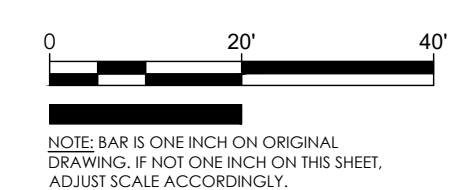
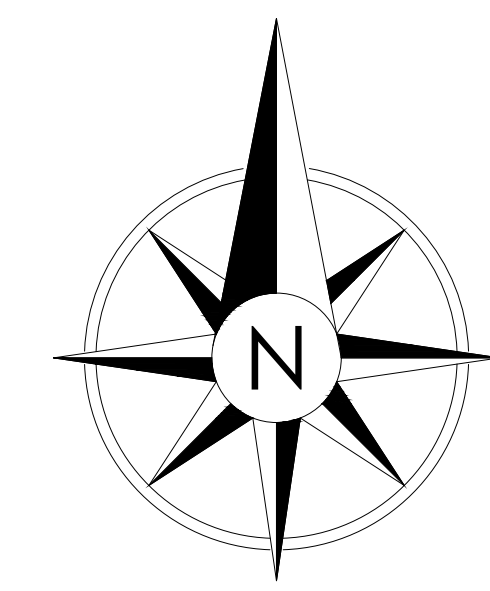
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6/23/2022

CUT & FILL QUANTITY ESTIMATES: ***
 CUT = 798 CY
 FILL = 1301 CY
 NET = 503 CY FILL (UNADJUSTED)

*** FOR BID/PROPOSAL PURPOSES CONTRACTOR SHALL CONFIRM/COMPUTE CUT AND FILL QUANTITIES INDEPENDENTLY. THESE NUMBERS DO NOT INCLUDE SHRINK/SWELL AND ARE A COMPARISON OF FINISH GRADE TO EXISTING GRADE.



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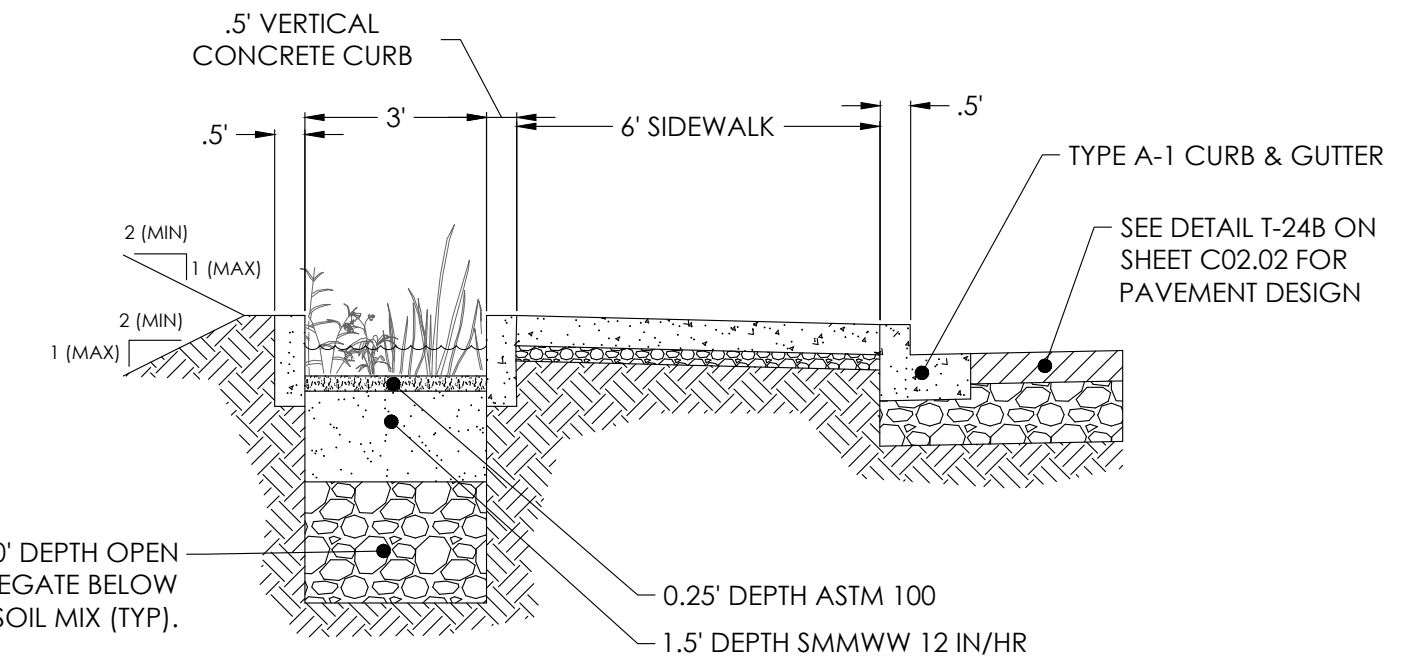
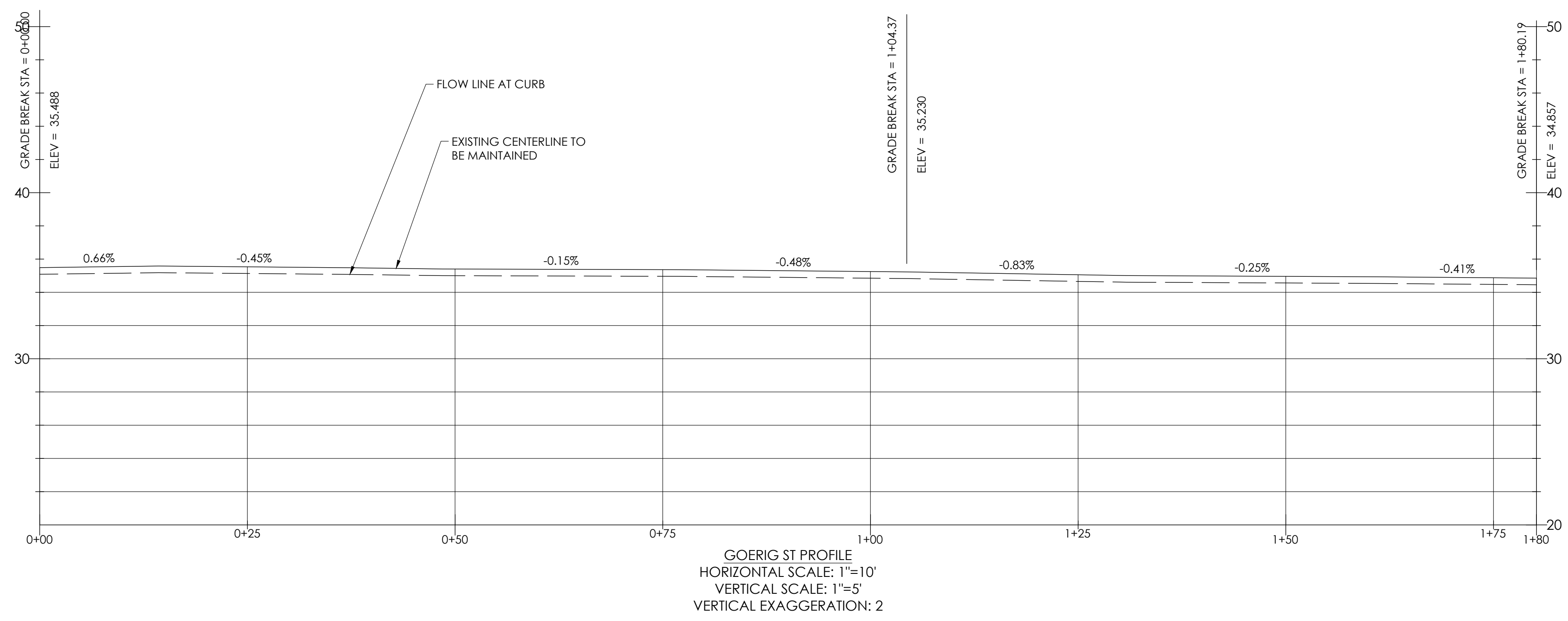
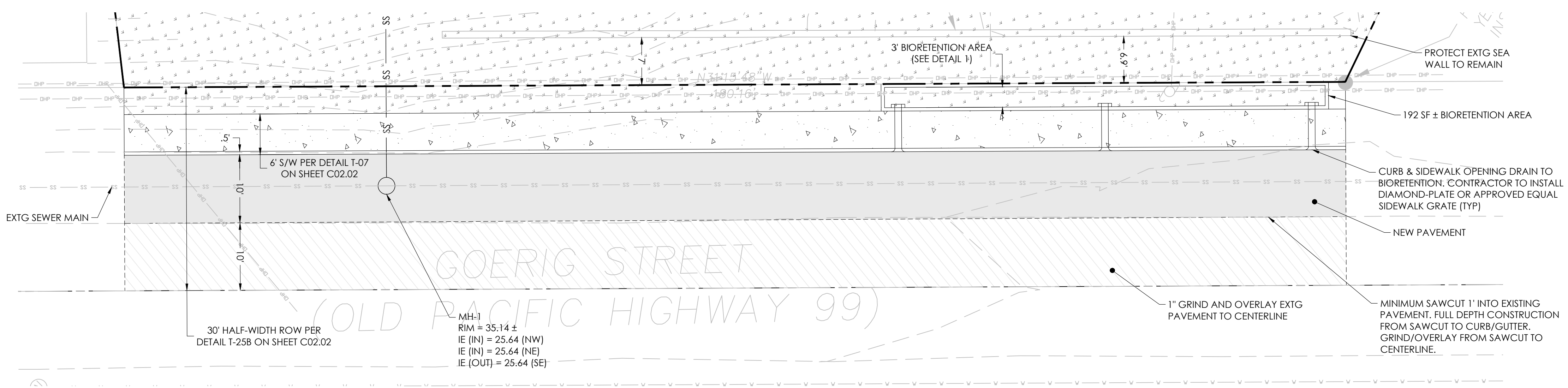
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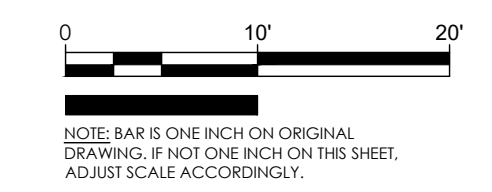
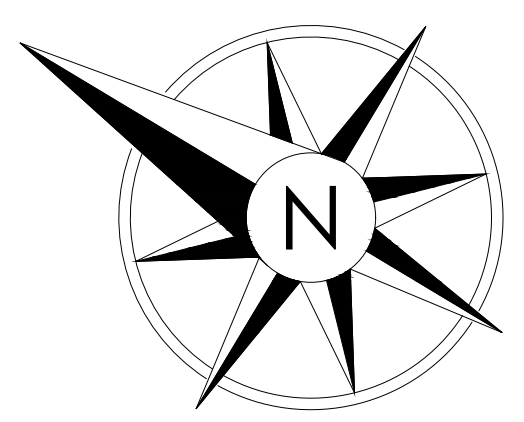
PROJECT: 22046
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 SCALE
 SCALE AS NOTED
 SHEET TITLE

GRADING PLAN
 SHEET
 C01.06

PRELIMINARY SITE PLAN REVIEW



1 BIORETENTION DETAIL
 NTS

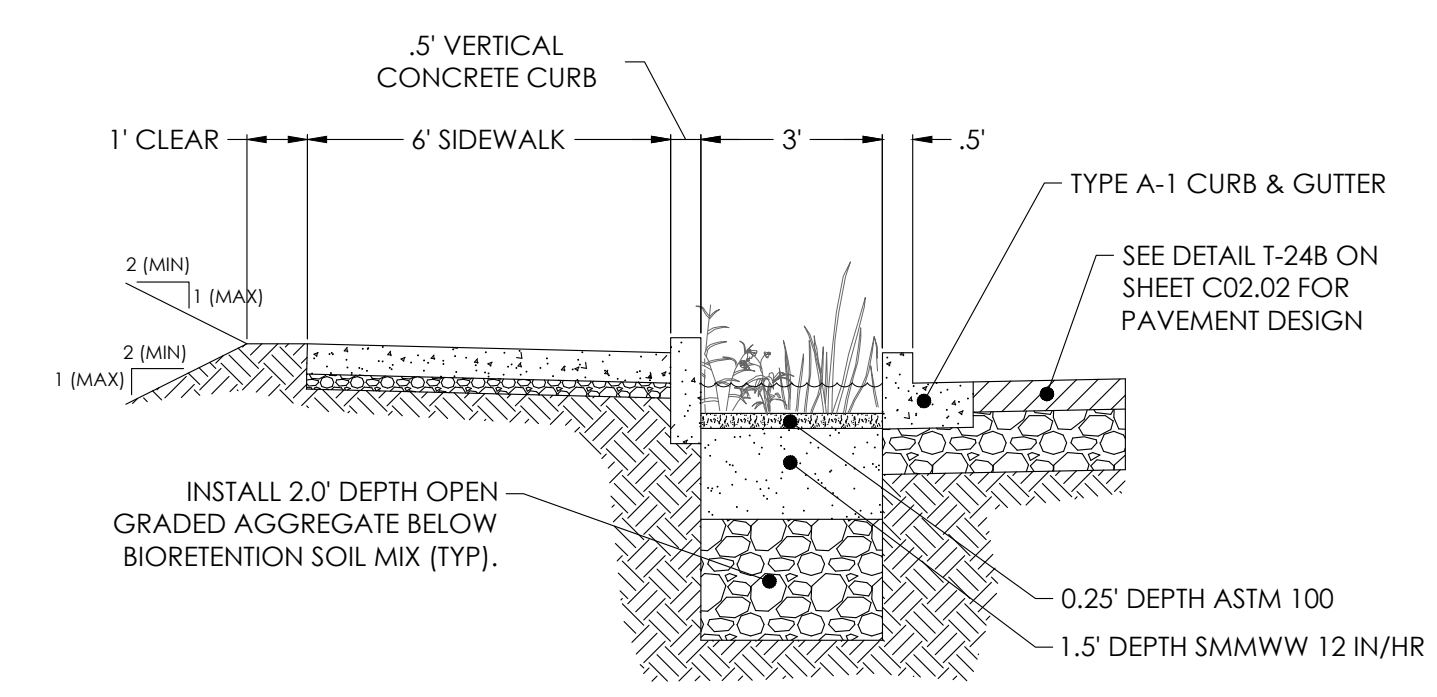
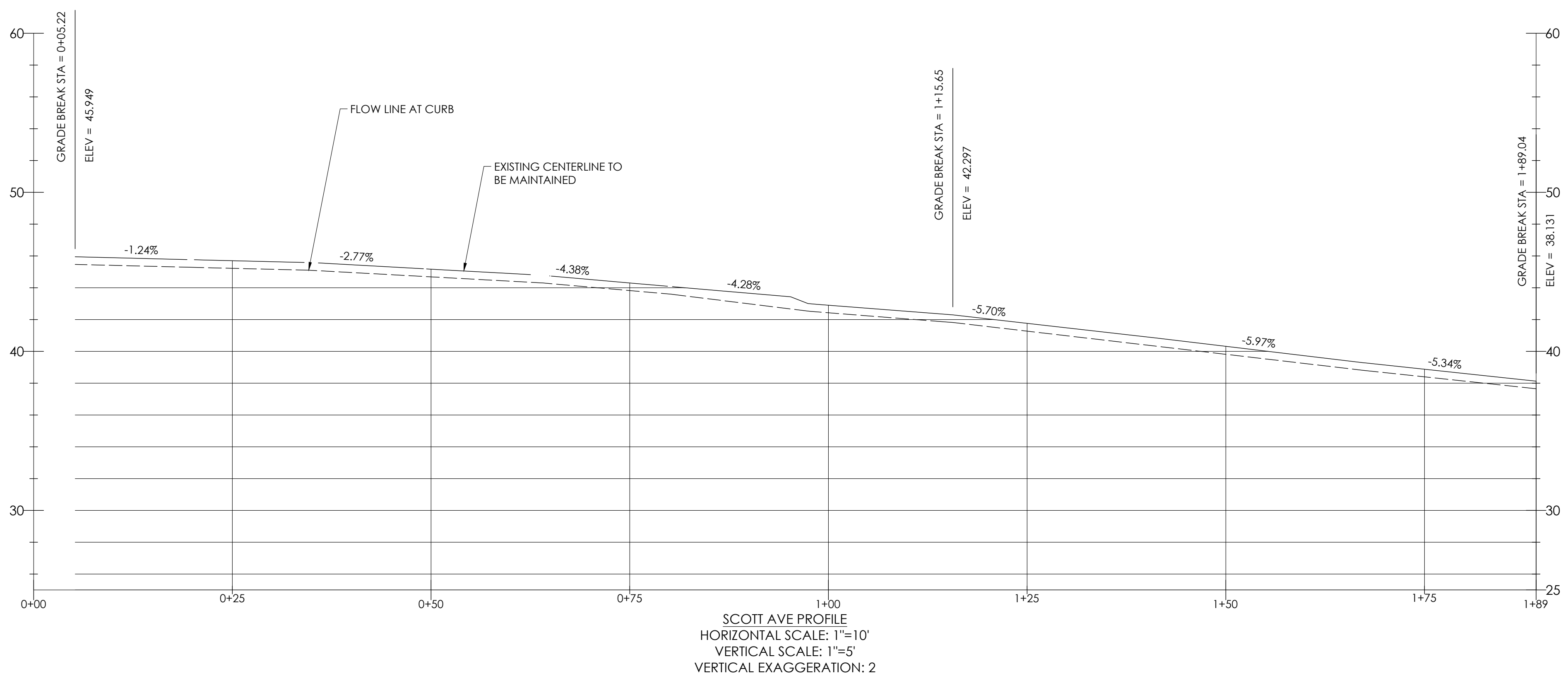
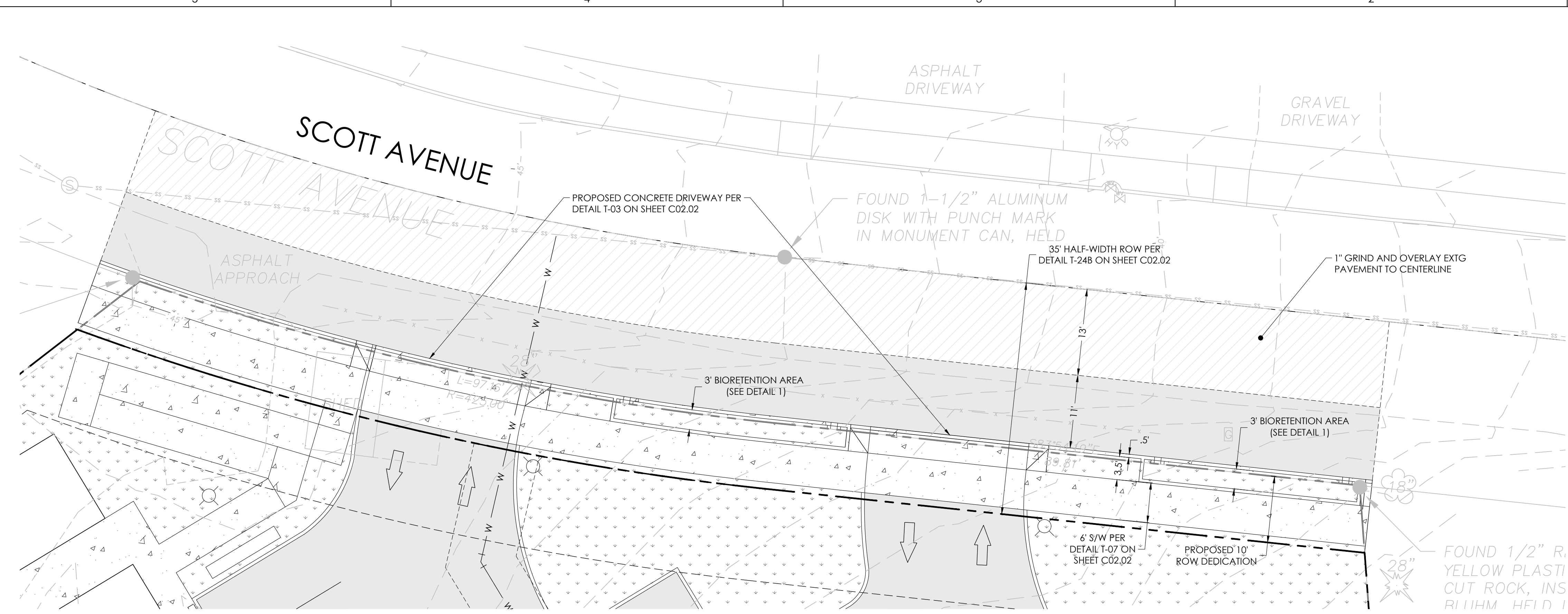


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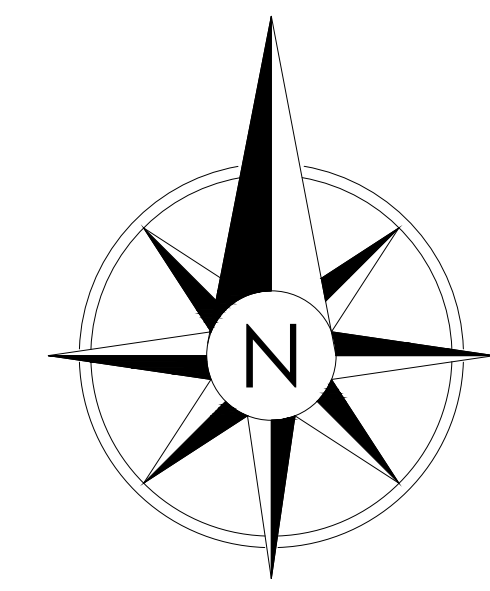
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GOERIG ST
 SHEET
 C01.07



1 BIORETENTION DETAIL
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SCALE	
SCALE AS NOTED	
SHEET TITLE	
	SCOTT AVE
SHEET	
	C01.08

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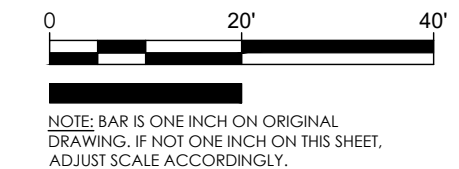
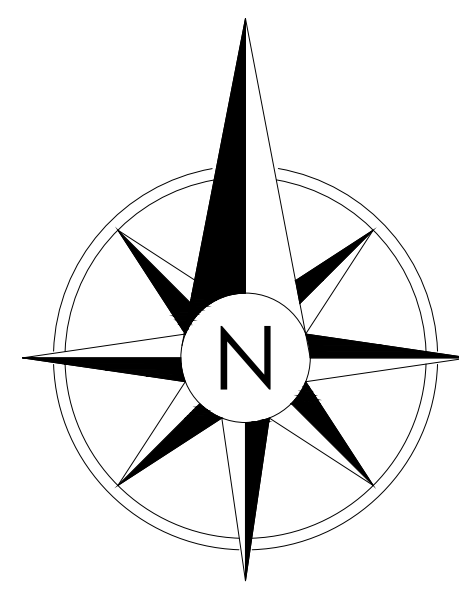
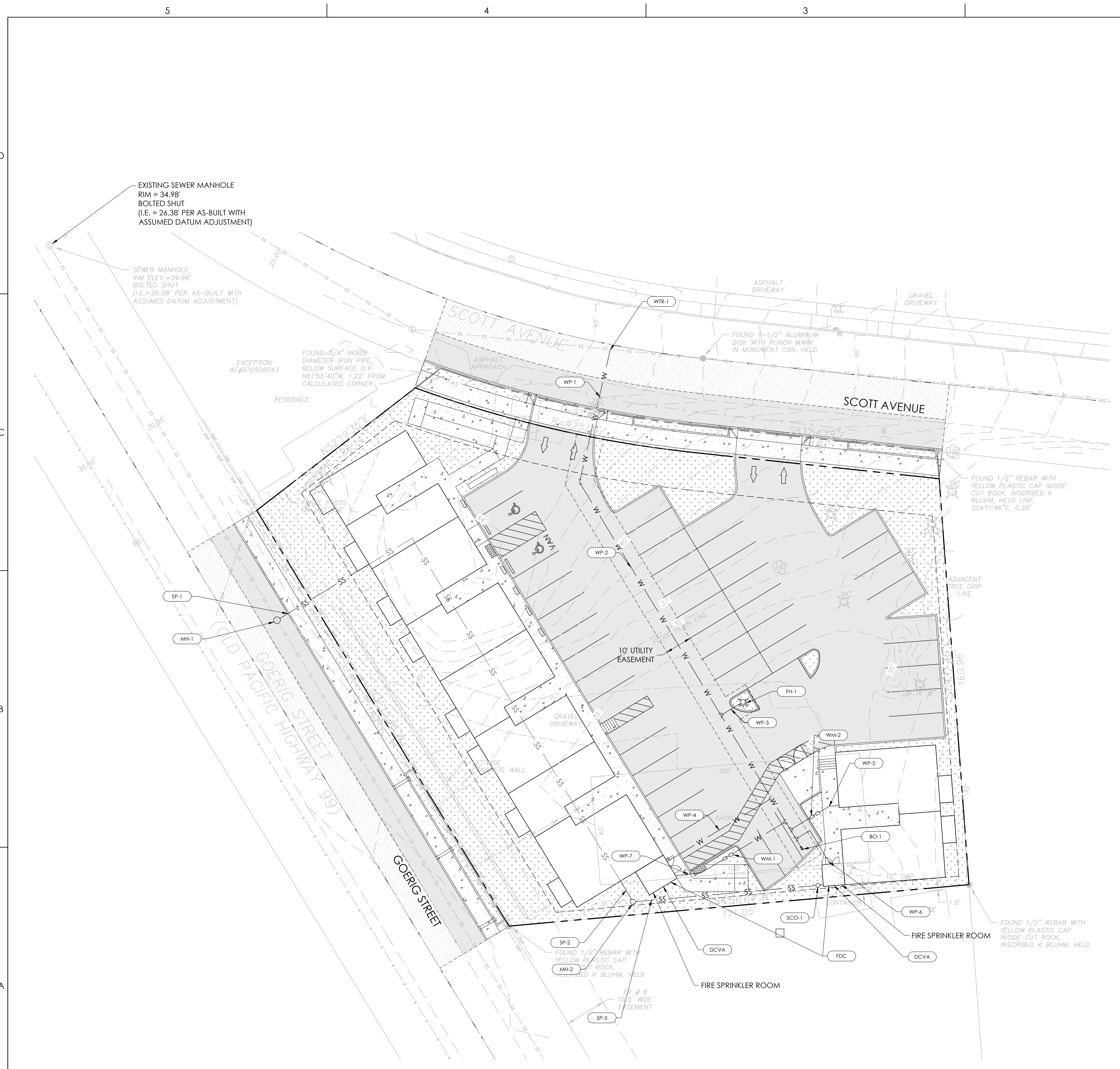
PROJECT:	22046
DESIGNED:	DGS
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CHECKED:	DGS
SCALE	
SCALE AS NOTED	
SHEET TITLE	
UTILITY PLAN	
SHEET	
	C01.09

WATER PIPE SCHEDULE			
MARK	SIZE	LENGTH	DESCRIPTION
WP-1	8" WATER MAIN	50 LF	DUCTILE IRON
WP-2	8" WATER MAIN	101 LF	DUCTILE IRON
WP-3	6" WATER MAIN	9 LF	DUCTILE IRON
WP-4	2" FIRE SERVICE	22 LF	DUCTILE IRON
WP-5	1" DOM. WATER	20 LF	COPPER
WP-6	2" FIRE SERVICE	22 LF	DUCTILE IRON
WP-7	2" DOM. WATER	46 LF	COPPER

WATER STRUCTURE SCHEDULE			
MARK	DESCRIPTION	DETAIL	NOTES
FH-1	FIRE HYDRANT	SEE DETAIL W-14 ON SHEET C-02.04	N/A
WM-1	WATER METER & BACK FLOW PREVENTER	N/A	INSTALL 2" STANDARD WATER SERVICE AND 2" METER
WM-2	WATER METER & BACK FLOW PREVENTER	N/A	INSTALL 1" STANDARD WATER SERVICE AND 1" METER
WTR-1	CONNECT TO WATER MAIN, 8" x 8" TEE	N/A	(1) 8" x 8" MJ TEE, (3) 8" MJ GATE VALVE, COORDINATE CONNECTION WITH CITY OF WOODLAND
FDC	FIRE DEPARTMENT CONNECTION	N/A	INSTALL FIRE DEPARTMENT CONNECTIONS MOUNTED ON BUILDING (FDC) PER FIRE DISTRICT REQUIREMENTS
DCVA	2" DOUBLE CHECK VALVE ASSEMBLY	N/A	DDCVA TO BE INSTALLED INSIDE BLDG (BY OTHERS)
BO-1	STANDARD BLOW OFF	SEE DETAIL W-10 ON SHEET C02.05	N/A

SANITARY SEWER STRUCTURE SCHEDULE					
MARK	DESCRIPTION	DETAIL	RIM	INVERT IN	INVERT OUT
MH-1	SAMPLING MANHOLE	SEE DETAIL S-19 ON SHEET C02.04	35.14	25.64 (NW) 25.64 (NE)	25.64 (SE)
MH-2	SAMPLING MANHOLE	SEE DETAIL S-19 ON SHEET C02.04	38.07	27.78 (E)	27.78 (W)
SCO-1	CLEAN OUT	SEE DETAIL S-14 ON SHEET C02.04	34.36	28.45 (E)	28.45 (W)

SANITARY SEWER PIPE SCHEDULE			
MARK	SIZE	LENGTH	SLOPE
SP-1	6" PVC C-900	39 LF	1.00%
SP-2	6" PVC C-900	8 LF	1.00%
SP-3	6" PVC C-900	70 LF	1.00%



PRELIMINARY SITE PLAN REVIEW

D
C
B
A



LANDSCAPE LEGEND

LABEL	DESCRIPTION	QTY	LAMP	HEIGHT	LUMENS	WATTS	CATALOG NO. **
A	LIGHT POLE	5	LED	25'	3624	38	LITHONIA [DSX0 P1 SKK 14M MVOLT HS] **
B	WALLMOUNT LIGHT	18	LED	8'	264	8.6	LITHONIA [OLLWD] **
C	LIGHT POLE	2	LED	25'	3624	38	LITHONIA [DSX0 P1 SKK 15M MVOLT] **

** LITHONIA HAS BEEN USED FOR MODELING LIGHT PHOTOMETRICS, CONTRACTOR MAY USE LITHONIA PRODUCTS OR AN APPROVED EQUAL

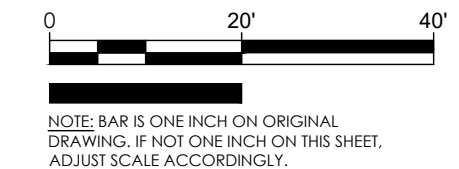
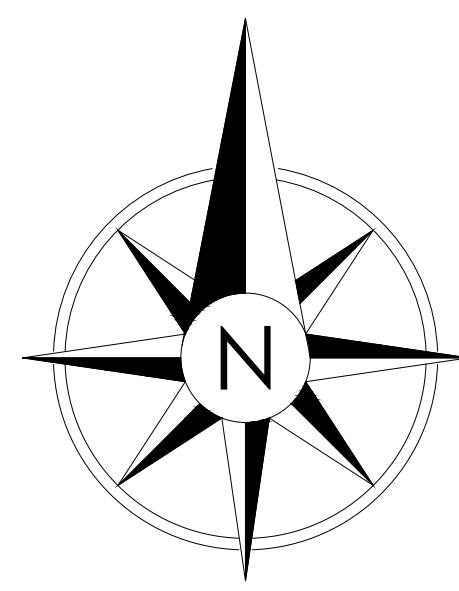
LIGHTING STATISTICS:

CALCULATIONS SUMMARY:

AVERAGE 0.7 FC
 MAXIMUM 3.5 FC
 MINIMUM 0.0 FC
 MAX/MIN N/A
 AVERAGE/MIN N/A

CALCULATION SHOWN IS 10' X 10' AND UNIT OF MEASUREMENT IS FOOT-CANDLE (FC).

- LIGHTING NOTES
- LIGHTING SHALL BE ARRANGED TO ENSURE NO LIGHT AND GLARE IS CAST INTO ADJACENT PARCELS; DOES NOT ROTATE, GLITTER, OR FLASH, OR CONFLICT WITH THE READABILITY OF TRAFFIC SIGNS AND CONTROL SIGNALS.
 - THERE WILL BE LIGHTING NEAR ENTRIES TO THE RESIDENTIAL UNITS. REFER TO ARCHITECTURAL PLANS FOR THESE LIGHTING LOCATIONS.



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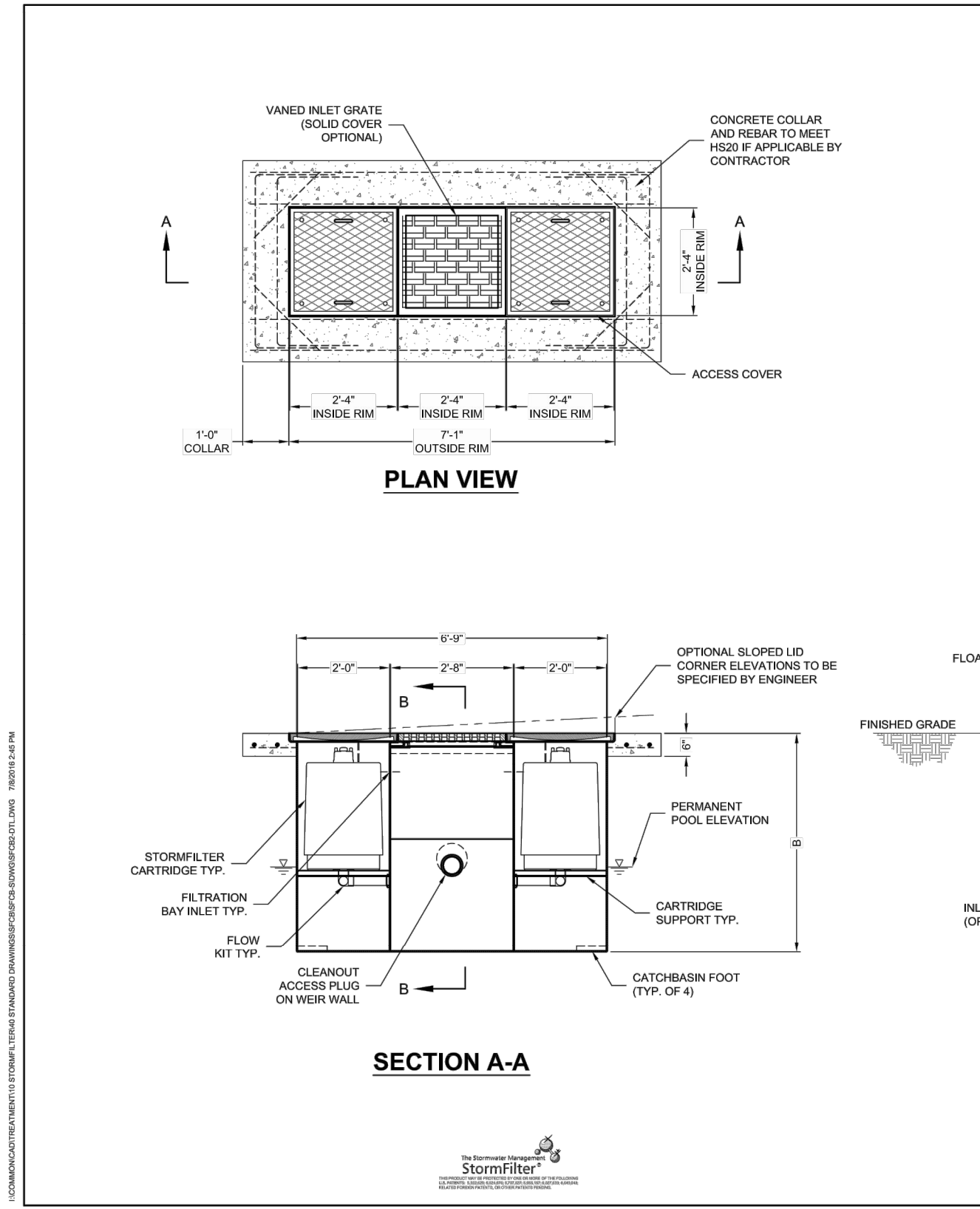
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 SCALE
 SCALE AS NOTED
 SHEET TITLE

LIGHTING PLAN
 SHEET C01.10



STORMFILTER STEEL CATCHBASIN DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. 2 CARTRIDGE CATCHBASIN HAS A MAXIMUM OF TWO CARTRIDGES. SYSTEM IS SHOWN WITH A 27" CARTRIDGE, AND IS ALSO AVAILABLE WITH AN 18" CARTRIDGE. STORMFILTER CATCHBASIN CONFIGURATIONS ARE AVAILABLE WITH A DRY INLET BAY FOR VECTOR CONTROL. PEAK HYDRAULIC CAPACITY PER TABLE BELOW. IF THE SITE CONDITIONS EXCEED PEAK HYDRAULIC CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	18" DEEP
RECOMMENDED HYDRAULIC DROP (H)	3'-0"	2'-3"	3'-3"
SPECIFIC FLOW RATE (gpm/ft ²)	2 gpm/ft ²	1.67 gpm/ft ²	1 gpm/ft ²
CARTRIDGE FLOW RATE (gpm)	22.5	15	7.5
PEAK HYDRAULIC CAPACITY	1.0	1.0	1.8
INLET PERMANENT POOL LEVEL (A)	1'-0"	1'-0"	2'-0"
OVERALL STRUCTURE HEIGHT (B)	4'-0"	3'-0"	4'-0"

1.67 gpm/ft² SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHORUS® (PSORB) MEDIA ONLY.

GENERAL NOTES

- CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STORMFILTER CATCHBASIN STRUCTURE, DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. WWW.CONTECHES.COM
- STORMFILTER CATCHBASIN WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- INLET SHOULD NOT BE LOWER THAN OUTLET. INLET (IF APPLICABLE) AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
- MANUFACTURER TO APPLY A SURFACE BEAD WELD IN THE SHAPE OF THE LETTER "O" ABOVE THE OUTLET PIPE STUB ON THE EXTERIOR SURFACE OF THE STEEL SFCB.
- STORMFILTER CATCHBASIN EQUIPPED WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET (IF APPLICABLE) AND OUTLET PIPING. STANDARD OUTLET STUB IS 8 INCHES IN DIAMETER. MAXIMUM OUTLET STUB IS 15 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR.
- STEEL STRUCTURE TO BE MANUFACTURED OF 1/4 INCH STEEL PLATE. CASTINGS SHALL MEET AASHTO M306 LOAD RATING. TO MEET HS20 LOAD RATING ON STRUCTURE, A CONCRETE COLLAR IS REQUIRED. WHEN REQUIRED, CONCRETE COLLAR WITH #4 REINFORCING BARS TO BE PROVIDED BY CONTRACTOR.
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 7 INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 30 SECONDS.
- SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

INSTALLATION NOTES

- ANY SUB-BASE BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CATCHBASIN (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

2-CARTRIDGE DEEP CATCHBASIN STORMFILTER DATA

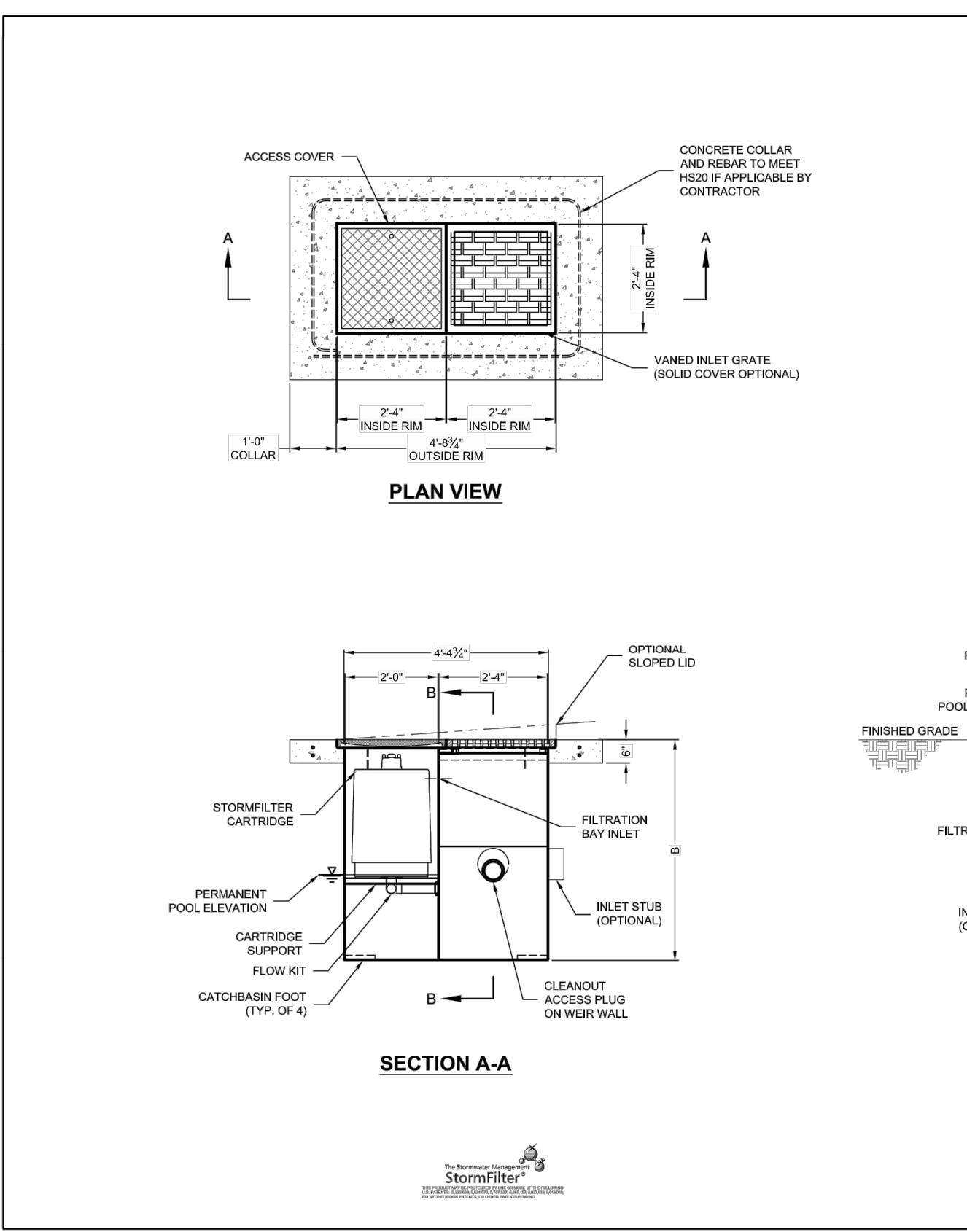
STRUCTURE ID	XXXX	CB-1
WATER QUALITY FLOW RATE (cfs)	XXXX	0.01 CFS
PEAK FLOW RATE (<1.8 cfs)	XXXX	<1 CFS
RETURN PERIOD OF PEAK FLOW (yrs)	XXXX	100 YEAR
CARTRIDGE FLOW RATE (gpm)	XXXX	7.5
MEDIA TYPE (PERLITE, ZPG, PSORB)	XXXXXX	2PG
RIM ELEVATION	XXXXXX	32.36

PIPE DATA: INLET STUB: XXXXXX" XXX" N/A; OUTLET STUB: XXXXXX" XXX" 8" ADS

CONFIGURATIONS: INLET, OUTLET, INLET, OUTLET, INLET, INLET

SLOPED LID: YES/NO; SOLID COVER: YES/NO; NOTES/SPECIAL REQUIREMENTS:

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
8025 Centre Pointe Dr., Suite 400, West Chester, OH 45390
800-338-3999 513-645-7000 513-645-7993 FAX



STORMFILTER CATCHBASIN DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. 1 CARTRIDGE CATCHBASIN HAS A MAXIMUM OF ONE CARTRIDGE. SYSTEM IS SHOWN WITH A 27" CARTRIDGE, AND IS ALSO AVAILABLE WITH AN 18" CARTRIDGE. STORMFILTER CATCHBASIN CONFIGURATIONS ARE AVAILABLE WITH A DRY INLET BAY FOR VECTOR CONTROL. PEAK HYDRAULIC CAPACITY PER TABLE BELOW. IF THE SITE CONDITIONS EXCEED PEAK HYDRAULIC CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	27"	18"	18" DEEP
MINIMUM HYDRAULIC DROP (H)	3'-0"	2'-3"	3'-3"
SPECIFIC FLOW RATE (gpm/ft ²)	2 gpm/ft ²	1 gpm/ft ²	1 gpm/ft ²
CARTRIDGE FLOW RATE (gpm)	22.5	15	7.5
PEAK HYDRAULIC CAPACITY	1.0	1.0	1.8
INLET PERMANENT POOL LEVEL (A)	1'-0"	1'-0"	2'-0"
OVERALL STRUCTURE HEIGHT (B)	4'-0"	3'-0"	4'-0"

GENERAL NOTES

- CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STORMFILTER CATCHBASIN STRUCTURE, DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. WWW.CONTECHES.COM
- STORMFILTER CATCHBASIN WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- INLET SHOULD NOT BE LOWER THAN OUTLET. INLET (IF APPLICABLE) AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
- STORMFILTER CATCHBASIN EQUIPPED WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET (IF APPLICABLE) AND OUTLET PIPING. STANDARD OUTLET STUB IS 8 INCHES IN DIAMETER. MAXIMUM OUTLET STUB IS 15 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR.
- STEEL STRUCTURE TO BE MANUFACTURED OF 1/4 INCH STEEL PLATE. CASTINGS SHALL MEET AASHTO M306 LOAD RATING. TO MEET HS20 LOAD RATING ON STRUCTURE, A CONCRETE COLLAR IS REQUIRED. WHEN REQUIRED, CONCRETE COLLAR WITH QUANTITY (Q) #4 REINFORCING BARS TO BE PROVIDED BY CONTRACTOR.
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 7 INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 30 SECONDS.
- SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

INSTALLATION NOTES

- ANY SUB-BASE BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CATCHBASIN (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

1-CARTRIDGE CATCHBASIN STORMFILTER DATA

STRUCTURE ID	XXXX	CB-2
WATER QUALITY FLOW RATE (cfs)	XXXX	0.01 CFS
PEAK FLOW RATE (<1 cfs)	XXXX	<1 CFS
RETURN PERIOD OF PEAK FLOW (yrs)	XXXX	100 YEAR
CARTRIDGE FLOW RATE (gpm)	XXXX	7.5
MEDIA TYPE (CSF, PERLITE, ZPG, GAC, PHS)	XXXXXX	2PG
RIM ELEVATION	XXXXXX	32.36

PIPE DATA: INLET STUB: XXXXXX" XXX" N/A; OUTLET STUB: XXXXXX" XXX" 8" ADS

CONFIGURATION: INLET, OUTLET, INLET, OUTLET, INLET, INLET

SLOPED LID: YES/NO; SOLID COVER: YES/NO; NOTES/SPECIAL REQUIREMENTS:

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
8025 Centre Pointe Dr., Suite 400, West Chester, OH 45390
800-338-3999 513-645-7000 513-645-7993 FAX

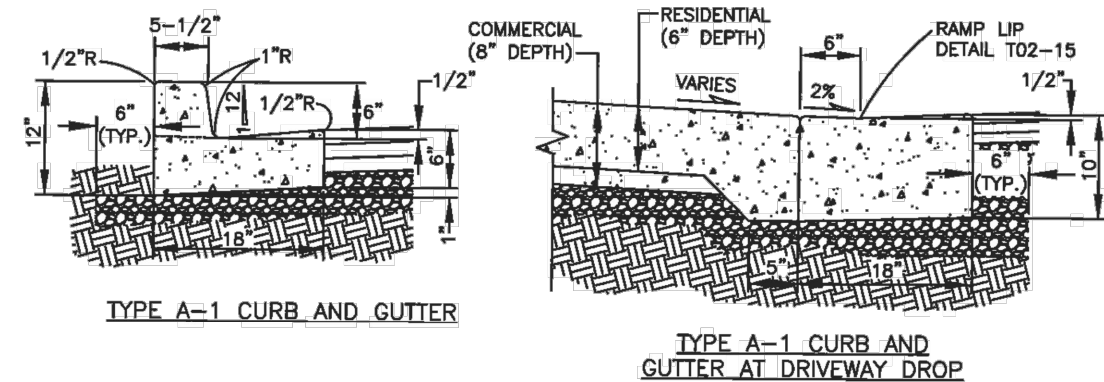
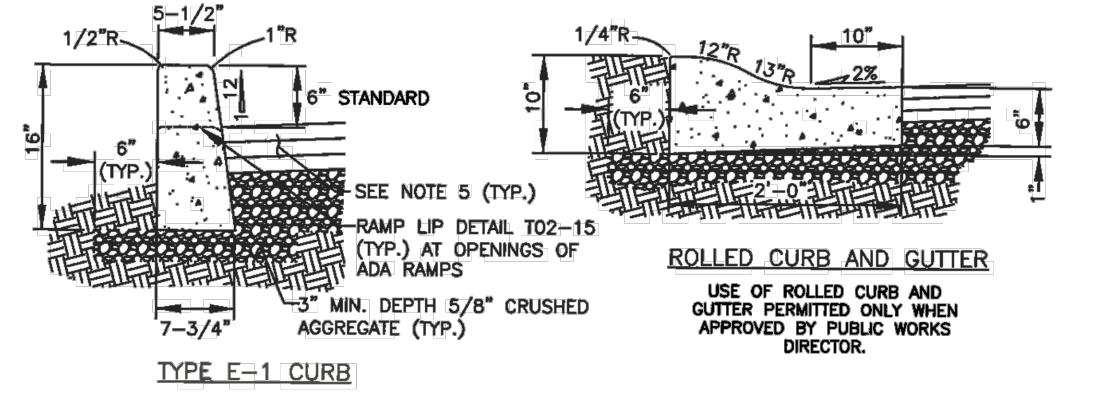
JDMA
Jolma Design, LLC
10 South Parkway Ave.
Ste. 102
Battle Ground, WA 98604
(360) 723-0392
www.jolmadesign.com



PROJECT NAME: GOERIC APARTMENTS
CLIENT: AIDAN WILLIS
PROJECT LOCATION: WOODLAND, WA

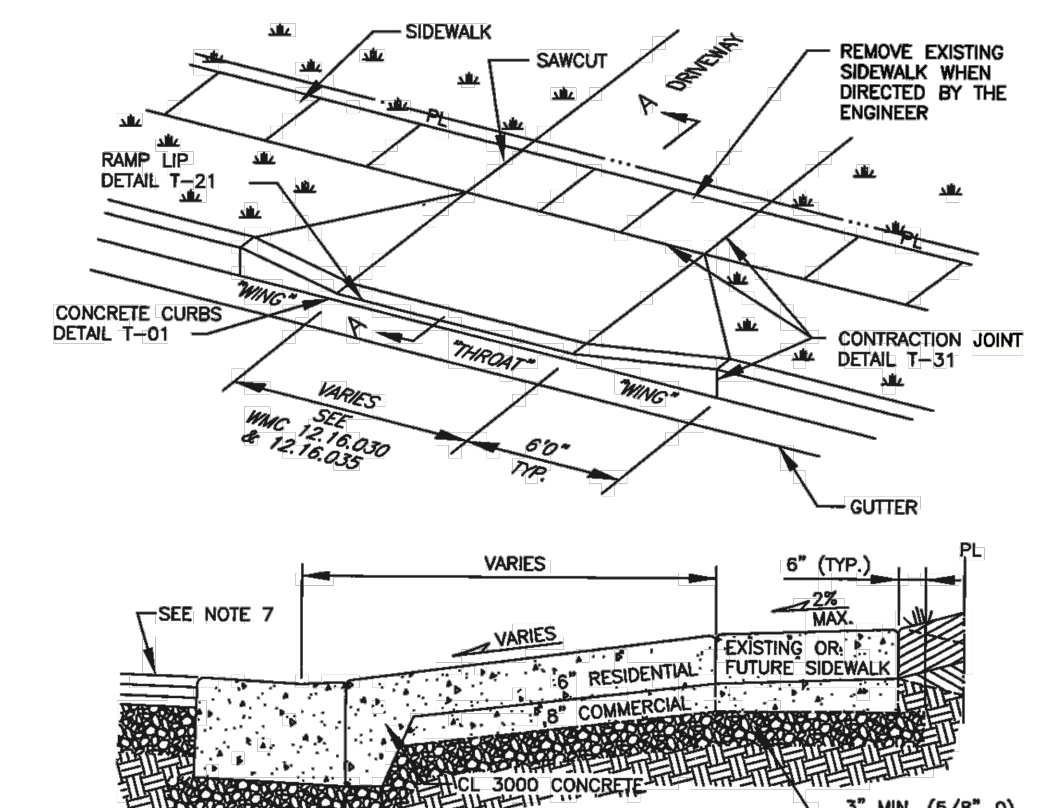
MARK	DATE	DESCRIPTION
A	6/24/2022	Issued for review.

PROJECT: 22046
DESIGNED: DGS
DRAWN: BDT
CHECKED: DGS
SCALE: SCALE AS NOTED
SHEET TITLE: STORM DETAILS
SHEET: C02.02



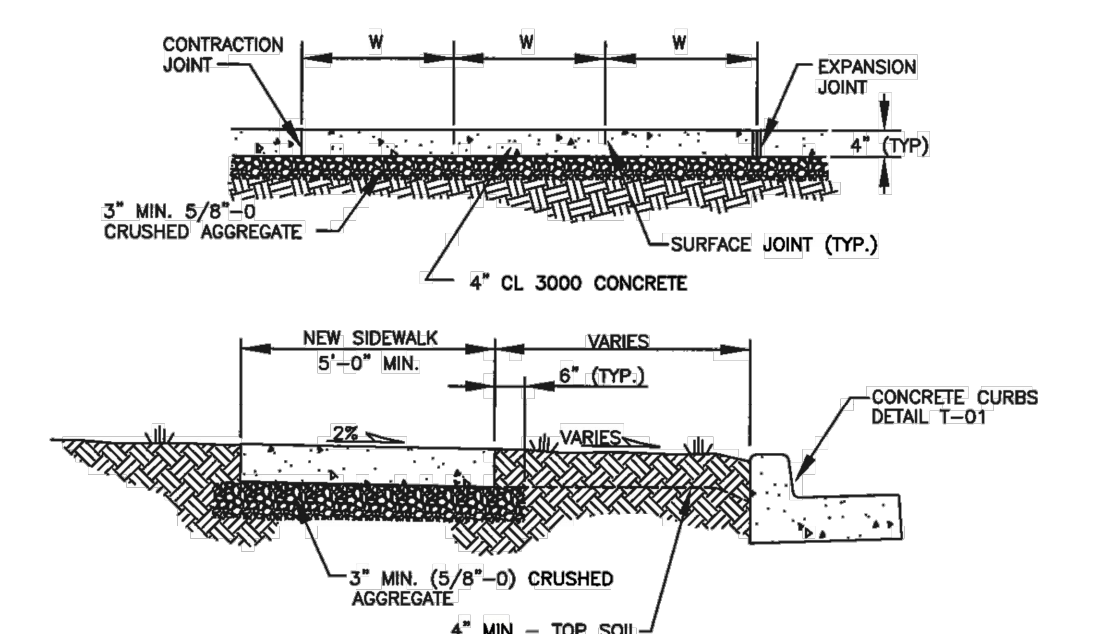
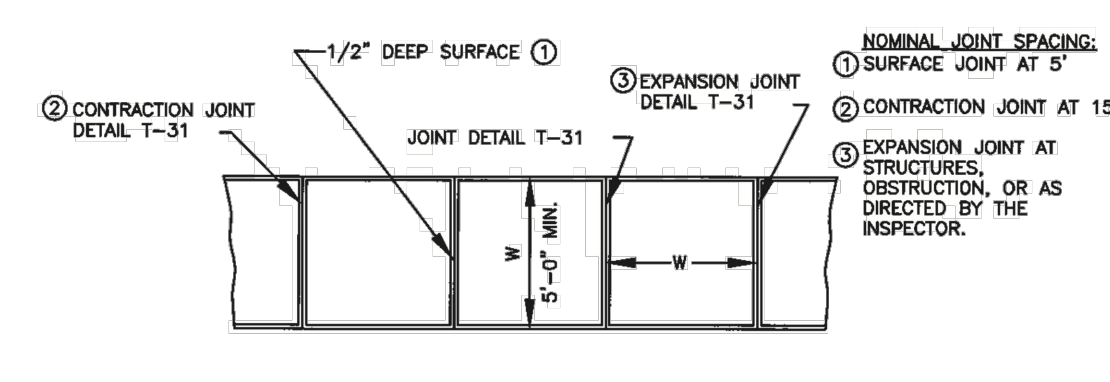
- NOTES:**
- CONCRETE SHALL BE 3000 PSI MIN. (CL 3000), 3-1/2" SLUMP (MAX.).
 - CURBS ADJACENT TO PAVEMENT OR SIDEWALK SHALL HAVE CONSTRUCTION JOINTS TO MATCH EXISTING PATTERNS. 3/8" EXPANSION JOINTS SHALL BE PLACED ON BOTH SIDES OF CATCH BASINS. AT TOPS OF DRIVEWAYS, ALL CHANGES IN DIRECTION, AND AS DIRECTED BY THE INSPECTOR. CONSTRUCTION JOINTS TO BE PLACED AT 15' MAXIMUM SPACING.
 - FOR CURB DROPS AT ADA RAMP, SEE RAMP LIP DETAIL T-21.
 - COMPACT SUBGRADE AND AGGREGATE TO 95% MAXIMUM DRY DENSITY (3" MIN. DEPTH).
 - SEE PAVEMENT RESTORATION/WIDENING AT CURBS DETAIL T-30.
 - CURB TO BE MEDIUM BROOM FINISHED, PARALLEL TO GUTTER LINE.
 - WHERE MATCHING EXISTING CURBS, ALL EXISTING EDGES SHALL BE SAWCUT.
 - WHEN ATTACHED SIDEWALKS ARE USED WITH ROLLED CURB AND GUTTER, THICKENED SIDEWALKS (6" MIN.) SHALL BE CONSTRUCTED UNDER THE SAME CONSTRUCTION CONTRACT.

CONCRETE CURBS		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-01
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



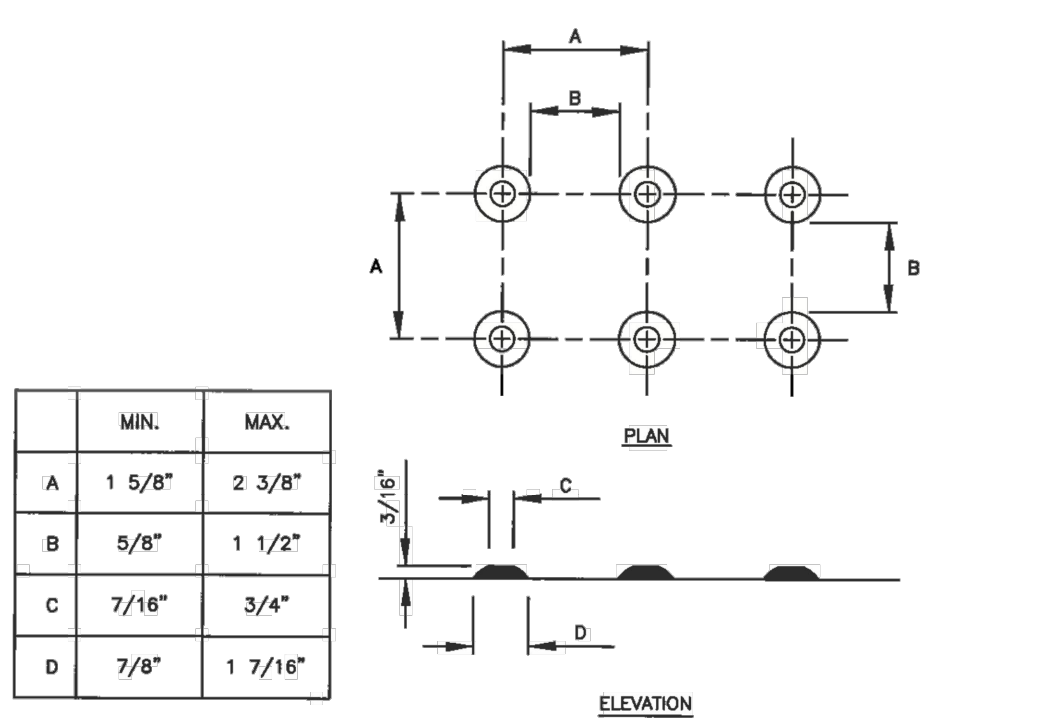
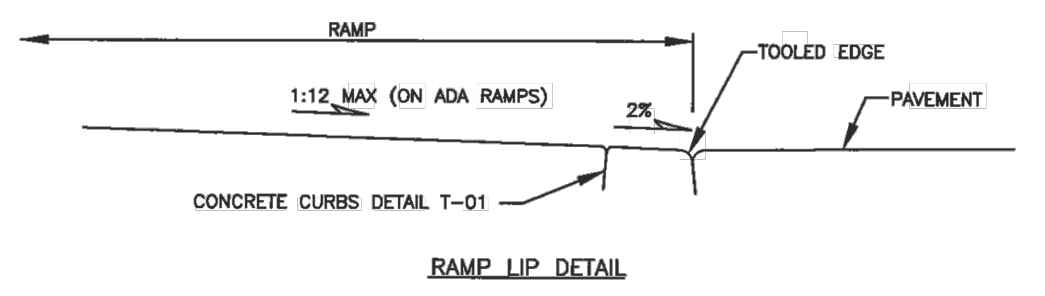
- NOTES:**
- CONCRETE SHALL BE 3000 PSI MIN. (CL 3000), 3-1/2" SLUMP (MAX.), MEDIUM BROOM FINISH PARALLEL TO DRIVEWAY CENTERLINE.
 - TO BE USED WHERE CURB AND SIDEWALK ARE SEPARATED BY A PLANTER STRIP.
 - COMMERCIAL DRIVEWAYS REQUIRE 8" CONCRETE WITH REINFORCING STEEL (6x6 - W2.9xW2.9 WWF, MIN.), 1 1/2" COVER FROM BOTTOM OF SLAB. RESIDENTIAL DRIVEWAYS REQUIRE 6" CONCRETE.
 - COMPACT SUBGRADE AND AGGREGATE TO 95% OF MAXIMUM DRY DENSITY (3" MIN. DEPTH).
 - DRIVEWAYS EXCEEDING 15' IN TOTAL WIDTH SHALL HAVE ADDITIONAL LONGITUDINAL JOINTS AS DIRECTED. JOINT SPACING SHALL NOT EXCEED 15'. SEE CONCRETE JOINTS DETAIL T-31.
 - EXISTING CURB SHALL BE REMOVED TO EXISTING JOINT OR SAWCUT SUCH THAT 3" MIN. OF NEW CURB IS CONSTRUCTED ADJACENT TO NEW DRIVEWAY. HORIZONTAL CUTTING OF EXISTING CURB ALLOWED SUBJECT TO PUBLIC WORKS DIRECTOR APPROVAL.
 - SEE PAVEMENT RESTORATION/WIDENING AT CURB DETAIL T-30 WHEN CUTTING EXISTING CURB.
 - ALL EXISTING EDGES SHALL BE SAWCUT.
 - STRUCTURAL SECTION OF DRIVEWAY TO BE EXTENDED THROUGH SIDEWALK AREA.
 - 3' WING MIN. FOR RESIDENTIAL STREET.
 - 45° ANGLE FOR WINGS ON ARTERIAL STREETS.
 - NO WATER METERS IN DRIVEWAY APPROACH OR WING.

DRIVEWAY WITH DETACHED SIDEWALK		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-03
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



- NOTES:**
- CONCRETE SHALL BE 3000 PSI MIN. (CL 3000), 3 1/2" SLUMP (MAX.).
 - COMPACT SUBGRADE AND AGGREGATE TO 95% OF MAXIMUM DRY DENSITY (3" MIN.).
 - FINISH SHALL BE MEDIUM BROOM PERPENDICULAR TO PEDESTRIAN TRAFFIC UNLESS OTHERWISE DIRECTED.
 - MATCH EXISTING BORDER.
 - SEE CONCRETE JOINTS DETAIL T-31 FOR SURFACE, CONTRACTION, AND EXPANSION JOINTS.
 - ALL EXISTING EDGES SHALL BE SAWCUT.
 - CROSS SLOPE OF PLANTER STRIP SHALL BE 2% (TYP.) AND 4:1 (MAX.).

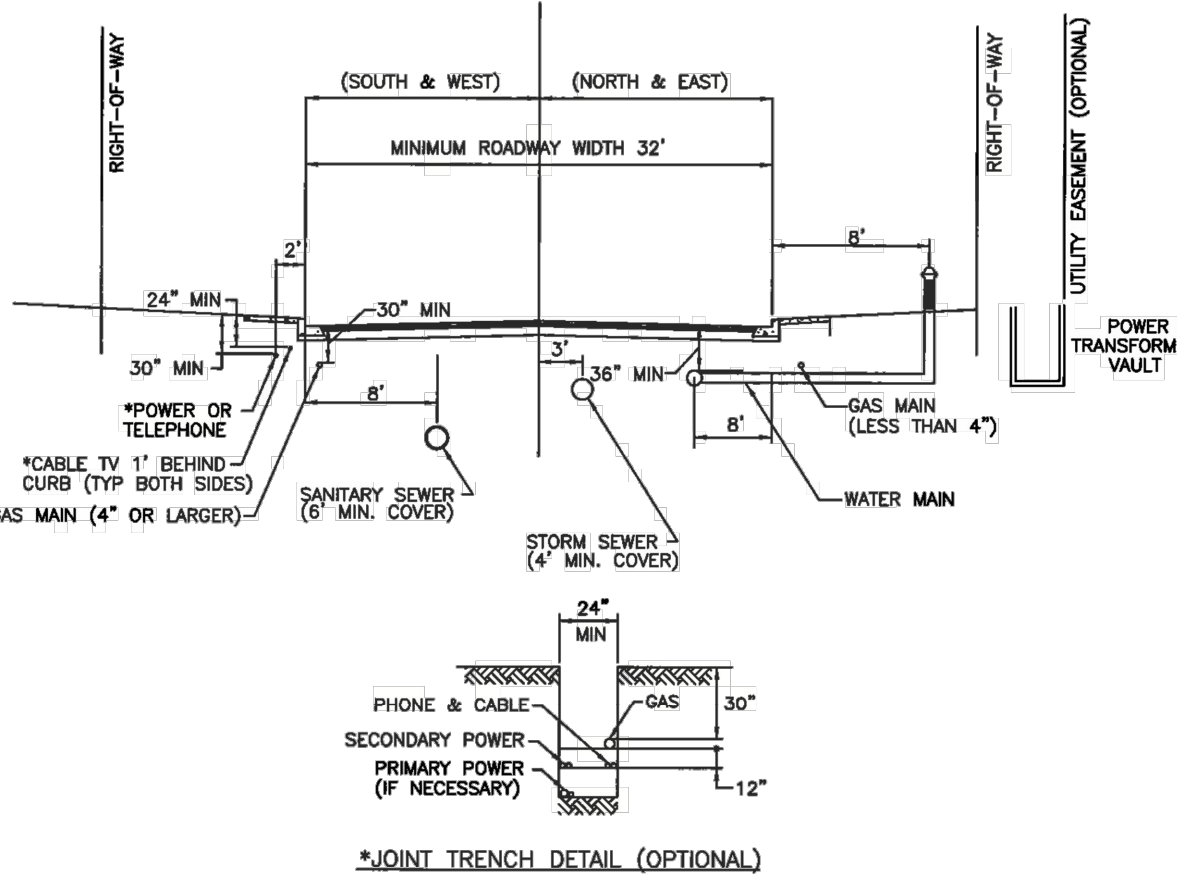
SIDEWALK DETAIL		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-07
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



- NOTES:**
- DETECTABLE WARNINGS SHALL BE MANUFACTURED USING THE MATERIALS SPECIFIED ON THE PLAN SHEETS WITH THE DOME DIMENSIONS AND SPACING SHOWN AND INSTALLED PER THE MANUFACTURER'S RECOMMENDED PROCEDURES.
 - DETECTABLE WARNINGS SHALL BE INSET INTO NEW CONCRETE WITH NO AIR TRAPPED UNDERNEATH. GLUED ON OR NAILED DOWN PRODUCTS ARE NOT ACCEPTABLE FOR NEW CONSTRUCTION.
 - SAFETY YELLOW TRUNCATED DOMES ARE REQUIRED UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.

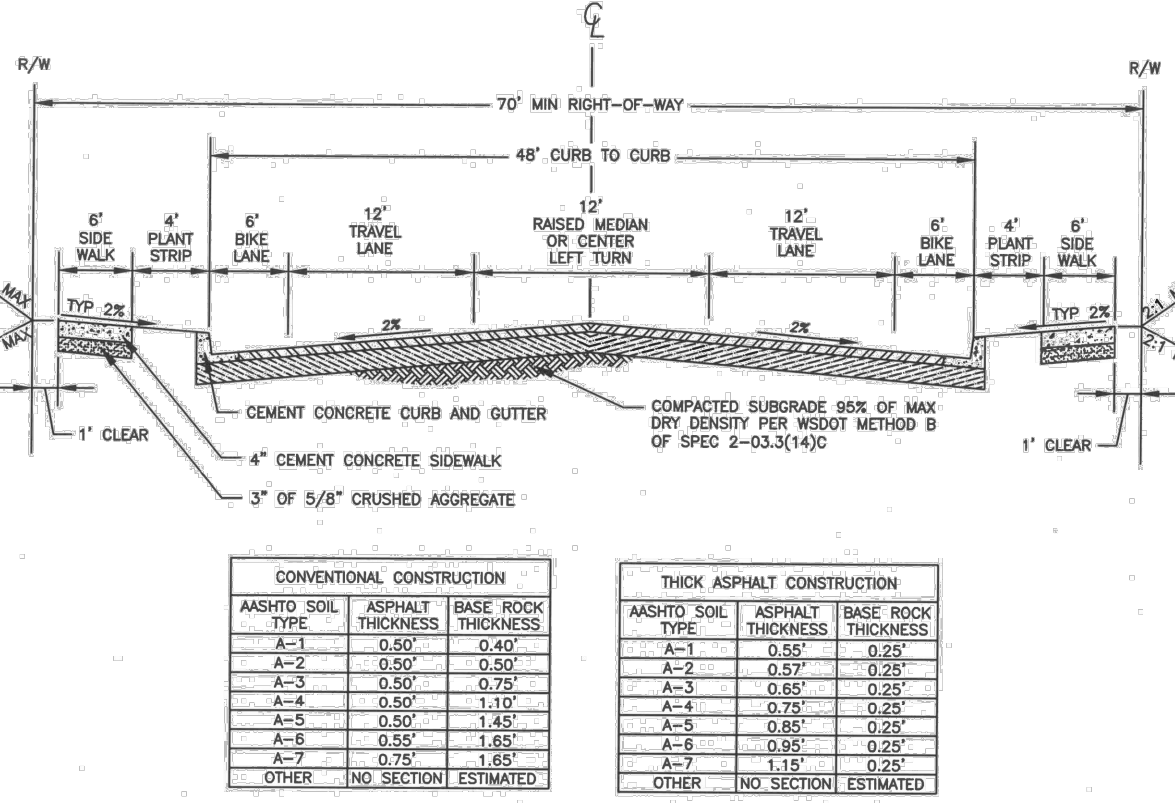
DETECTABLE WARNING PATTERN DETAIL		MIN.	MAX.
A		1 5/8"	2 3/8"
B		5/8"	1 1/2"
C		7/16"	3/4"
D		7/8"	1 7/16"

RAMP LIP AND DETECTABLE WARNING PATTERN		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-21
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



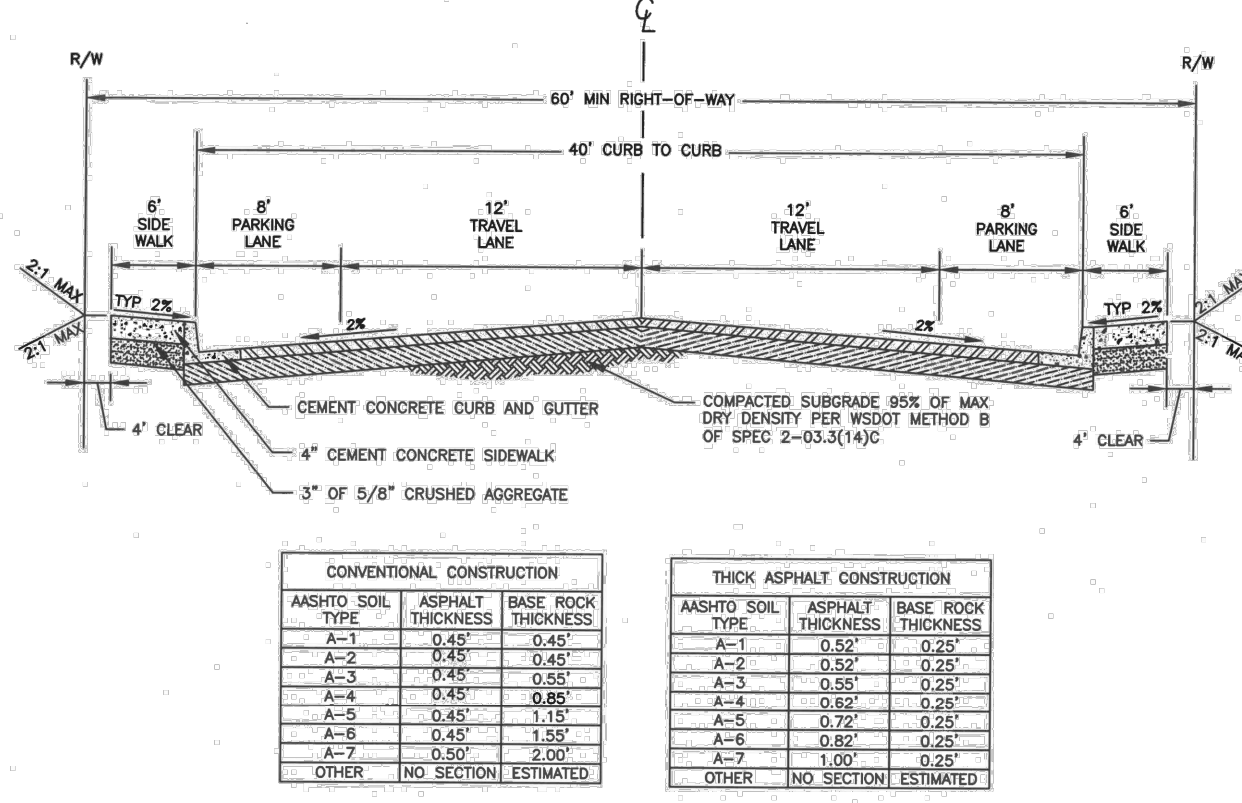
- NOTES:**
- THE PUBLIC WORKS DIRECTOR MAY REQUIRE INSTALLATION OF SANITARY SEWER AT A DEPTH GREATER THAN 6 FEET.
 - ALTERNATE LOCATIONS CONSIDERED ONLY TO SALVAGE CORE ROADWAY, OR TO AVOID SUBSTANTIAL CONFLICT WITH EXISTING UTILITIES.
 - MANHOLES CONES TO BE ROTATED TO KEEP MANHOLE COVER LOCATED OUTSIDE OF WHEEL PATH.
 - GAS VALVES ARE TO BE LOCATED 2' MINIMUM FROM FACE OF CURB.
 - MODIFICATION TO THIS STANDARD IS SUBJECT TO THE REVIEW AND APPROVAL OF THE PUBLIC WORKS DIRECTOR.
 - PULL BOXES AND VAULTS OF PRIVATE UTILITIES WILL BE LOCATED OUTSIDE OF THE SIDEWALK.

UTILITY PLACEMENT		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-22
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



- NOTES:**
- WIDER SIDEWALKS MAY BE REQUIRED BY REVIEWING AUTHORITY UNDER CERTAIN CIRCUMSTANCES.
 - SUBGRADE REINFORCEMENT GEOTEXTILES SHALL BE INSTALLED OVER A-6 AND A-7 SOILS PRIOR TO CONSTRUCTING THE BASE AND SURFACING.
 - ASPHALT SURFACE FOR ALL ROADS SHALL BE HMA CLASS 1/2" PG 64-22 PER WSDOT STANDARD SPECIFICATIONS.
 - THE PAVEMENT STRUCTURE THICKNESSES IDENTIFIED FOR THESE SOIL TYPES ARE REQUIRED UNLESS A SITE SPECIFIC PAVEMENT DESIGN IS DONE. THE TOTAL PAVEMENT STRUCTURE SHALL NOT EXCEED 2.5 FEET.
 - EITHER CONVENTIONAL OR THICK ASPHALT CONSTRUCTION IS ALLOWED.
 - BASE ROCK SECTION SHALL BE TWO (2) INCHES OF 5/8" - 0" TOP COURSE, OVER REMAINING DEPTH OF BASE COURSE PER WSDOT STANDARD SPEC SECTION 6-03.3(1). TOTAL BASE ROCK SECTION THICKNESS AS INDICATED IN THE TABLES. BASE ROCK WILL BE COMPACTED TO MEET SPEC 2-03.3(1)(D).

MINOR ARTERIAL		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-24B
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



- NOTES:**
- WIDER SIDEWALKS MAY BE REQUIRED BY REVIEWING AUTHORITY UNDER CERTAIN CIRCUMSTANCES.
 - SUBGRADE REINFORCEMENT GEOTEXTILES SHALL BE INSTALLED OVER A-6 AND A-7 SOILS PRIOR TO CONSTRUCTING THE BASE AND SURFACING.
 - ASPHALT SURFACE FOR ALL ROADS SHALL BE HMA CLASS 1/2" PG 64-22 PER WSDOT STANDARD SPECIFICATIONS.
 - THE PAVEMENT STRUCTURE THICKNESSES IDENTIFIED FOR THESE SOIL TYPES ARE REQUIRED UNLESS A SITE SPECIFIC PAVEMENT DESIGN IS DONE. THE TOTAL PAVEMENT STRUCTURE SHALL NOT EXCEED 2.5 FEET.
 - EITHER CONVENTIONAL OR THICK ASPHALT CONSTRUCTION IS ALLOWED.
 - BASE ROCK SECTION SHALL BE TWO (2) INCHES OF 5/8" - 0" TOP COURSE, OVER REMAINING DEPTH OF BASE COURSE PER WSDOT STANDARD SPEC SECTION 6-03.3(1). TOTAL BASE ROCK SECTION THICKNESS AS INDICATED IN THE TABLES. BASE ROCK WILL BE COMPACTED TO MEET SPEC 2-03.3(1)(D).

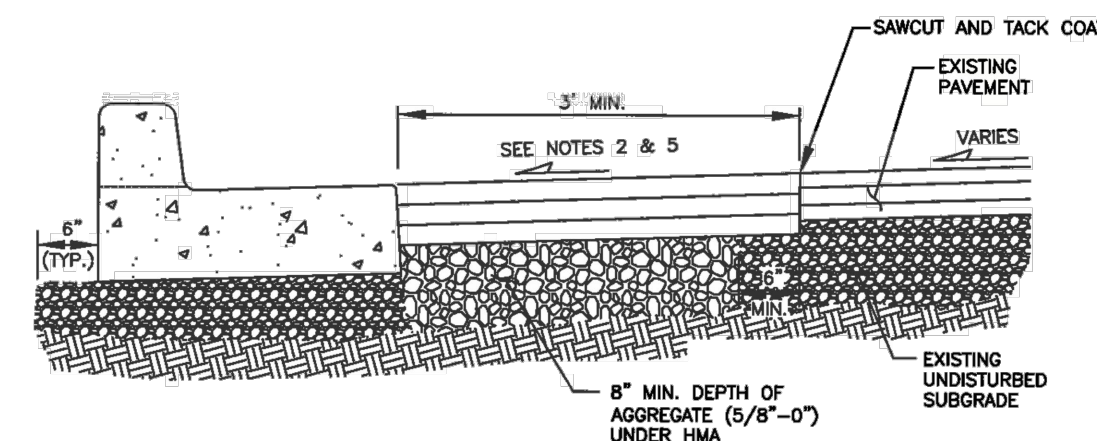
TWO-LANE COLLECTOR		APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	T-25B
WOODLAND	APPROVED	<i>Bart Stapp</i>	5/8/13				
PUBLIC WORKS	PUBLIC WORKS DIRECTOR	DATE					



PROJECT NAME: GOERIC APARTMENTS
 CLIENT: AIDAN WILLIS
 PROJECT LOCATION: WOODLAND, WA

MARK	DATE	DESCRIPTION
A	6/24/2022	Issued for review.

PROJECT: 22046
 DESIGNED: DGS
 DRAWN: BDT
 CHECKED: DGS
 SCALE: SCALE AS NOTED
 SHEET TITLE: STREET DETAILS
 SHEET: C02.03



TYPE A-1 CURB AND GUTTER

NOTES:

- SEE CONCRETE CURBS DETAIL T-01 FOR CURBS.
- PAVEMENT SECTION SHALL BE APPROVED IN ADVANCE AND COMPLETED TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR.
- THE EDGES OF ALL EXISTING ASPHALT SURFACES SHALL BE CLEANED AND A TACK COAT SHALL BE APPLIED PER THE STANDARD SPECIFICATIONS. ALL JOINTS SHALL BE SEALED WITH CRS-1 AND SANDED.
- COMPACT SUBGRADE, CRUSHED AGGREGATE AND PAVEMENT TO 95% OF MAXIMUM DRY DENSITY.
- HOT MIX ASPHALT SHALL BE (HMA) CLASS 1/2" PG 64-22 3 TO 30 ESAL MIX DESIGN. MINIMUM LIFT THICKNESS IS 0.15" MAXIMUM LIFT THICKNESS IS 0.35" FOR BASE COURSE AND 0.25" FOR SURFACE COURSE.
- MATCH EXISTING PAVEMENT SLOPE. NO STEEPER THAN 4% WITHOUT SPECIFIC CITY APPROVAL.
- SAWCUT AND REMOVE EXISTING FAILING ASPHALT PAVEMENT.
- SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT. MINIMUM 6" WIDTH, MAXIMUM HALF STREET WIDTH.
- 3' MIN. PAVEMENT RESTORATION AROUND MANHOLE.

PAVEMENT RESTORATION/WIDENING AT CURBS				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stepp</i>		5/8/19		
PUBLIC WORKS DIRECTOR		DATE		

T-30

GENERAL NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, EXCEPT WHERE OTHERWISE NOTED IN THESE STANDARDS. MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) AND SHALL COMPLY WITH THE CURRENT EDITION.
- TRENCH BACKFILL AND RESURFACING SHALL BE AS SHOWN IN THE STANDARD DETAILS, UNLESS MODIFIED BY THE RIGHT OF WAY USE PERMIT. SURFACING DEPTHS AND PAVING LIMITS SHOWN IN THE STANDARD DETAILS ARE MINIMUMS AND MAY BE INCREASED BY THE DIRECTOR TO MEET TRAFFIC LOADINGS OR SITE CONDITIONS.
- THE DIRECTOR MAY REQUIRE MATERIALS COMPACTION AND MOISTURE TESTING. TESTING SHALL BE PERFORMED BY A LAB PRE-APPROVED BY THE CITY WITH THE RESULTS BEING SUPPLIED TO THE DIRECTOR. THE TESTING IS NOT INTENDED TO RELIEVE THE CONTRACTOR FROM ANY LIABILITY FOR THE TRENCH RESTORATION. IT IS INTENDED TO SHOW THE INSPECTOR AND THE CITY THAT THE RESTORATION MEETS THIS SPECIFICATION.
- THE FINAL PAVEMENT PATCH SHALL BE COMPLETED AS SOON AS POSSIBLE AND SHALL BE COMPLETED WITHIN THIRTY (30) DAYS AFTER FIRST OPENING THE TRENCH. THIS TIME FRAME MAY BE ADJUSTED IF DELAYS ARE DUE TO INCLEMENT WEATHER, OR OTHER ADVERSE CONDITIONS. HOWEVER, DELAYING OF FINAL PATCH OR OVERLAY WORK IS ALLOWABLE ONLY SUBJECT TO THE DIRECTOR'S APPROVAL. THE DIRECTOR MAY DEEM IT NECESSARY TO COMPLETE THE WORK WITHIN THIRTY (30) DAYS TIME FRAME AND NOT ALLOW ANY TIME EXTENSION. IF THIS OCCURS, THE CONTRACTOR SHALL PERFORM THE NECESSARY WORK AS DIRECTED. PATCHES, REPAIRS, OR OVERLAYS SHALL ONLY BE INSTALLED NEXT TO A CLEAN, NEAT SAWCUT LINE.
- WHEN TRENCHING WITHIN THE ROADWAY SHOULDERS, THE SHOULDER SHALL BE RESTORED TO ITS ORIGINAL OR BETTER CONDITION. LONGITUDINAL TRENCH RESTORATION REQUIRING A HALF LANE WIDTH OR MORE SHALL BE REQUIRED TO RESTORE THE ENTIRE LANE TO CENTERLINE. UNDERMINED PAVEMENT SHALL BE CUT BACK, REMOVED, AND RESTORED TO LIMITS AS REQUIRED BY THE DIRECTOR TO ALLOW COMPACTION AND BACKFILL OF DISTURBED AREAS. LIMITS OF TRENCH RESTORATION SHALL BE IDENTIFIED PRIOR TO TRENCH BACKFILL.
- ANY PATCH OR OVERLAY ON ARTERIAL STREETS OR AREAS ZONED COMMERCIAL SHALL BE PERMANENT AND COMPLETED AS SOON AS POSSIBLE.
- IF A PAVEMENT CUT IS PROPOSED IN A STREET THAT WAS CONSTRUCTED OR RE-PAVED WITHIN THE PAST FIVE YEARS, A DISRUPTION FEE WILL BE CHARGED IN ACCORDANCE WITH WMC 12.04.060. TRENCHLESS CONSTRUCTION METHODS MUST BE EXPLORED ON ALL PAVED ROAD CROSSINGS REGARDLESS OF THE PAVEMENT CONDITION.
- CONTROL DENSITY FILL IS REQUIRED WHEN TRENCHING IN ARTERIAL STREETS, AND STREETS LOCATED IN THE CENTRAL BUSINESS DISTRICT. FOR LONGITUDINAL TRENCHES ALTERNATIVE METHODS OF RESTORATION MAY BE CONSIDERED.
- THE OWNER SHALL WARRANTY THE RESTORATION WORK FOR A PERIOD OF 2 YEARS ON RESIDENTIAL, LOCAL, AND UNCLASSIFIED STREETS AND 5 YEARS ON COLLECTOR AND ARTERIAL STREETS. FRANCHISE UTILITIES SHALL WARRANTY THEIR WORK FOR THE LIFE OF THE RESTORATION. THE OWNER SHALL REPAIR ANY OF THE FOLLOWING DEFICIENCIES WHICH OCCUR DURING THIS TIME PERIOD.
 - SETTLEMENT OR BUMP: ANY SETTLEMENT OR BUMP MORE THAN 1/4 INCH LOWER OR HIGHER THAN THE ORIGINAL PAVEMENT SHALL BE REPAIRED. REPAIR MAY INCLUDE REMOVAL AND REPLACEMENT OR SKIN PATCHING AND WILL BE DETERMINED BY THE DIRECTOR.
 - EDGE SEPARATION: ANY SEPARATION OF THE TRENCH FROM SURROUNDING ROADWAY GREATER THAN 1/4 INCH SHALL BE CRACK SEALED PER WSDOT STANDARD SPECIFICATIONS SECTION 5-04.
 - ALLIGATOR CRACKING: ANY TRENCH PAVEMENT WHICH EXHIBITS ALLIGATOR CRACKING SHALL BE REPLACED. THE REPLACEMENT SHALL BE IN CONFORMANCE WITH THE PAVEMENT REPAIR SECTION OF THE STANDARD SPECIFICATIONS.
 - RAVELING: RAVELING IS DEFINED AS SURFACE DETERIORATION THAT OCCURS WHEN AGGREGATE PARTICLES ARE DISLODGED OR OXIDATION CAUSES LOSS OF ASPHALT BINDER. THE ASPHALT CONCRETE PAVEMENT LOSES ITS SMOOTH SURFACE AND BEGINS TO APPEAR VERY OPEN AND ROUGH. MEDIUM SEVERITY RAVELING AS DEFINED BY THE "PAVEMENT SURFACE CONDITION FIELD RATING MANUAL FOR ASPHALT PAVEMENT" DEVELOPED BY THE NORTHWEST PAVEMENT MANAGEMENT ASSOCIATION SHALL BE PLANED AND REPAVED.
- PAVEMENT REMOVAL SHALL ONLY BE ACCOMPLISHED BY USE OF SAWCUTTING, PLANING, OR GRINDING EQUIPMENT SPECIFICALLY DESIGNED FOR THIS PURPOSE, TO ACCOMPLISH A NEAT STRAIGHT CUT LINE. USE OF PAVEMENT RIPPER IS PROHIBITED.
- ALL PAVEMENT, CURB, GUTTER, OR SIDEWALK DAMAGED AS A RESULT OF CONTRACTOR ACTIVITY SHALL BE RESTORED TO ORIGINAL CONDITION. PAVEMENT SHALL BE RESTORED TO NOT LESS THAN THE ORIGINAL CROSS SECTION AND STRENGTH. WHERE PAVEMENT, CURB, GUTTER, OR SIDEWALK HAVE BEEN UNDERMINED BY TRENCHING, IT SHALL BE REMOVED. THE SUBGRADE RESTORED AND SURFACES REPLACED TO LIMITS AS APPROVED BY THE CITY.

STANDARD TRENCH RESTORATION NOTES				
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stepp</i>		5/8/19		
PUBLIC WORKS DIRECTOR		DATE		

T-32

Jolma Design, LLC
 10 South Parkway Ave.
 Ste. 102
 Battle Ground, WA 98604
 (360) 723-0392
 www.jolmadesign.com



PROJECT NAME:
GOERIC APARTMENTS

CLIENT:
AIDAN WILLIS

PROJECT LOCATION:
WOODLAND, WA

MARK	DATE	DESCRIPTION
A	6/24/2022	Issued for review.

PROJECT:	22046
DESIGNED:	DGS
DRAWN:	BDT
CHECKED:	DGS
SCALE:	
SCALE AS NOTED	
SHEET TITLE	

STREET DETAILS

SHEET

GENERAL NOTES FOR SANITARY SEWER

ALL MATERIALS AND INSTALLATION OF SANITARY SEWERS SHALL BE IN CONFORMANCE WITH THE MOST CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, HERINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS", PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, EXCEPT AS NOTED HEREIN OR ON THE STANDARD PLANS. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE OWNER AS EITHER THE "STATE" OR "SECRETARY" OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "CITY".

ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE CITY AT (360) 225-7999 AT LEAST 48-HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION CONFERENCE MAY BE REQUIRED.

THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MUST CONTACT THE UNDERGROUND UTILITY NOTIFICATION CENTER "CALL BEFORE YOU DIG" AT (800) 424-5555 OR "811".

FINAL ACCEPTANCE OF SANITARY SEWERS ARE SUBJECT TO SECTIONS 1-05.11, 1-05.12, 7-17.3(2)(c), 7-17.3(2)(f), 7-17.3(2)(g) AND 7-17.3(2)(h) OF THE STANDARD SPECIFICATIONS. TELEVISION INSPECTION SHALL INCLUDE VIDEO OF ALL MANHOLES IN ADDITION TO THE PIPE. THE CONTRACTOR SHALL WARRANT ALL WORK DONE UNDER CITY CONTRACT FOR A PERIOD OF TWO (2) YEARS AS PER OF THE CITY OF WOODLAND GENERAL PROVISIONS FOR MUNICIPAL CONSTRUCTION.

LOCAL VARIATIONS IN SLOPE (I.E. "BELLES") MUST BE NO MORE THAN 1/2" MAXIMUM. VARIATIONS IN EXCESS OF THESE TOLERANCES MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CITY.

ALL PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING:

A. POLYVINYL CHLORIDE (PVC) SEWER PIPE 15" DIAMETER OR LESS SHALL CONFORM TO ASTM D3034, SDR 35. IT SHALL HAVE A MINIMUM PIPE STIFFNESS OF 48 PSL. PVC PIPE 18" DIAMETER SHALL CONFORM TO ASTM F 679. ALL PVC PIPE SHALL HAVE AN INTEGRAL BELL GASKETED JOINT WITH ELASTOMERIC GASKET AND SHALL BE FURNISHED IN 12-1/2 FOOT LAYING LENGTHS.

B. DUCTILE IRON (DI) PIPE SHALL CONFORM TO ANSI A21.51 OR AWWA C151, WITH PUSH-ON JOINTS, CLASS 52, UNLESS OTHERWISE NOTED.

INSTALLATION OF PIPE AND MANHOLES SHALL CONFORM TO THE FOLLOWING:

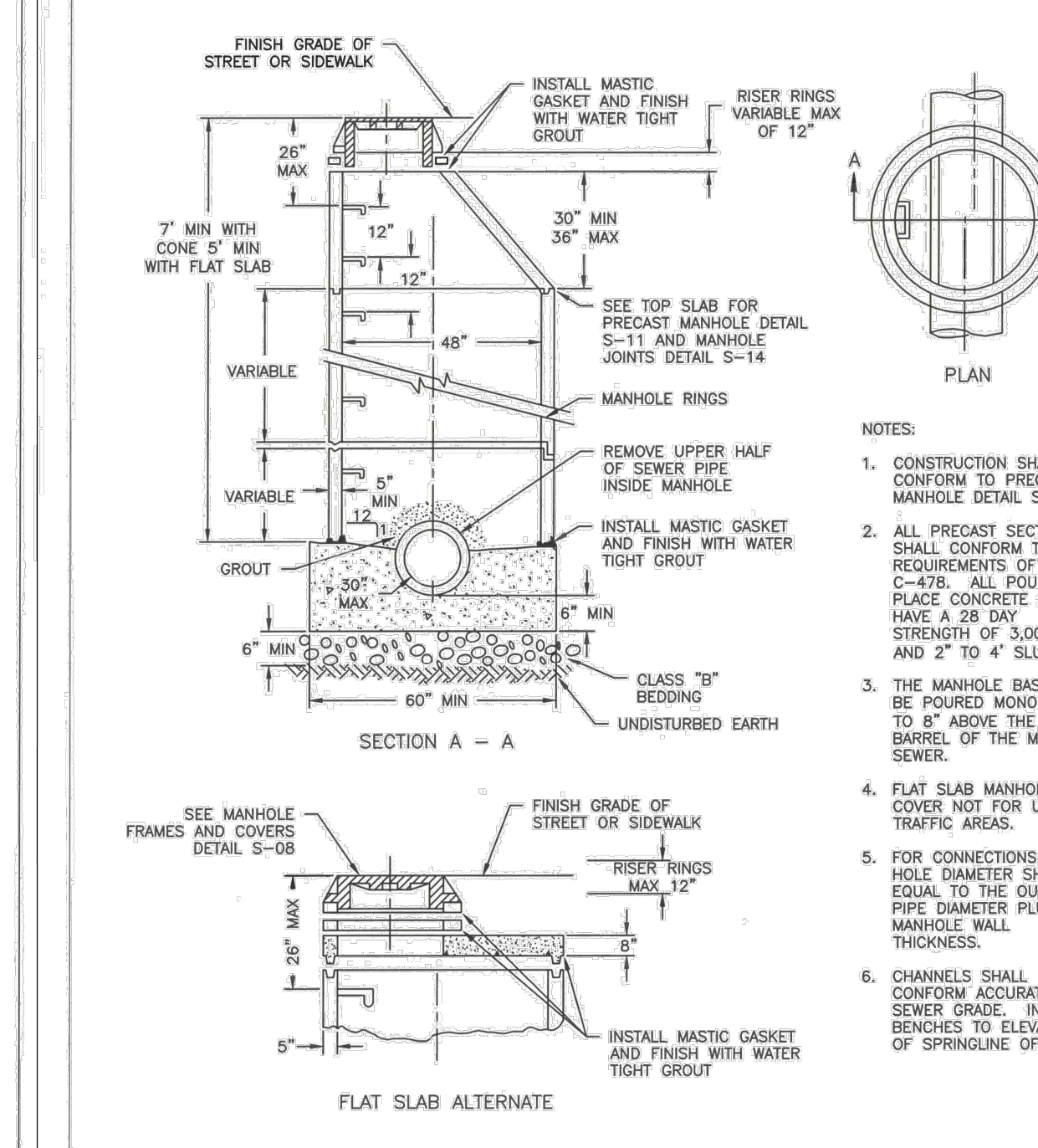
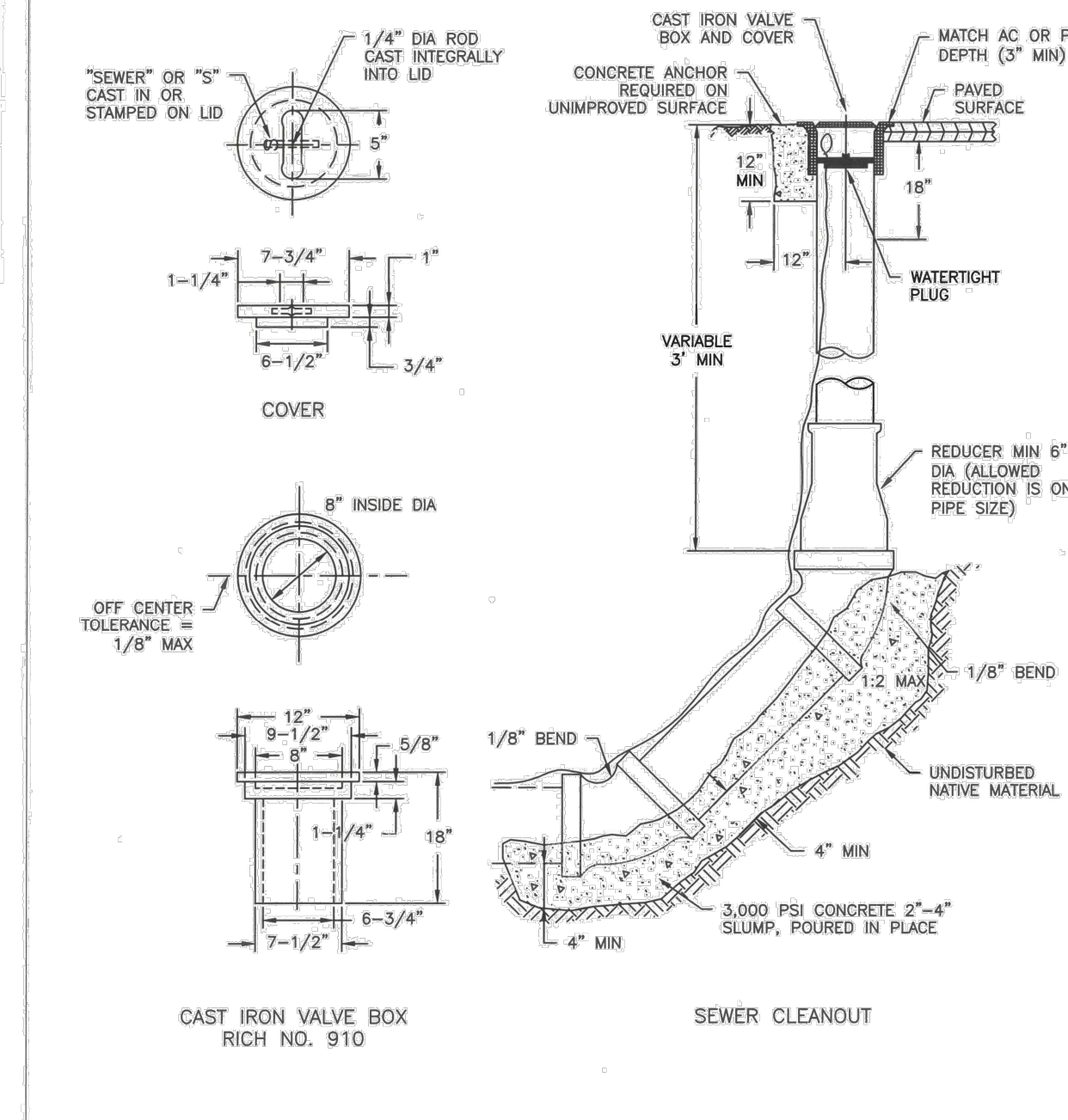
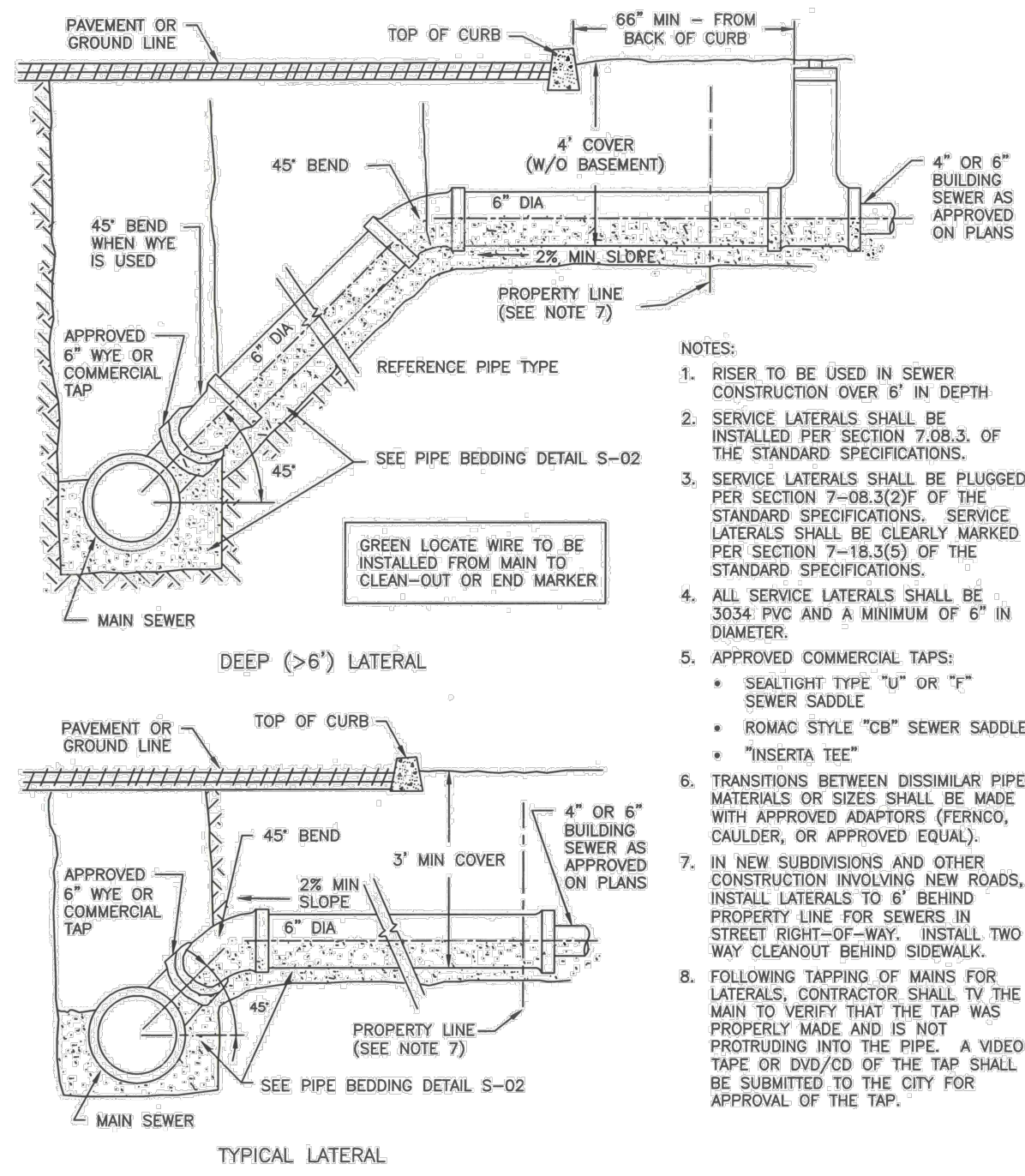
A. PIPE SHALL BE INSTALLED IN CONFORMANCE WITH PIPE DETAIL S-02 AND TRENCHING DETAIL S-03.

B. MANHOLES SHALL CONFORM WITH STANDARD DETAILS S-07 THROUGH S-14.

MANHOLES, CLEANOUTS, SERVICE LATERAL CONNECTIONS, TRENCH EXCAVATION, PIPE BEDDING AND STREET RESTORATION, AND APPURTENANCES SHALL CONFORM TO THE CITY OF WOODLAND STANDARD PLANS, THE WSDOT STANDARD DETAILS CONTAINED AND THE STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.

THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS ISSUED OR EASEMENTS GRANTED TO THE CITY IN CONJUNCTION WITH THE CONSTRUCTION OF SANITARY SEWERS. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

THE CONTRACTOR SHALL SUBMIT AN APPROVED TRAFFIC CONTROL PLAN. APPROVAL SHALL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.



GENERAL NOTES FOR SANITARY SEWER

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	S-01
WOODLAND PUBLIC WORKS					

SERVICE LATERAL CONNECTIONS

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	S-04
WOODLAND PUBLIC WORKS					

SEWER CLEANOUT

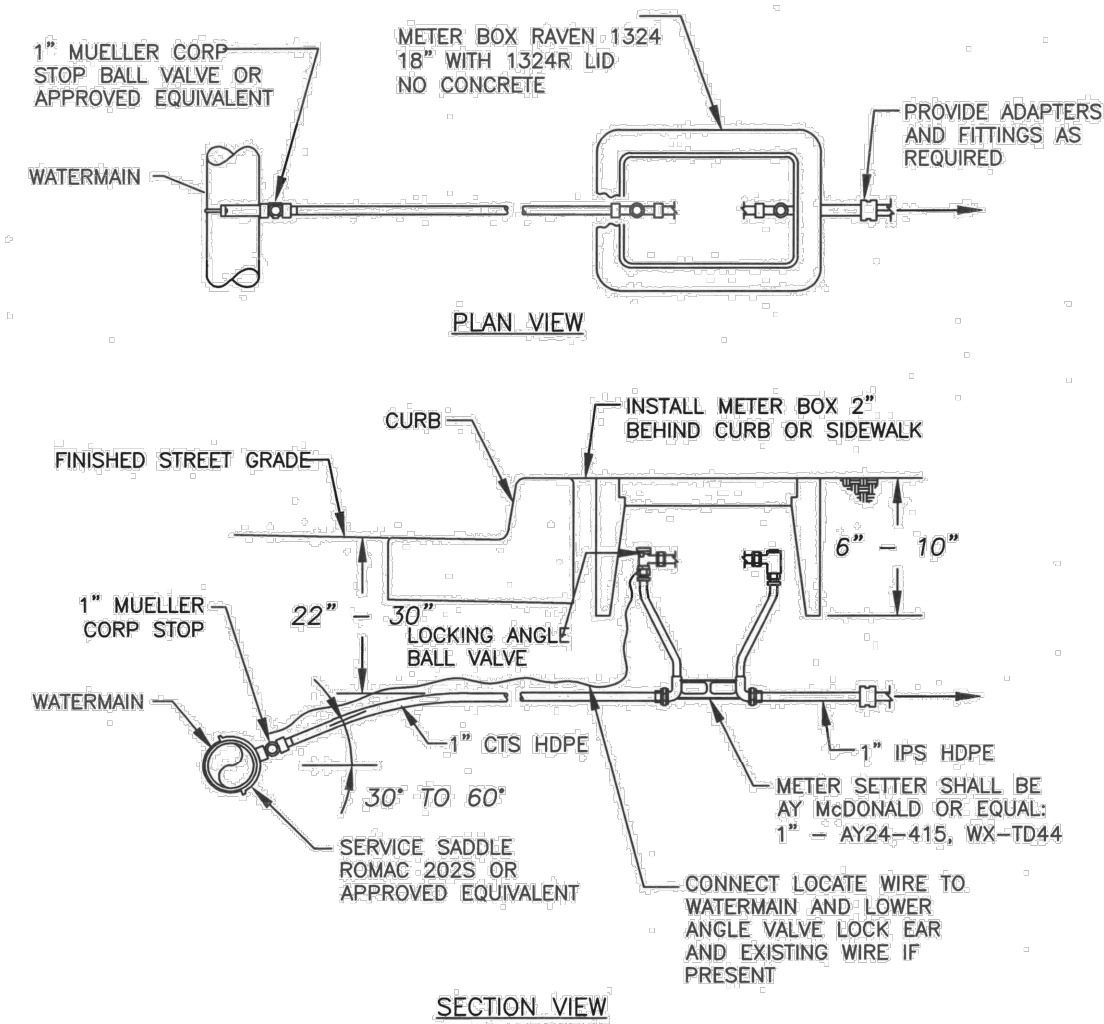
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	S-16
WOODLAND PUBLIC WORKS					

SAMPLING MANHOLE

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	S-19
WOODLAND PUBLIC WORKS					

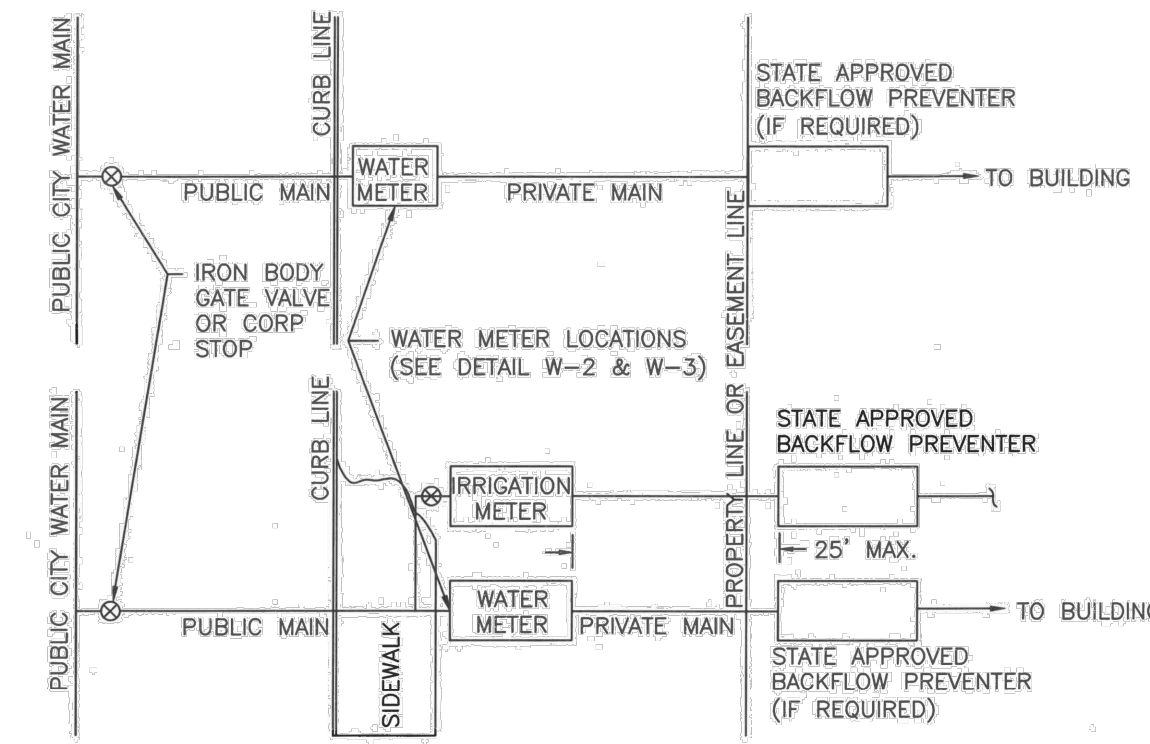
GENERAL NOTES FOR WATER MAIN INSTALLATION

- ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION HEREIN IDENTIFIED AS THE "STANDARD SPECIFICATIONS", AND AWWA SPECIFICATIONS, EXCEPT AS MODIFIED BELOW OR BY CITY OF WOODLAND STANDARD DETAILS.
- A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH CITY OF WOODLAND AT LEAST 48-HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SCHEDULES AND TRAFFIC CONTROL PLANS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. PROPOSED "EQUIVALENTS" MUST BE SUBMITTED TO THE CITY OF WOODLAND FOR APPROVAL.
- THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (360) 225-7999, 48-HOURS PRIOR TO LIVE TAPS OR OTHER CONNECTIONS TO EXISTING WATERMANS. WHERE CONNECTIONS REQUIRE SHUT-DOWN OF SERVICE, CONNECTION POINTS WILL BE EXPOSED FOR "FIELD VERIFICATION" BY CONTRACTOR AND CONNECTION DETAILS SHALL BE VERIFIED 48 HOURS PRIOR TO DISTRIBUTING SHUT-DOWN NOTICES.
- CALL UNDERGROUND LOCATE AT 811 A MINIMUM OF 48-HOURS PRIOR TO ANY EXCAVATIONS.
- UNLESS OTHERWISE ESTABLISHED IN WRITING BY THE CITY, ALL WATER MAINS SHALL BE STAKED FOR GRADES AND ALIGNMENT BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK.
- EXISTING VALVES AND ANY VALVES INSTALLED DIRECTLY TO AND CONNECTED TO A PORTION OF ACTIVE WATER SYSTEM ARE TO BE OPERATED BY CITY OF WOODLAND REPRESENTATIVES ONLY.
- WATER MAINS SHALL BE PVC IN ACCORDANCE WITH AWWA C900, MINIMUM DR18 OR DUCTILE IRON PRESSURE CLASS 52 OR AS NOTED ON DRAWING. ALL MATERIAL IN SUBSTANTIAL CONTACT WITH DRINKING WATER MUST CONFORM TO ANSI/NSF STANDARD 61 AND BE LEAD FREE.
- ALL LINES SHALL BE CHLORINATED AND TESTED IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS PRIOR TO USE.
- HARD COPY AND ELECTRONIC "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO CITY OF WOODLAND UPON COMPLETION OF THE WORK.
- ALL WATERMANS, FIRE HYDRANTS, BLOW OFF ASSEMBLIES, VACUUM BREAKERS, AND WATER SERVICES MUST HAVE LOCATE WIRE INSTALLED.
- ALL MECHANICAL JOINT FITTINGS SHALL BE RESTRAINED USING MJ FOLLOWER GLANDS, MEGALUG, OR EQUAL.



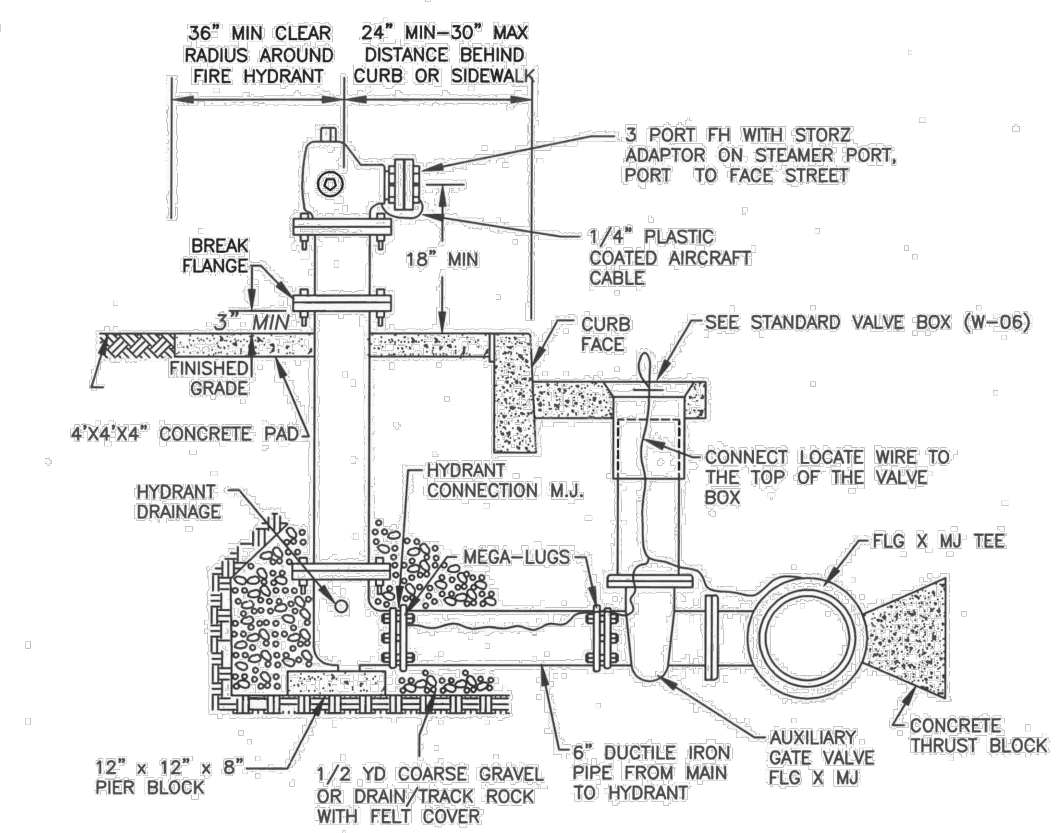
3/4" AND 1" WATER SERVICE

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	W-02
WOODLAND PUBLIC WORKS					



STANDARD METER LOCATIONS

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	W-04
WOODLAND PUBLIC WORKS					



FIRE HYDRANT

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	W-14
WOODLAND PUBLIC WORKS					

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DAVID G. SPENCER
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
41148
6/23/2022

PROJECT NAME: GOERIC APARTMENTS
CLIENT: AIDAN WILLIS
PROJECT LOCATION: WOODLAND, WA

MARK	DATE	DESCRIPTION
A	6/24/2022	Issued for review.

PROJECT: 22046
DESIGNED: DGS
DRAWN: BDT
CHECKED: DGS
SCALE
SCALE AS NOTED
SHEET TITLE

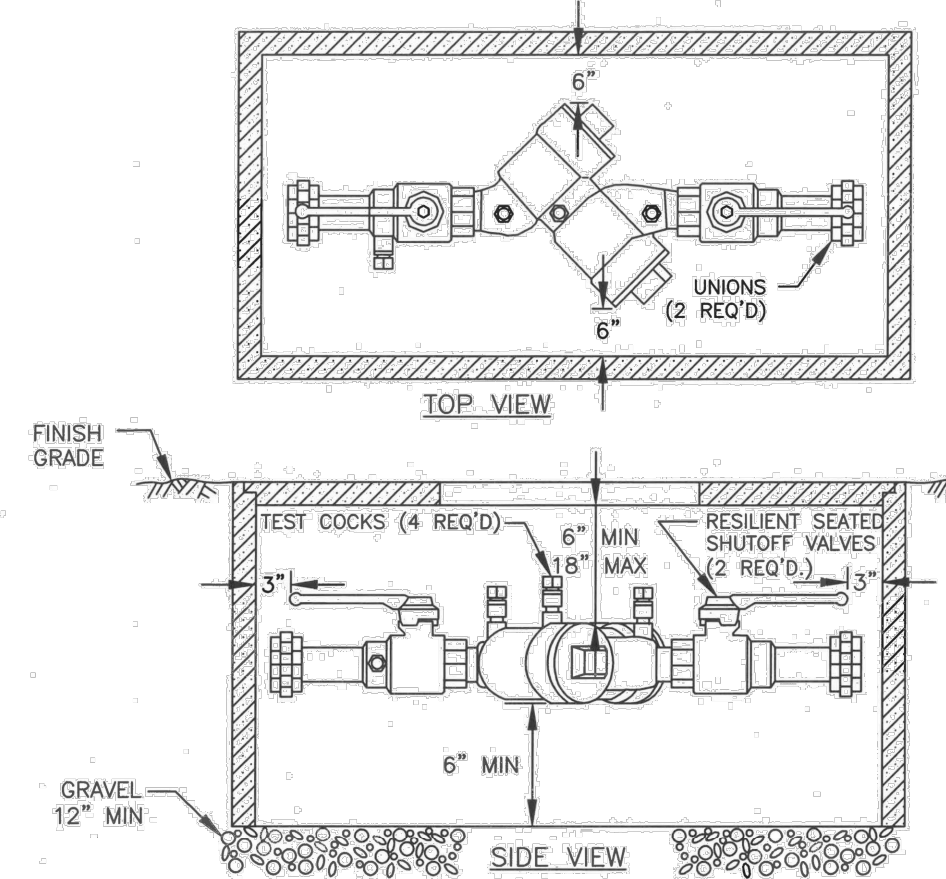
UTILITY DETAILS
SHEET
C02.05

GENERAL NOTES FOR BACKFLOW PROTECTION

1. ALL REDUCED PRESSURE AND BACKFLOW DEVICES SHALL BE WASHINGTON STATE APPROVED, PER WAC 246-290.
 2. FIRE SPRINKLER AND IRRIGATION SYSTEMS SHALL BE PROTECTED WITH STATE APPROVED BACKFLOW PROTECTION AS PRESCRIBED IN WAC 246-290. IRRIGATION SYSTEMS ARE PROTECTED COMMENSURATE WITH THE DEGREE OF HAZARD AS DEFINED BELOW:
 - HIGH HEALTH HAZARD - IS ASSESSED TO ANY IRRIGATION SYSTEM THAT CONTAINS PUMPS OR INFECTORS FOR THE ADDITION OF CHEMICALS. THIS RISK ASSESSMENT IS ALSO BASED ON THE ADDITIONAL HAZARD POSED BY BACTERIAL CONTAMINANTS FOUND ON LAWNS, AND ON THE POSSIBILITY OF CHANGES BEING MADE TO THE IRRIGATION SYSTEM BY THE CUSTOMER. AN APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY, OR AN APPROVED AIR GAP SEPARATION, SHALL BE REQUIRED IN ALL CASES WHERE MEANS ARE PROVIDED FOR CHEMICALS OR HERBICIDES TO BE INJECTED INTO THE IRRIGATION SYSTEM, OR WHERE AN AUXILIARY SUPPLY IS ALSO PROVIDED FOR IRRIGATION WATER.
 - LOW HEALTH HAZARD - IS ASSESSED TO ALL IRRIGATION SYSTEMS NOT OTHERWISE ASSESSED AS A HIGH HEALTH HAZARD. THIS RISK ASSESSMENT IS BASED ON THE HAZARD POSED BY BACTERIAL AND CHEMICAL CONTAMINANTS FOUND ON LAWNS, AND ON THE POSSIBILITY OF CHANGES BEING MADE TO THE IRRIGATION SYSTEM BY THE CUSTOMER. AN APPROVED DOUBLE CHECK VALVE ASSEMBLY IS REQUIRED.
 3. ALL COMMERCIAL, INDUSTRIAL AND MULTI-FAMILY FACILITIES SHALL BE PROTECTED WITH WASHINGTON STATE APPROVED BACKFLOW PROTECTION.
 4. FURTHER BACKFLOW PREVENTION SHALL BE REQUIRED BY THE CITY OF WOODLAND DEPENDENT UPON ACTIVITY (BOILERS, CHILLERS, CHEMICAL ADDITION, BOOSTER PUMPS, WELLS, MEDICAL EQUIP, SODA POP MACHINES, ETC).
 5. ALL HOSEBIBS SHALL BE PROTECTED WITH VACUUM BREAKERS.
 6. IF CHEMICALS ARE ADDED TO THE FIRE PROTECTION SYSTEM, A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER IS REQUIRED.
 7. IF A WELL IS NOW EXISTING ON-SITE OR IS DRILLED IN THE FUTURE, A REDUCED PRESSURE BACKFLOW ASSEMBLY WILL BE REQUIRED AT EACH METER.
 8. WHERE A VAULT IS REQUIRED, A GALV. STEEL WALL MOUNTED CHAMBER LADDER W/EXTENSIONS IS REQUIRED AND SHALL BE CENTERED UNDER THE ACCESS DOOR.
 9. DOUBLE CHECK ASSEMBLIES SHALL BE INSTALLED IN EITHER AN APPROVED VAULT OR INSIDE THE BUILDING IN A MAINTAINABLE LOCATION.
 10. REDUCED PRESSURE ASSEMBLIES SHALL BE INSTALLED EITHER OUTSIDE ABOVE GROUND OR INSIDE THE BUILDING.
 11. ALL BACKFLOW DEVICES SHALL BE PROTECTED FROM FREEZING.
 12. BACKFLOW PREVENTION ASSEMBLY VAULTS (I.E. FIRE AND SERVICE PROTECTION) MUST BE INSTALLED AT THE CUSTOMER'S SIDE OF THE EASEMENT OR PROPERTY LINE. ALTERNATE LOCATIONS MUST BE REQUESTED IN WRITING AND APPROVED BY CITY OF WOODLAND PUBLIC WORKS PRIOR TO INSTALLATION.
 13. NO PART OF THE BACKFLOW PREVENTION ASSEMBLY SHALL BE SUBMERGED IN WATER OR INSTALLED IN A LOCATION SUBJECT TO FLOODING. IF A BACKFLOW PREVENTION ASSEMBLY IS INSTALLED IN A VAULT OR BASEMENT, ADEQUATE DRAINAGE OR DEWATERING SHALL BE PROVIDED.
 14. ALL FIRE PROTECTION SERVICES SHALL HAVE AN IRON BODY GATE VALVE AT THE PUBLIC MAIN AND SHALL BE PRIVATE AFTER THAT VALVE.
 15. ALL DOMESTIC SERVICES WITH BACKFLOW PROTECTION SHALL BE PRIVATE AFTER THE DOMESTIC WATER METER.
 16. ALL BACKFLOW PREVENTION DEVICES SHALL BE TESTED AFTER INSTALLATION PRIOR TO ACCEPTANCE AND ANNUALLY THEREAFTER BY A CERTIFIED BACKFLOW ASSEMBLY TESTER. A PARTIAL LIST OF WASHINGTON STATE APPROVED TESTERS IS AVAILABLE UPON REQUEST. TEST RESULTS SHALL BE SENT TO THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT.
- MAIL TEST RESULTS TO: CITY OF WOODLAND
PUBLIC WORKS
P.O. BOX 9
WOODLAND, WA 98674
- EMAIL TEST RESULTS TO: PWCLERK@WOODLAND.WA.US
- FAX TEST RESULTS TO: 360-225-7336

GENERAL NOTES FOR BACKFLOW PROTECTION

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	W-07
		11/21/22			
PUBLIC WORKS DIRECTOR		DATE			

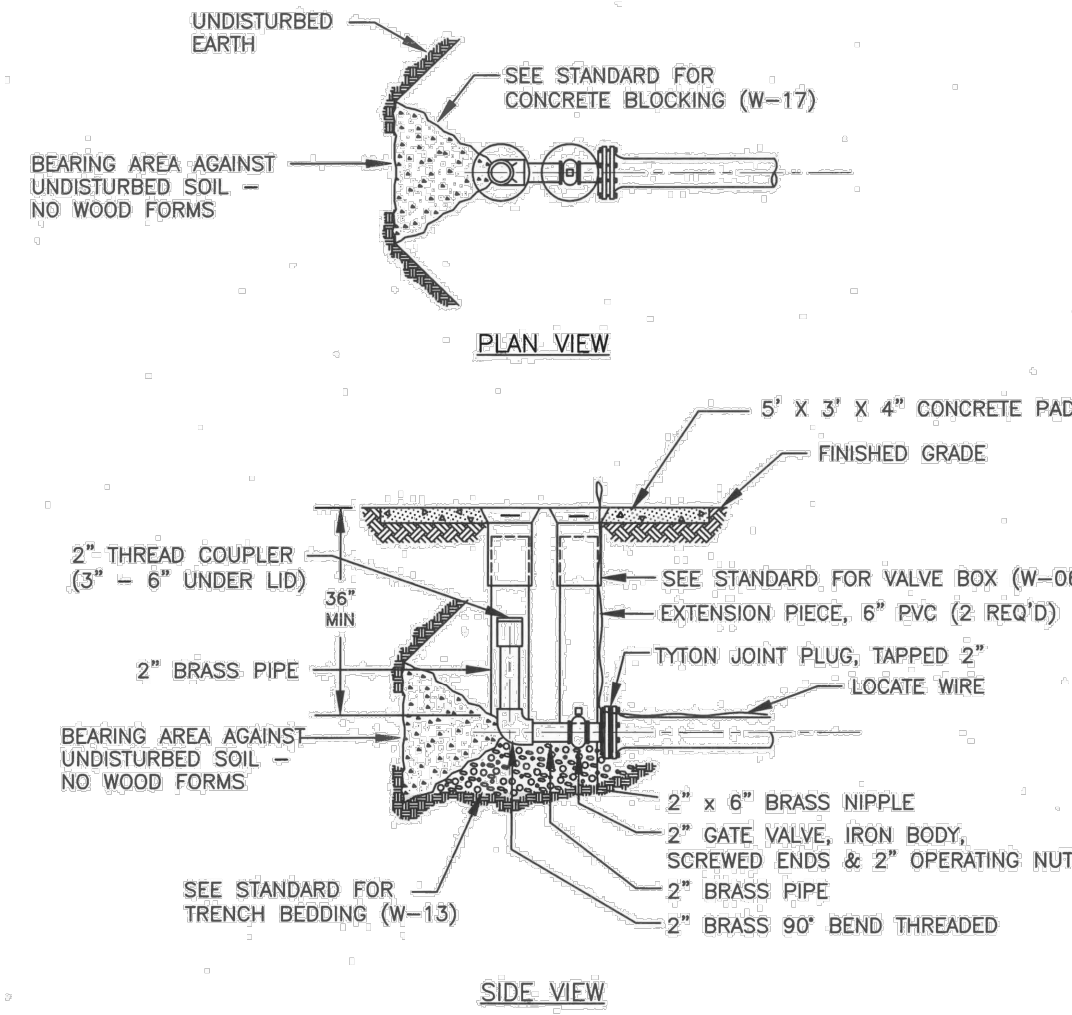


NOTES:

1. DOUBLE CHECK VALVE ASSEMBLY (DCVA) SHALL BE APPROVED BY THE STATE OF WASHINGTON. APPROVED DCVA TO BE INSTALLED IN THE ORIENTATION (VERTICAL OR HORIZONTAL) FOR WHICH THEY ARE APPROVED.
2. DCVA MAY BE INSTALLED ABOVE OR BELOW GROUND PROVIDED ALL CLEARANCES ARE MET.
3. DESIGN FOR BACK SIPHONAGE AND BACK PRESSURE.
4. ALL INSTALLATIONS SHALL HAVE TWO UNIONS.
5. TEST COCKS TO EITHER FACE OUTWARDS OR UPWARDS FROM ASSEMBLY.
6. THE WATER LINE SHALL BE DISINFECTED, FLUSHED AND PRESSURE TESTED PRIOR TO INSTALLATION OF THE BACKFLOW ASSEMBLY.
7. DCVA SHALL BE ACCESSIBLE AND PROTECTED FROM FREEZING AND FLOODING.
8. A PLUMBING PERMIT IS REQUIRED, CONTACT THE WOODLAND BUILDING DEPARTMENT AT (360) 225-7289.
9. DCVA SHALL BE TESTED AFTER INSTALLATION, THEN ANNUALLY BY A WASHINGTON STATE CERTIFIED BACKFLOW TESTER. DCVA SHALL BE RETESTED IF MOVED OR REPAIRED. RESULTS SHALL BE SUBMITTED TO THE CITY OF WOODLAND PUBLIC WORKS DEPARTMENT.

DOUBLE CHECK VALVE ASSEMBLY 2" & SMALLER

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	W-08A
		11/21/22			
PUBLIC WORKS DIRECTOR		DATE			



NOTE:

1. NO WOOD OR TIE DOWNS ALLOWED.

STANDARD BLOW OFF

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	W-10
		11/21/22			
PUBLIC WORKS DIRECTOR		DATE			



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6/23/2022

PROJECT NAME:
GOERIC APARTMENTS

CLIENT:
AIDAN WILLIS

PROJECT LOCATION:
WOODLAND, WA

MARK	DATE	DESCRIPTION
A	6/24/2022	Issued for review.

PROJECT:	22046
DESIGNED:	DGS
DRAWN:	BDT
CHECKED:	DGS
SCALE:	
SCALE AS NOTED	
SHEET TITLE	

UTILITY DETAILS

SHEET

C02.06