

DELTA PLAZA PHASE 1

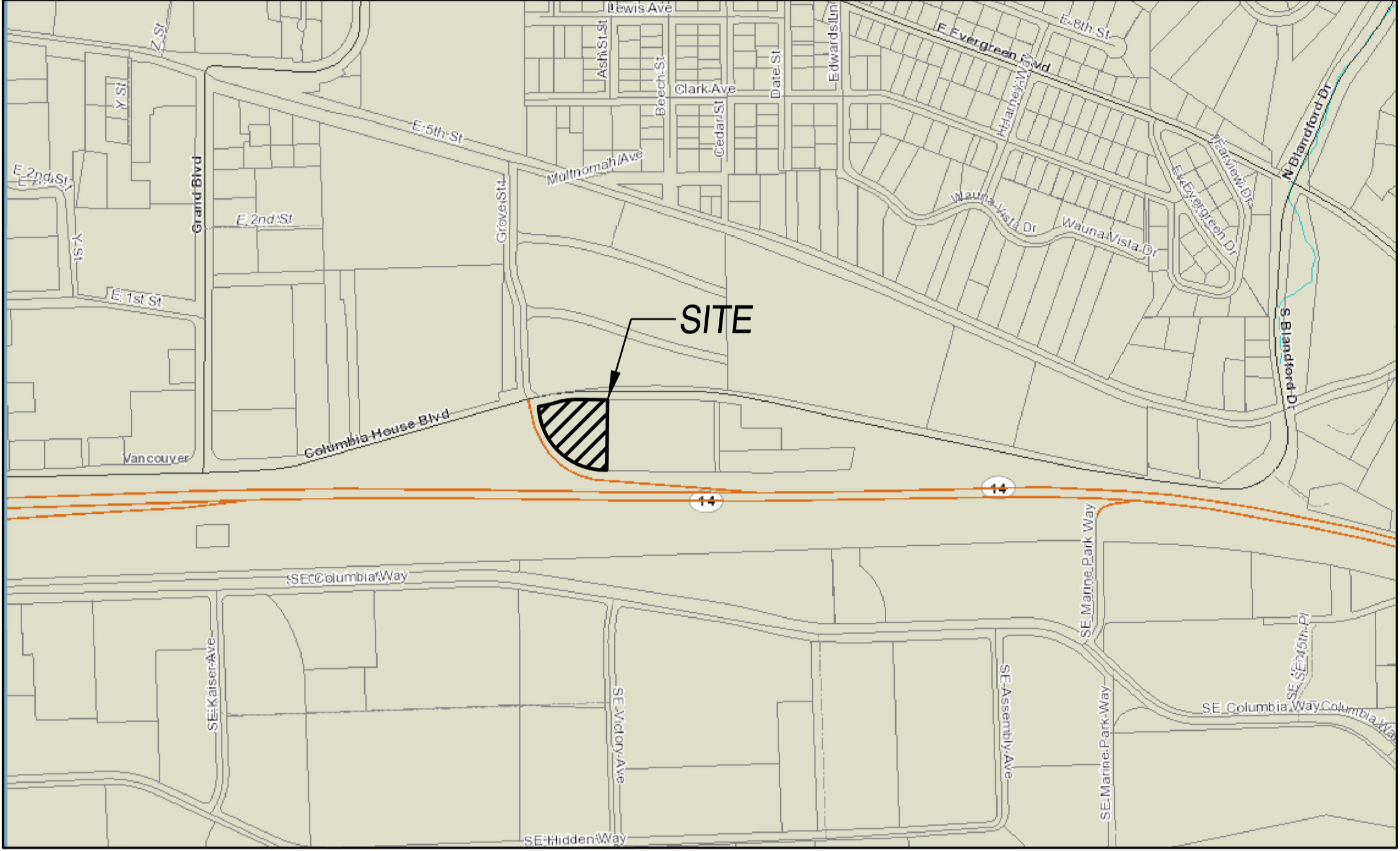
NW QTR, SECTION 36, TOWNSHIP 2N, RANGE 1E WM



NOTES:

- 1) THE DEVELOPMENT SITE IS IDENTIFIED AS PARCEL #986036-085 AND IS 5.28 ACRES (229,997 SF) IN SIZE ACCORDING TO CLARK COUNTY GIS.
- 2) ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER, SEWER, STORM WATER FACILITIES, AND EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES "GENERAL REQUIREMENTS AND DETAILS FOR THE DESIGN AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER SYSTEMS". CONSTRUCTION SHALL BE AS PER THE MOST CURRENT STANDARD DETAIL CONTAINED THEREIN.
- 3) IF ANY CULTURAL OR HISTORICAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION ACTIVITY, CONSTRUCTION SHALL CEASE UNTIL A QUALIFIED ARCHAEOLOGIST ASSESSES THE FIND. THE APPLICANT WILL CONTACT ALL APPLICABLE AUTHORITIES IN THE CITY AND IN OLYMPIA.

DATUM
PER KPF SURVEYING INC., ELEVATIONS FOR THIS SURVEY ARE CITY OF VANCOUVER DATUM (NGVD-29) DERIVED FROM CONVERTING GPS ELEVATIONS (NAVD-88(91)) OPERATING ON WASHINGTON STATE REFERENCE NETWORK.



VICINITY MAP

N.T.S.

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- LS2) LANDSCAPE DETAILS

APPLICANT / OWNER:
DELTA MANAGEMENT COMPANY
203 E. RESERVE STREET
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEYVANI
EMAIL: kiakeyvani@gmail.com

ENGINEER:
OLSON ENGINEERING, INC.
222 E. EVERGREEN BOULEVARD
VANCOUVER, WA 98660
PH: (360) 695-1385
FX: (360) 695-8117
CONTACT: PETER TUCK
EMAIL: peter@olsonengr.com

SURVEYOR:
KPF SURVEYING, INC.
1514 NE 267TH AVENUE
CAMAS, WA 98607
PH: (360) 834-0174
CONTACT: KYLE FEEDER
EMAIL: kpfsurvey@comcast.net

Digitally signed
by Peter A Tuck
Date: 2022.02.18
14:06:49 -08'00'

THIS STAMP APPLIES TO THE HORIZONTAL
AND VERTICAL ASBUILT INFORMATION SHOWN
ON THIS SHEET ONLY BY FOR:

- A N/A
- ☐ GRADING
 - ☐ STORM SEWER
 - ☐ SANITARY SEWER
 - ☐ WATER
- ☒ LOCATIONS FOR WATER VALVES,
SERVICES AND FIRE HYDRANTS
CONFIRMED BY VISUAL INSPECTION

CITY OF Vancouver WASHINGTON			
Application Number ENG-75171			
Improvement Summary:			
Water Main Footage	1,067	LF	
Sewer Main Footage	4,147	LF	
Septic System Decommissioned	N/A	EA	
Total Hard Surface	73,267	SF	
Total Pervious Pavement/Sidewalk	N/A	SF	
Private Hard Surface	1.37	AC	
Grading	Cut 0	CY	Fill 10,630*
Total Trenching within City Right of Way	4,631	LF	
Total Street Improvements (Curb/Pavmnt)	246	LF	
Right of Way Dedication	50	SF	
Easements	Utility 9,238	SF	Non-Util N/A
Full St Const.			
Total Pavmnt Add			
Curb/Gutter			
Sidewalk			
Street Lights			
Traffic Signals			

* GRADING QUANTITIES ARE CALCULATED FROM EXISTING GROUND TO FINISHED GRADE AND ARE NOT ADJUSTED FOR STRIPPING, TRENCH SPOILS, OR SHRINKAGE/SWELLINGS.

EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEYVANI
EMAIL: kiakeyvani@gmail.com

AS-BUILT
DELTA PLAZA PHASE 1

COVER SHEET FOR:

PETER A. TUCK
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
31817
RESIDENT
E SIGNED BY
PETER A. TUCK
06/17/2020

CHANGES / REVISIONS
DESCRIPTION: DATE:

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: N.T.S.

DELTA PLAZA PHASE 1

JOB NO.: 9787.01.01

SHEET

C1.0

- 1) ALL CONSTRUCTION, MATERIALS, AND WORKSMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICE OF THE CITY OF VANCOUVER AND THE 2018 EDITION OF THE 'STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION' AS PREPARED BY WSDOT AND APWA.
- 2) ALL WATER AND SANITARY SEWER FACILITIES AND THE INSTALLATION THEREOF, SHALL FOLLOW CITY OF VANCOUVER STANDARD AND THE MOST CURRENT EDITION OF APWA WITH THE CITY OF VANCOUVER INSPECTION DURING CONSTRUCTION.
- 3) A MINIMUM OF 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL CALL THE UTILITIES NOTIFICATION CENTER AT 696-4646 FOR LOCATION MARK-UP OF EXISTING UTILITIES.
- 4) THE CONTRACTOR SHALL TRY TO LIMIT CONSTRUCTION ACTIVITIES TO AVOID ANY UNNECESSARY VEGETATION REMOVAL IF AT ALL POSSIBLE.
- 5) SEDIMENT CONTROL SHALL BE ESTABLISHED PRIOR TO THE COMMENCEMENT OF WORK AND MAINTAINED THROUGH THE LIFE OF THE PROJECT, AS CALLED OUT ON THESE PLANS.
- 6) PRIOR TO ANY PAVING ACTIVITIES THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO HAVE THE NECESSARY PRE-PAVING AS-BUILT INFORMATION COLLECTED AND SUBMITTED TO THE CITY OF VANCOUVER, CIVIL BUREAU/ENGINEER. DRAINAGE AREAS MUST HAVE ESTABLISHED VEGETATION PRIOR TO ANY PAVING. ALL FILTER MANHOLES / CATCH BASINS SHALL BE FUNCTIONAL PRIOR TO ANY PAVING. PRE-PAVING AS-BUILTS SHALL BE SUBMITTED TO THE CITY OF VANCOUVER INSPECTOR FOR BOTH SANITARY AND STORM SEWER, PRIOR TO PAVING.
- 7) IF ANY WELLS OR SEPTIC TANKS EXIST ON-SITE, THEY SHALL BE PROPERLY ABANDONED. WRITTEN VERIFICATION OF ABANDONMENT SHALL BE PROVIDED TO THE SOUTHWEST WASHINGTON HEALTH DISTRICT, WASHINGTON DEPARTMENT OF ECOLOGY, AND THE CITY OF VANCOUVER CONSTRUCTION INSPECTOR.
- 8) IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR EROSION CONTROL TECHNIQUES, A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF VANCOUVER DEVELOPMENT ENGINEERING STAFF.
- 9) IF ANY CULTURAL OR HISTORICAL RESOURCES ARE DISCOVERED (MNC 20.710.036) IN THE COURSE OF UNDERTAKING THE DEVELOPMENT ACTIVITY, ALL GROUND DISTURBING ACTIVITIES MUST CESSATE AND YOU ARE REQUIRED TO NOTIFY THE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION (OAH) IN OLIMPIA AT (360) 733-4011 AND THE CITY OF VANCOUVER DEVELOPMENT REVIEW SERVICES AT (800) 488-4848 IMMEDIATELY. FAILURE TO COMPLY WITH THESE STATE REQUIREMENTS MAY CONSTITUTE A CLASS C VIOLATION.
- 10) ANY SIGNIFICANT DEVIATIONS FROM THE PLANS WILL REQUIRE A REQUEST FROM THE APPLICANT'S ENGINEER AND APPROVAL FROM THE CITY'S ENGINEER AND CITY INSPECTOR.
- 11) ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY A SUITABLE APPLICATION OF AN APPROPRIATE BEST MANAGEMENT PRACTICE (BMP).
- 12) THE DEVELOPER IS RESPONSIBLE FOR EROSION CONTROL DURING AND AFTER INSTALLATION OF ALL UTILITY WORK ASSOCIATED WITH UTILITY TRENCHES.
- 13) THE CONTRACTOR SHALL MAINTAIN AN ON-SITE WRITTEN DAILY LOG OF EROSION CONTROL PRACTICE MAINTENANCE.
- 14) PER GPS SURVEYING INC., ELEVATIONS FOR THIS SURVEY ARE CITY OF VANCOUVER DATUM (NVD=2 DERIVED FROM CONVERTING GPS ELEVATIONS NVD=884(8.1)) OPERATING ON WASHINGTON STATE REFERENCE NETWORK.
- 15) PREPAVING AS-BUILTS ARE REQUIRED FOR STORMWATER, WATER, AND SANITARY SEWER FACILITIES. PREPAVING AS-BUILTS SHALL BE SUBMITTED TO THE CITY OF VANCOUVER CONSTRUCTION OFFICE, CITY INSPECTOR, AND ENGINEER FOR APPROVAL, PRIOR TO PAVING.

TRANSPORTATION NOTES:

- 1) CITY OF VANCOUVER TRANSPORTATION SERVICES STANDARD DETAILS DATED 07/01/1991 SHALL BE UTILIZED IN THE CONSTRUCTION OF THE TRANSPORTATION ELEMENTS OF THESE PLANS.
- 2) STREET SIGNING AND STRIPING SHALL BE INSTALLED BY THE DEVELOPER. ALL STREET SIGNS AND STRIPING SHALL BE INSTALLED PER MUTCD.
- 3) ALL CONSTRUCTION WITHIN CITY OF VANCOUVER OR CLARK COUNTY R.O.W. SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.
- 4) CONTRACTOR TO INSTALL ADA WHEELCHAIR RAMPS AND SIDEWALKS AS SHOWN ON PLANS AND ON DETAIL SHEETS.
- 5) STREET LIGHTING WILL BE INSTALLED BY THE DEVELOPER PER P.D. APPROVED STREET LIGHTING PLANS. THE DEVELOPER WILL NEED TO COORDINATE WITH P.U.D. TO GET THE STREET LIGHTING PLANS APPROVED (COORDINATION SHOULD OCCUR EARLY ON IN THE CONSTRUCTION OF THE PROJECT). THE STREET LIGHTS SHALL BE INSTALLED PRIOR TO RECEIVING COMPLETION OF THE CONSTRUCTION.
- 6) PAVING WILL NOT BE ALLOWED DURING WET OR COLD WEATHER. PER W.S.D.O.T. SPECIFICATIONS.
- 7) ALL PAVEMENT SHALL BE SAW CUT STRAIGHT PRIOR TO PAVING. EXISTING PAVEMENT SHALL BE REMOVED AS NECESSARY TO PROVIDE A SMOOTH TRANSITION FOR BOTH DRIVE AND DRAINAGE.
- 8) ALL ADA PEDESTRIAN RAMPS SHOWN ON THE PLANS AND ON DETAIL SHEETS SHALL BE CONSTRUCTED WITH THE PROJECT. WHERE THE SIDEWALK ENDS AT THE PROPERTY LINE, A PEDESTRIAN RAMP SHALL BE PROVIDED TO ACCOMMODATE WHEEL CHAIR ACCESS. SIDEWALKS SHALL BE CONSTRUCTED WITH THE PROJECT WHERE THERE IS AN EXISTING HOUSE, DRAINAGE SWALE, ETC. OR ALONG AN ARTERIAL THAT DOES NOT ALLOW ACCESS FROM THE NEW LOTS.
- 9) SUBGRADE PREPARATION DURING WET OR WINTER TIME CONSTRUCTION IS USUALLY OFTEN NOT FEASIBLE. A WET OR WINTER TIME PLAN SHALL BE SUBMITTED TO CITY OF VANCOUVER. THE SUBGRADE PREPARATION IS DUE FOR REVIEW AND APPROVAL. IF THE CONTRACTOR PLANS TO COMMENCE WITH CONSTRUCTION DURING WET WEATHER CONDITIONS, IF PAYING FROM OCTOBER 15TH TO MARCH 30TH, A WET WEATHER SUBGRADE PREPARATION PLAN IS REQUIRED. THE SUBGRADE MUST BE OPEN EXCAVATED AND A GEOTECHNICAL USERNED. THE INSPECTOR SHALL APPROVE A COMPLETE PROF.ROLL TEST ON BOTH SIDES OF THE STREET.
- 10) STREET SWEEPING AND SHOVELING IS REQUIRED. WASHING THE STREET INTO THE STORM SYSTEM WILL NOT BE PERMITTED.
- 11) ALL TRAFFIC SIGNAL INTERCONNECT CONDUITS AND CABLES (COPPER OR FIBER OPTIC) SHALL BE PROTECTED DURING CONSTRUCTION ACTIVITIES. DUE TO THE IMPORTANCE OF MAINTAINING THESE TRANSMISSIONS, ANY DIRT FOR REVIEW AND APPROVAL. IF THE CONTRACTOR PLANS TO COMMENCE WITH CONSTRUCTION DURING WET WEATHER CONDITIONS, IF PAYING FROM OCTOBER 15TH TO MARCH 30TH, A WET WEATHER SUBGRADE PREPARATION PLAN IS REQUIRED. THE SUBGRADE MUST BE OPEN EXCAVATED AND A GEOTECHNICAL USERNED. THE INSPECTOR SHALL APPROVE A COMPLETE PROF.ROLL TEST ON BOTH SIDES OF THE STREET.

SANITARY SEWER NOTES:

- 1) ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER, SEWER, AND STORMWATER FACILITIES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES' "GENERAL REQUIREMENTS AND DETAILS FOR THE DESIGN AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER INFRASTRUCTURE (LAST REVISION); CONSTRUCTION SHALL BE AS PER THE STANDARD DETAILS CONTAINED THEREIN.
- 2) ALL SANITARY SEWER PIPING SHALL BE PVC PIPE (D-3034), UNLESS OTHERWISE NOTED.
- 3) ALL SERVICE LATERAL PIPING SHALL BE 6" PVC PIPE (ASTM D-3034), UNLESS OTHERWISE NOTED.
- 4) PRIOR TO BACKFILLING SEWER SERVICE LATERALS AND SEWER MAIN CLEANSOUTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN 24 HOURS SO THAT CONSTRUCTION AND PRE-PAVING AS-BUILT INFORMATION CAN BE OBTAINED.
- 5) SEAL ALL MANHOLE JOINTS AND FRAME WITH INF-SHIELD "SEAL WRAP" EXTERNAL SEAL SYSTEM.
- 6) BUILDING SEWERS NOTED AS "PRIVATE" ON THE PLANS ARE GOVERNED BY THE BUILDING DEPARTMENT PLUMBING CODE, PERMITS AND INSPECTIONS ARE REQUIRED.

STORM SEWER NOTES:

- 1) ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS IN THE CITY OF VANCOUVER'S LATEST VERSION OF "GENERAL REQUIREMENTS AND STANDARD DETAILS MANUAL" AND THE LATEST VERSION OF THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. WHERE THE CITY OF VANCOUVER'S GENERAL REQUIREMENTS SHALL TAKE PRECEDENCE, 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 SHALL BE THE "CITY".
- 2) ALL PUBLIC STORM SEWER AND DRAINAGE SYSTEM CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF VANCOUVER'S DEPARTMENT OF PUBLIC WORKS. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS OFFICE (360) 487-7735 PRIOR TO THE START OF ANY CONSTRUCTION. THE CITY MAY REQUIRE THAT A PRECONSTRUCTION CONFERENCE BE HELD.
- 3) THE CONTRACTOR IS REQUIRED TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR MAY CONTACT THE NORTHWEST UTILITY NOTIFICATION CENTER AT 1-800-424-5555 IN LIEU OF CONTACTING INDIVIDUAL UTILITIES.
- 4) IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROCURE AND COMPLY WITH THE PROVISIONS OF ALL APPLICABLE PERMITS, EASEMENTS, LICENSES AND CERTIFICATES IN CONJUNCTION WITH THE CONSTRUCTION OF STORM SEWERS AND DRAINAGE SYSTEMS. COMPLIANCE SHALL BE AT ALL LEVELS: FEDERAL, STATE, AND CITY, RELATING TO THE PERFORMANCE OF THIS WORK. THE CONTRACTOR SHALL OBTAIN A STREET CUT PERMIT FOR WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- 5) THE CONTRACTOR SHALL OBTAIN AND SUBMIT AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO BEGINNING CONSTRUCTION. THE PLAN SHALL BE APPROVED BY THE CITY TRANSPORTATION DIVISION (360) 487-7735.
- 6) ALL EROSION-CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND EROSION CONTROL DETAILS, PRIOR TO START OF ANY CONSTRUCTION OR LAND DISTURBING ACTIVITY.
- 7) THE CONTRACTOR SHALL OBTAIN ALL OFFSITE CONSTRUCTION EASEMENTS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THAT ALL OFFSITE UTILITIES EASEMENTS HAVE BEEN OBTAINED BY THE OWNER PRIOR TO THE COMMENCEMENT OF ANY OFFSITE CONSTRUCTION.
- 8) THE CONTRACTOR IS TO VERIFY AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. ITEMS TO VERIFY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
 - INVERT AND TOP ELEVATIONS OF EXISTING STORM SEWERS
 - CENTERLINE AND TOP OF CURB ELEVATIONS
- 9) WATER QUALITY DEVICES WILL BE INSTALLED AND FUNCTIONING PRIOR TO COMMENCING WITH INSTALLATION OF PAVEMENT FOR ALL AREAS DRAINING INTO THE WATER QUALITY SYSTEM. VEGETATION IN BIO-FILTRATION SWALE AND POND SYSTEMS SHALL BE ESTABLISHED AND MECHANICAL DEVICES AND FILTER MEDIA SHALL BE INSTALLED. SWALES AND FILTER STRIPS WILL BE SEEDED WITH AN APPROVED SEED MIX. THE WESTLAND WASHINGTON MATERIALS CENTER HAS HIGH QUALITY POLYURETHANE FILTERS PROVIDED THE TURF AREA IS OVERSEEDING WITH THE EQUIVALENT GRASS SEED MIX.
- 10) IF CONTRACTOR IS USING STENCILED CUT, ALL NEW CHUTE BASINS SHALL BE STENCILED WITH THE APPROPRIATE STENCIL DEPENDING ON STORMWATER DISCHARGE FROM SITE. CONTACT (360) 487-7130 TO DETERMINE THE PROPER STENCIL FOR YOUR SITE. CONTACT (360) 487-7800 TO PURCHASE STENCIL KITS. IF CONTRACTOR IS USING MEDALLIONS: "PROTECT WATER" ONLY RAIN IN DRAIN MEDALLION. MEDALLIONS WILL BE REQUIRED TO DRY SURFACES WITH HIGH QUALITY POLYURETHANE SEALANT AND DINETES. APPROVED MEDALLIONS ARE AVAILABLE FOR PURCHASE AT THE CITY OF VANCOUVER PERMIT CONTROL LOCATED AT 415 W. 6TH STREET, VANCOUVER, WA. (360) 487-7800.
- 11) ROOF DOWNSPOUT RUNOFF MUST BE RETAINED ON EACH SPECIFIC SITE. DOWNSPOUTS SHALL NOT DRAIN TO THE STREET OR ANY ADJACENT PROPERTIES UNLESS SPECIFIC APPROVAL HAS BEEN OBTAINED.
- 12) THE CONTRACTOR SHALL PROVIDE A TELEVISION REPORT, TAPE, AND TABULAR AS-BUILT OF ALL PUBLIC STORM MAINS AND LATERALS PRIOR TO PAVING. THIS TV INFORMATION SHALL BE SUBMITTED TO THE INSPECTOR FOR REVIEW. TV INSPECTIONS WILL DEMONSTRATE NO MANUFACTURING OR INSTALLATION DEFECTS, OR ANY DEBRIS IN THE LINES. FOR APPROVAL AND ACCEPTANCE BY THE CITY, FINAL ACCEPTANCE AND CONSTRUCTION OF STORM SEWERS ARE SUBJECT TO SECTIONS 1-05.12, AND 7-04.3 OF THE STANDARD SPECIFICATIONS.
- 13) STORMWATER FACILITIES ON SITE TO BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER FOR EACH LOT.

WATER NOTES

- 1) ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER, SEWER, AND STORMWATER FACILITIES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES' GENERAL REQUIREMENTS AND DETAILS FOR THE DESIGN AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER SYSTEMS' (LATEST REVISION). CONSTRUCTION SHALL BE AS PER THE STANDARD DETAILS CONTAINED THEREIN.
- 2) THE CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION MANAGER'S OFFICE AT 487-7780 TWENTY-FOUR (24) HOURS PRIOR TO THE START OF CONSTRUCTION. INSPECTIONS AND APPROVAL OF THE CONSTRUCTION WILL BE BY THE CITY CONSTRUCTION MANAGER'S OFFICE. A SATISFACTORY PRESSURE AND BACTERIOLOGICAL TEST FOR THE WATER CONSTRUCTION IS REQUIRED FOR APPROVAL.
- 3) WHERE EXISTING SERVICES MUST BE INTERRUPTED, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE CONSTRUCTION MANAGER'S OFFICER AND NOTIFY ALL CUSTOMERS THAT ARE TO BE AFFECTED AS TO THE DATE, TIME AND DURATION OF THE INTERRUPTION. NOTIFICATION MUST BE DONE 24 HOURS IN ADVANCE OF THE INTERRUPTION. THE CONTRACTOR SHALL ADVISE THE CONSTRUCTION TO PROVIDE MINIMUM INTERRUPTION OF SERVICES AS DETERMINED BY THE INSPECTOR. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR SCHEDULE A WATER MAIN SHUT DOWN WITHOUT THE REQUIRED 24 HOUR NOTICE. THE CONTRACTOR SHALL NOT OPERATE THE CITY WATER FACILITIES WITHOUT APPROVAL FROM THE CONSTRUCTION INSPECTOR.
- 4) A MINIMUM OF 10 FEET HORIZONTAL SEPARATION AND 18 INCHES VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL EXISTING AND PROPOSED WATER AND SEWER LINES.
- 5) BACKFILL FOR WATER LINES SHALL BE IMPORTED GRANULAR MATERIAL. BACKFILL COMPACTION SHALL BE 92% MAXIMUM DENSITY (7-180) (SEE COMPACTION NOTE BELOW).
- 6) STATE APPROVED BACKFLOW PROTECTION SHALL BE REQUIRED ON FIRE SPRINKLER AND IRRIGATION SYSTEMS. ALL HOSE BIBBS SHALL BE PROTECTED WITH VACUUM BREAKERS. FURTHER BACKFLOW PROTECTION SHALL BE REQUIRED DEPENDING ON WATER USAGE. SEE CITY OF VANCOUVER BACKFLOW PREVENTION DETAILS, INCLUDED IN THIS PLAN SET.
- 7) LOCATION OF WATER SERVICES IS TO BE DIRECTED BY THE CITY INSPECTOR.

COMPACTION NOTES:

- 1) ALL STRUCTURAL FILL PLACED WITHIN THE NEW BUILDING AND/OR PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM 92% MAXIMUM DENSITY. BASE COURSE MATERIALS FOR FLOOR SLAB AND PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM 95% MAXIMUM DENSITY. NON-STRUCTURAL FILL SHALL BE COMPACTED TO 85% MAXIMUM DENSITY. MEASUREMENTS FOR COMPACTION SHALL BE TAKEN USING THE STANDARD PROCTOR TEST AS DETAILED IN ASTM D698 (7-99). RESULTS OF THE TESTS SHALL BE MADE AVAILABLE TO THE ENGINEER AND THE CITY OF VANCOUVER UPON REQUEST. SEE GEOTECHNICAL REPORT BY COLUMBIA WEST ENGINEERING, INC. FOR FURTHER COMPACTION REQUIREMENTS.

RETAINING WALL NOTE

- 1) A SEPARATE BUILDING PERMIT IS REQUIRED FOR A RETAINING WALL EXCEEDING 4-FEET IN HEIGHT MEASURED FROM THE BOTTOM OF THE FOOTING TO THE TOP OF THE WALL.

BUILDING DEPARTMENT NOTES

- 1) PRIOR TO FINAL CIVIL PLAN APPROVAL, A GEO-TECHNICAL REPORT SHALL BE SUBMITTED TO THE CITY OF VANCOUVER. THE GEO-TECHNICAL ENGINEER OF RECORD WILL BE RESPONSIBLE FOR REVIEWING AND COMMENTING ALL GEO-TECH AND RELATED DOCUMENTS (SUCH AS DRAINAGE PLAN, AND FOUNDATION PLAN, ETC) AND SUBMITTALS, AND FOR COMPLETENESS AND COMPATIBILITY OF GEO-TECH DATA, ANALYSIS, RECOMMENDATIONS AND IMPLEMENTATION METHODS.
- 2) GEO-TECHNICAL ENGINEER OF RECORD WILL BE REQUIRED TO PROVIDE MONITORING OF SITE IMPROVEMENTS AND DESIGN/CONSTRUCTION IMPLEMENTATION METHODS. A COPY OF ALL REPORTS SHALL BE PROVIDED TO THE CITY OF VANCOUVER BUILDING DEPARTMENT.
- 3) ALL AREAS OF EXCAVATION AND FILL SHALL COMPLY WITH 2015 IBC APPENDIX X GRADING. ALL AREAS OF FILL THAT WILL SUPPORT A STRUCTURE SHALL BE PLACED AS STRUCTURAL FILL. SPECIAL INSPECTION BY AN APPROVED THIRD PARTY GEOTECHNICAL ENGINEER CORRESPONDING REPORTS INCLUDING INSPECTION AND COMPACTION REPORTS SHALL BE PROVIDED TO THE CITY OF VANCOUVER BUILDING DEPARTMENT.
- 4) GEO-TECH ENGINEER OF RECORD SHALL APPROVE FINAL GRADE AND SHALL PROVIDE A LETTER OF ACCEPTANCE TO THE CITY.
- 5) THE 2015 I-CODES WILL BE OFFICIALLY ADOPTED EFFECTIVE JULY 1, 2016 IN THE STATE OF WASHINGTON. ALL BUILDING PERMIT APPLICATIONS SUBMITTED ON OR AFTER THAT DATE ARE SUBJECT TO REVIEW UNDER THOSE CODES AND ASSOCIATED WASHINGTON AMENDMENTS. CODES CURRENTLY IN EFFECT INCLUDE THE 2015 IBC, 2015 IRC, 2015 IFCS, 2015 IMC, 2015 UPC, 2017 NEC AND UPDATED AMENDMENTS TO THE WSEC & WSQAQ.
- 6) PER IBC 1104, ACCESSIBLE ROUTES WITHIN THE SITE SHALL BE PROVIDED WITH ILLUMINATION ALONG AN EXTERIOR ACCESSIBLE ROUTE OF TRAVEL AT ANY TIME THE BUILDING IS OCCUPIED, WITH AN INTENSITY OF NOT LESS THAN ONE FOOT-CANDLE, PER IBC 1006.2.
- 7) ALL TACTILE WARNING STRIPS SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED CITY OF VANCOUVER STANDARDS.
- 8) THE DESIGN AND CONSTRUCTION OF BUILDINGS AND STRUCTURES LOCATED IN FLOOD HAZARD AREAS SHALL BE IN ACCORDANCE WITH CHAPTERS 5 OF ASCE 7 AND ASCE 24 AND SECTION 1612 OF THE 2015 IBC. PROJECT SHALL BE IN ACCORDANCE WITH SECTION 5704.2.8.10 OF THE 2015 IBC. PROJECT SHALL BE PROVIDED WITH LEAK PROTECTION IN ACCORDANCE WITH SECTIONS 22.14 & 23.14 OF NFPA 30. PER 5704.2.8.5 VALUETS & THEIR TANKS SHALL BE SUITABLY ANCHORED TO WITHSTAND LIFTING BY GROUND WATER OR FLOODING INCLUDING WHEN THE TANK IS FULL OF DESIGN LIQUID. BUILDINGS AND STRUCTURES LOCATED IN FLOOD HAZARD AREAS SHALL ALSO COMPLY WITH TITLE 17 AND TITLE 20 OF THE VMC.

SIGNAGE NOTES

- 1) ALL MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF THE CITY OF VANCOUVER, THE 2016 EDITION OF ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AS PREPARED BY WSDOT/APWA AND THE 2008 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 2) PRIOR TO THE INSTALLATION OF TRAFFIC CONTROL DEVICES, THE CONTRACTOR SHALL CONTACT THE UTILITY COMMISSION COUNCIL AT 896-4848 FOR THE LOCATION OF EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA.
- 3) REFER TO C.O.V. STANDARD DETAILS T29-01, T29-02, T29-03, T29-05 AND T29-20 FOR ALL SIGNAGE RELATED NOTES AND INSTALLATION.

GENERAL EROSION PREVENTION & SEDIMENT CONTROL NOTES

- 1) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAND DISTURBING ACTIVITY INCLUDING CLEARING OR GRADING. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY EROSION SPECIALIST PRIOR TO THE COMMENCEMENT OF ANY WORK. AN ON-SITE INSPECTION SHALL BE REQUESTED WHEN EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND PRIOR TO COMMENCEMENT OF WORK. ONCE APPROVED, THE SITE MUST BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT, AS SHOWN ON THE PLANS. ADDITIONAL MEASURES MAY BE REQUIRED TO MEET THE PROVISIONS OF THE CITY EROSION AND SEDIMENT CONTROL ORDINANCE WMC 14-24.
- 2) EROSION AND SEDIMENT CONTROL BMPs SHALL BE SITED, DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS IN THE CITY OF VANCOUVER'S LATEST VERSION OF GENERAL REQUIREMENTS AND STANDARD DETAILS MANUAL AND THE WASHINGTON STATE DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON, WHERE THE CITY OF VANCOUVER GENERAL REQUIREMENTS SHALL TAKE PRECEDENCE.
- 3) THE DEVELOPER AND/OR OWNER IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL BMPs DURING AND AFTER INSTALLATION OF ALL UTILITY WORK ASSOCIATED WITH UTILITY TRENCHES.
- 4) PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAIN INLETS SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREAS PER STANDARD DETAIL E-2-20 TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREAS. CLEAN FILTER FABRIC AS NECESSARY TO MAINTAIN STABILIZATION. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITE WORK.
- 5) NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT IMMEDIATELY UPON INSTALLATION.
- 6) THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS; IF THIS OCCURS, THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, AND STORM PIPES IMMEDIATELY. FINAL ACCEPTANCE WILL NOT BE ISSUED BY THE CITY UNTIL THIS OCCURS.
- 7) PRIOR TO LEAVING A CONSTRUCTION SITE OR PRIOR TO DISCHARGING INTO AN INFILTRATION SYSTEM, SEDIMENT-LADEN WATER SHALL PASS THROUGH A SEDIMENT POND, TRAP, OR OTHER APPROVED BMP SYSTEM.
- 8) ALL EXPOSED AND UNCOVERED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs), FROM OCTOBER 1 TO APRIL 30, NO SOILS SHALL BE EXPOSED AND UNCOVERED FOR MORE THAN TWO (2) DAYS, FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL BE EXPOSED AND UNCOVERED FOR MORE THAN SEVEN (7) DAYS.
- 9) SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHEN POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATERWAYS AND DRAINAGE CHANNELS.

- 1) IF THE BMPs APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, STORM FACILITIES OR PUBLIC RIGHT-OF-WAY, THEN THE CITY WILL REQUIRE ADDITIONAL BMPs.
- 2) IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMPs, CITATIONS AND/OR A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF VANCOUVER.
- 3) PROVIDE A 12-INCH DEEP PAD OF CRUSHED ROCK OR GRAVEL FOR A DISTANCE OF 100 FEET INTO THE SITE FROM ALL ACCESS POINTS UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS. PAD WIDTH SHALL BE A MINIMUM OF 10 FEET. ALL VEHICLES LEAVING THE SITE SHALL EGRESS ACROSS THE PAD. ACCUMULATED SEDIMENT SHALL BE PERIODICALLY REMOVED, OR ADDITIONAL ROCK SHALL BE PLACED UPON THE PAD SURFACE. ROCK SHALL BE CLEAN 4-INCH TO 8-INCH QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS SHALL BE REMOVED IMMEDIATELY.
- 4) PAVEMENT SWEEPING AND SHOVELING IS REQUIRED. WASHING THE PAVEMENT INTO THE STORM SYSTEM IS NOT PERMITTED.
- 5) IF SEDIMENT, MUD OR DEBRIS IS TRANSPORTED ONTO A PAVED SURFACE OR ROADWAY, THE PAVED SURFACE OR ROADWAY SHALL BE THOROUGHLY CLEANED WITH HIGH EFFICIENCY STRIP SWEEPERS AT THE FIRST OCCURRENCE. IF TWO OR MORE OCCURRENCES OF SIGNIFICANT SOIL DEPOSITS ARE REMOVED FROM ROADS BY SHOVELING AND SWEEPING, STRIP WASHING IS NOT ALLOWED UNLESS APPROVED BY THE DIRECTOR AND ONLY AFTER SEDIMENT IS REMOVED IN THE MANNER DESCRIBED ABOVE.
- 6) A WHEEL WASH MAY BE REQUIRED IF CONSTRUCTION TRAILAGE IS NOT SUFFICIENT IN PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT. WHEEL WASH SHALL BE PER STANDARD PLAN E-1.08 AND THE STORMWATER MANUAL.
- 7) INSTALL STANDARD FENCE PER STANDARD PLAN E-2.33 PRIOR TO BUILDING CONSTRUCTION AND/OR EXCAVATION TO PREVENT SILT INTRUSION UPON ADJACENT LOTS. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE LOTS HAVE THE SAME OWNER DURING CONSTRUCTION, THE SILT FENCE ALONG THE COMMON LOT LINE MAY BE ELIMINATED.
- 8) PROPOSED PERMEABLE PAVEMENT AREAS SHALL BE SHOWN ON THE EROSION CONTROL PLAN. PERMEABLE PAVEMENT AREAS SHALL BE PROTECTED FROM SEDIMENT DURING AND AFTER INSTALLATION.
- 9) ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs SHALL BE REGULARLY INSPECTED AND MAINTAINED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
- 10) THE CONTRACTOR SHALL MAINTAIN AND HAVE ON-SITE A WRITTEN LOG OF EROSION PREVENTION AND SEDIMENT CONTROL BMP MAINTENANCE.
- 11) ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED PER THE STORMWATER MANUAL.
- 12) IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, REFER TO THE STORMWATER MANUAL FOR DUST CONTROL BMPs.
- 13) EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADE OR GIVEN A PERMANENT COVER TREATMENT WITHIN 30 DAYS OF THE EXPOSURE SHALL HAVE SEED MIX AND MULCH PLACED TO STABILIZE THE SOIL AND REDUCE EROSION SEDIMENTATION. SEEDED AREAS SHALL BE CHECKED REGULARLY TO DETERMINE IF SEEDS ARE BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT EROSION WILL BE RESEED AS SOON AS THE AREAS ARE IDENTIFIED.
- 14) AN APPROVED TEMPORARY SEEDING MIXTURE SHALL BE APPLIED TO THE PREPARED SEED BED AT A RATE OF 120 LBS/AIRC. NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.
- 15) PERMANENT STORM WATER FACILITIES SHALL BE ISOLATED AND PROTECTED FROM SEDIMENTATION WITH A PROVED BMP.

GRADING NOTES:

- 1) ALL CUT AND FILL AREAS SHALL BE STRIPPED OF SOO AND OTHER UNSUITABLE MATERIAL PRIOR TO COMPACTION OR PLACEMENT OF SUBGRADE AND TOP COURSE. STRIPPINGS SHALL BE STOCKPILED FOR LATER DISTRIBUTION ON THE GRADED AREAS.
- 2) AREAS TO BE GRADED SHALL BE CLEARED AND GRUBBED. MATERIAL FROM THE CLEARING AND GRUBBING OPERATION SHALL BE DISPOSED OF PROPERLY.
- 3) AT THE END OF THE GRADING OPERATION, STRIPPINGS SHALL BE SPREAD EVENLY OVER NON-PAVED/DISTURBED AREAS. THE STRIPPING REDISTRIBUTION SHALL NOT EXCEED ONE FOOT IN DEPTH.
- 4) ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
- 5) EXISTING CONTOURS AND APPROXIMATE FINAL CONTOURS ARE SHOWN ON THIS PLAN.
- 6) ALL STRUCTURAL FILL SHALL BE COMPACTED TO 92% MAXIMUM DENSITY. COMPACTION FOR FILLS IN ROADWAYS ARE TO MEET SECTION 2-3.01.14 C METHOD B IN THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION. NON-STRUCTURAL FILL SHALL BE COMPACTED TO 90% MAXIMUM DENSITY. MEASUREMENTS FOR COMPACTION SHALL BE TAKEN USING THE STANDARD PROCTOR TEST AS DETAILED IN ASTM D688. STRUCTURAL FILL AREAS ARE DEFINED AS THOSE AREAS TO BE BUILT UP TO THE RIGHT OF WAY AND INSIDE ANY POTENTIAL BUILDING AREAS. NON-STRUCTURAL FILL AREAS ARE DEFINED AS THOSE OUTSIDE ANY POTENTIAL BUILDING OR PAVING AREAS. RESULTS OF THE TESTS SHALL BE MADE AVAILABLE TO THE ENGINEER AND THE CITY OF VANCOUVER UPON REQUEST.
- 7) ALL GRADING OPERATIONS, EXCAVATIONS, FILL, COMPACTION TESTING, AND BACKFILL SHALL BE OBSERVED AND TESTED BY A QUALIFIED SOILS ENGINEER AND APPROVED TESTING AGENCY. THE SOILS ENGINEER SHALL BE DESIGNATED BY AND PAID FOR BY THE OWNER.
- 8) NO FILL SHALL BE PLACED PRIOR TO APPROVAL OF THE SUBGRADE BY THE SOILS ENGINEER. COMPACTION TESTS SHALL BE DONE FOR EVERY TWO FEET OF FILL, BUT NOT LESS THAN ONE HUNDRED (100) YARDS. OR, FOR EVERY TWO FEET OF FILL, BUT NOT LESS THAN ONE HUNDRED (100) YARDS. COMPACTION SHALL BE DONE IN ACCORDANCE TO THE RECOMMENDATIONS OF THE SOILS REPORT.
- 9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS INCURRED FOR INSPECTION AND TESTING OF SOILS DUE TO FAILURE TO COMPLY WITH THE MINIMUM REQUIREMENTS OF THE SOILS REPORT.
- 10) ALL GRADING OPERATIONS SHALL BE STAKED BY A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR APPROVED BY THE OWNER.
- 11) UPON COMPLETION OF GRADING, THE SOILS ENGINEER SHALL PROVIDE OWNER WITH A LETTER INDICATING THAT THE SITE AND BUILDING PAD WERE PREPARED IN DIRECT CONFORMANCE WITH THE RECOMMENDATIONS AND CONCLUSIONS OF THE SOILS REPORT.
- 12) ALL EXPOSED AND UNDISTURBED SOILS SHALL BE STABILIZED BY SUITABLE APPLICATION OF AN APPROPRIATE BEST MANAGEMENT PRACTICE (BMP).
- 13) NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN 2 DAYS DURING THE PERIOD OCTOBER 1 TO DECEMBER 31, 30. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN 7 DAYS WHEN A CONTRACTOR IS NOT ON-SITE.

TRANSPORTATION GRADING NOTES

- 1) ALL CONSTRUCTION WITHIN CITY OF VANCOUVER OR CLARK COUNTY RIGHT-OF-WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.
- 2) THE APPLICANT MAY BE REQUIRED TO PROVIDE FLAGGING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES TO ENSURE SAFE TRUCK ACCESS onto PUBLIC STREETS. ALL SUCH DEVICES SHALL CONFORM TO THE STANDARDS ESTABLISHED IN THE LATEST ADDED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. ANY MODIFICATIONS TO THE MUTCD FOR STREETS AND HIGHWAYS FOR THE STATE OF WASHINGTON.
- 3) IN ORDER TO ENHANCE TRAFFIC AND SAFETY ELEMENTS, THE APPLICANT SHALL MAINTAIN ADEQUATE SIGHT DISTANCE AT THE SITE ACCESS POINTS AND INTERSECTIONS. DRIVEWAY EXITS SHALL MEET THE SIGHT DISTANCE REQUIREMENTS PER WAC 11.80.040, CITY STANDARD PLAN 110-0-01 AND 110-0-04. ANY OBSTRUCTIONS BY LANDSCAPING, SIGNING, PARKING, BUILDINGS, OR OTHER STRUCTURES OR OBSTACLES ARE PROHIBITED. THE APPLICANT SHALL INSURE THAT NONE OF THESE INTERFERE WITH VISION THROUGH THE DRIVEWAY REQUIREMENTS.
- 4) TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS.
- 5) SHOULD ANY OF ARCHAEOLOGICAL INTEREST (NAC 20.710.090) BE FOUND DURING DEVELOPMENT, YOU'RE REQUIRED TO STOP WORK AND NOTIFY THE PLANNING CASE MANAGER IN DEVELOPMENT REVIEW SERVICES AT (360) 487-7800, AND THE WASHINGTON STATE OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION AT (360) 753-4011 IMMEDIATELY. FAILURE TO DO SO COULD RESULT IN A FELLOW CONVICTION.
- 6) ANY PUBLIC, OR PRIVATE, CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED TO CITY OF VANCOUVER STANDARDS.
- 7) IF ANY FILL IS PROPOSED WITHIN CURRENT, OR FUTURE, RIGHT-OF-WAY THE CONTRACTOR SHALL PLACE SUCH FILL IN ACCORDANCE WITH 2018 WSDOT STANDARD SPECIFICATIONS SECTION 2-03.31.4.1 METHOD B.

CITY OF VANCOUVER

THESE PLANS HAVE BEEN REVIEWED FOR COMPLIANCE WITH CITY CODES, ORDINANCES AND POLICIES AND ARE

CITY APPROVED

THE APPROVAL OF THESE PLANS BY THE CITY OF VANCOUVER DOES NOT AUTHORIZE ANY NONCOMPLIANCE WITH LOCAL ORDINANCE, CODE OR STATE LAW.

THESE PLANS SHALL BE AVAILABLE FOR ALL REQUESTED INSPECTIONS

ENG-75171

10/20/20

STANDARD CONSTRUCTION NOTES FOR:

DELTA PLAZA PHASE 1

CLSON LAND SURVEYORS
CLSON ENGINEERS

60 COPYRIGHT 2017, OLSON ENGINEERING, INC.

ENGINEERING INC.
222 E. EVERGREEN, VAN

Years

Digitally signed by Peter Tuck
Date: 2020.01.23 11:07:16 -08'00'

CHANGES / REVISIONS

DESCRIPTION:	D
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RECORD DRAWING

DESIGNED: JRS

DRAWN: IRS

CHECKED: PAT

DATE: APRIL 2010

SCALE: MTS

DELTA PLAZA PHASE 1

JOB NO : 9787.01.01

SHEET

C1.1

MATCHLINE, SEE SHEET C2.1

CITY OF VANCOUVER

THESE PLANS HAVE BEEN REVIEWED FOR
COMPLYING WITH THE ZONING ORDINANCES
AND THE CITY OF VANCOUVER

TOPOGRAPHIC SURVEY

APPROVED

IN A FORM OF THE

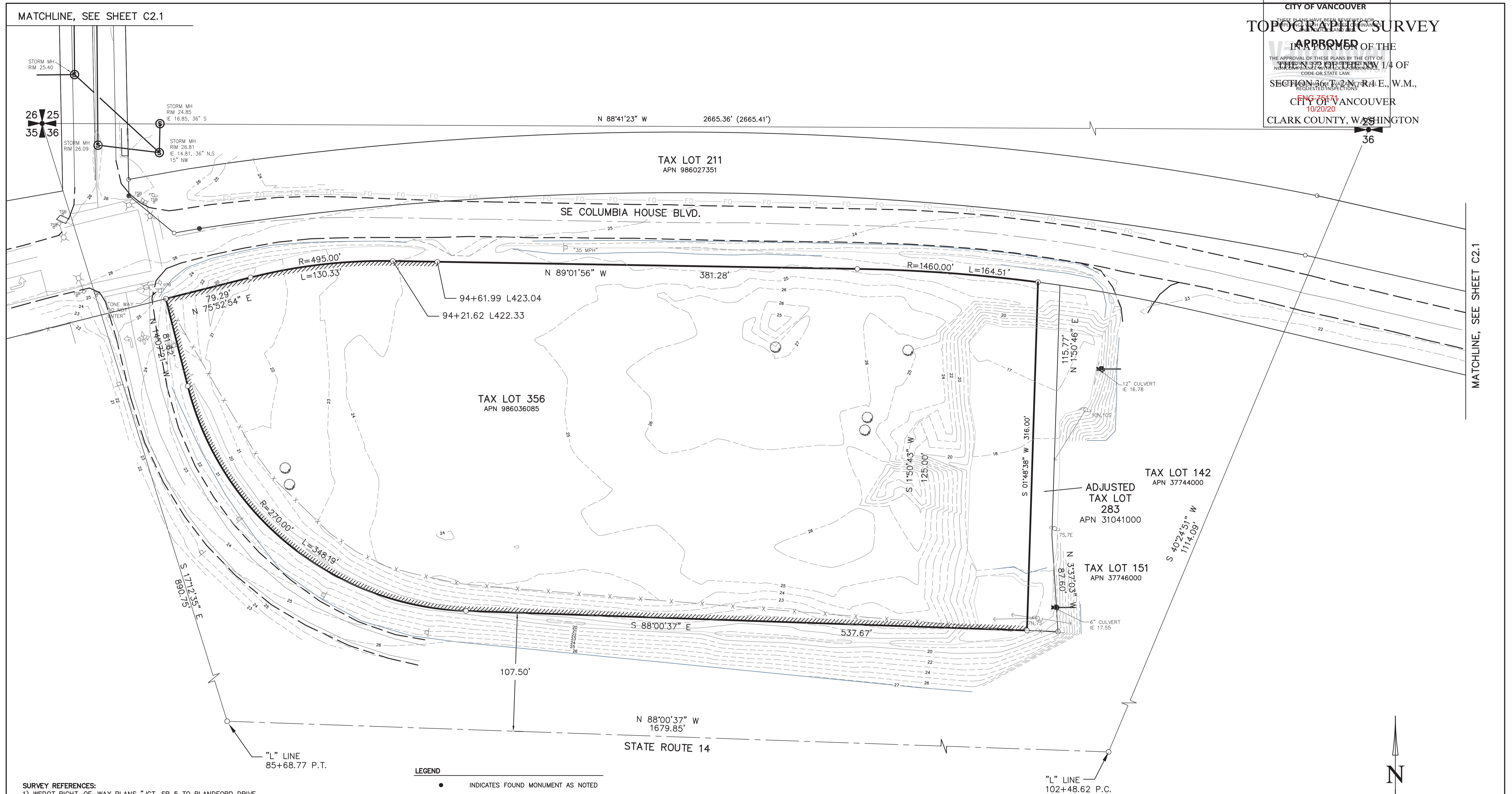
THE APPROVAL OF THESE PLANS BY THE CITY OF
VANCOUVER IS CONDITIONAL UPON THE
NEW EMPLOYEE WORK COUNCIL REVIEWING THE
CODE OR STATE LAW.

SECTION 166.02(2)(a) R.E., W.M.,
REQUIRED INSPECTIONS

CITY OF VANCOUVER

CLARK COUNTY, WASHINGTON

MATCHLINE, SEE SHEET C2.1



SURVEY REFERENCES:
1) WSDOT RIGHT-OF-WAY PLANS "JCT. SR 5 TO BLANDFORD DRIVE,
APPROVED OCTOBER 25, 1993

DEED REFERENCE:
GRANTOR: STATE OF WASHINGTON
GRANTEE: ASGHAR R. SADRI, TRUSTEE
AUDITORS FILE NUMBER: 5165476
DATED: 4-22-2015

VERTICAL DATUM:
 DATUM CITY OF VANCOUVER (NGVD-29)
 DERIVED FROM CONVERTING GPS ELEVATIONS (NAVD-88(91))
 OPERATING ON THE WASHINGTON STATE REFERENCE NETWORK

NOTE: A UTILITY LOCATED WAS CALLED FOR ON 8-13-2015 UNDER TICKET NUMBER 15239889. THE UNDERGROUND UTILITIES AS SHOWN ON THIS TOPOGRAPHIC MAP ARE AS MARKED AT THE TIME OF THIS SURVEY. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN SURFACE LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. SOME UNDERGROUND UTILITIES HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. KPF SURVEYING, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS.

LEGEND

●	INDICATES FOUND MONUMENT AS NOTED
○	INDICATES CALCULATED POSITION
○ ₂	INDICATES POWER POLE
→	INDICATES GUY ANCHOR
○TB	INDICATES TRAFFIC SIGNAL BOX
⦿	INDICATES STREET LIGHT
⚡	INDICATES SIGN AS NOTED
⦿	INDICATES DECIDUOUS TREE
=====	INDICATES PROPERTY BOUNDARY
=====	INDICATES WSDOT LIMITED ACCESS
=====	INDICATES EDGE OF PAVEMENT
=====	INDICATES CENTERLINE
— X —	INDICATES FENCELINE
- - - - -	INDICATES 1 FOOT INTERVAL FENCE
- - - - -	INDICATES 10 FOOT INTERVAL CONTOUR

RECORD DRAWING



DATE:	8-14-19
SCALE:	1"=40'
JOB NO.:	15-0699
CALC BY:	KPF
DRAWN BY:	GLF
CHECKED BY:	KPF
SHEET	C 2.0

KPF
SURVEYING, INC.
1514 N.E. 267TH AVE CAMAS, WA 98607
360-834-0174 fax: 360-838-0155

CITY OF VANCOUVER

THESE PLANS HAVE BEEN DEVELOPED FOR THE CITY OF VANCOUVER, WASHINGTON, AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF THE CITY OF VANCOUVER.

APPROVED

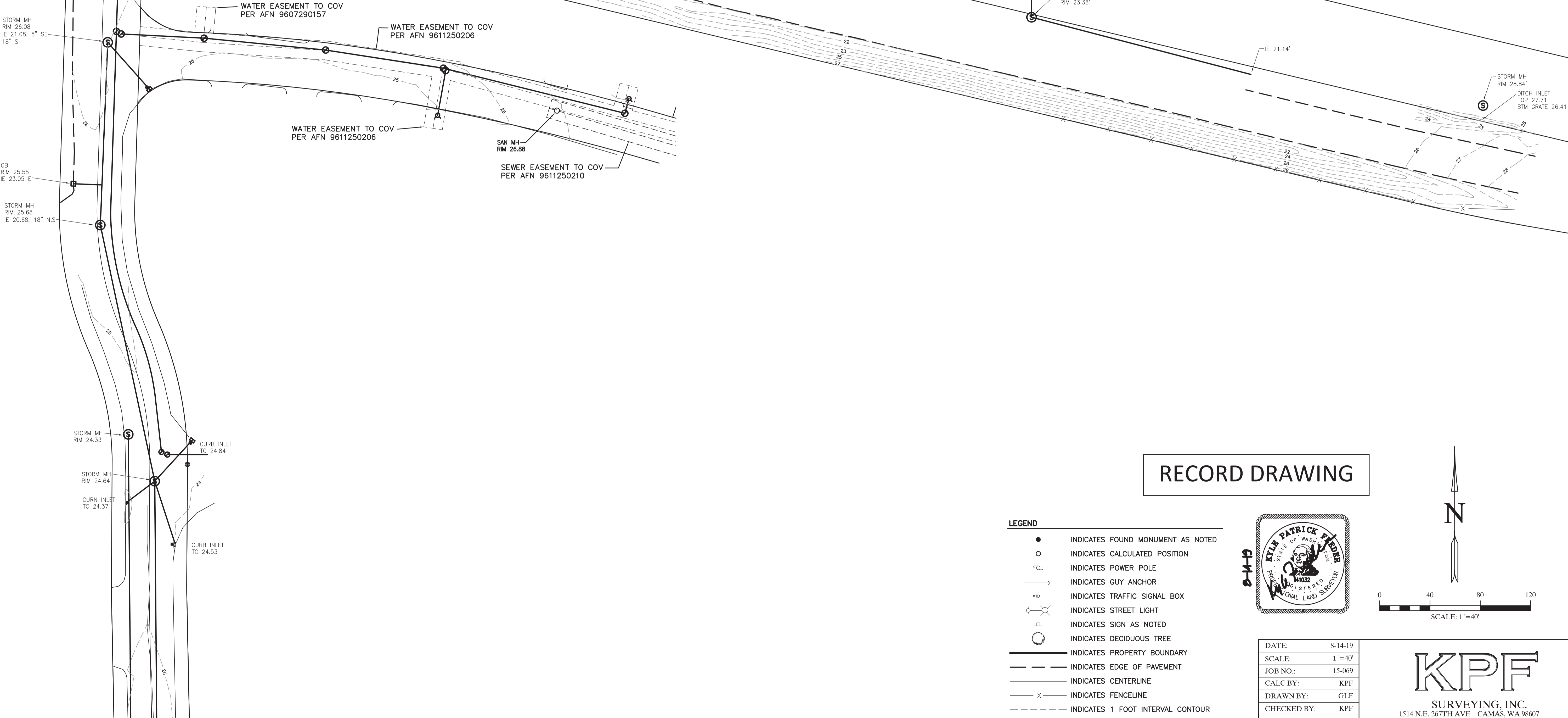
THE APPROVAL OF THESE PLANS BY THE CITY OF VANCOUVER DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION CONTAINED HEREIN, NOR DOES IT REPRESENT A WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

SECTION 36.12.2 N.E., W.M.,
CITY OF VANCOUVER
CLARK COUNTY, WASHINGTON

MATCHLINE, SEE SHEET C2.0

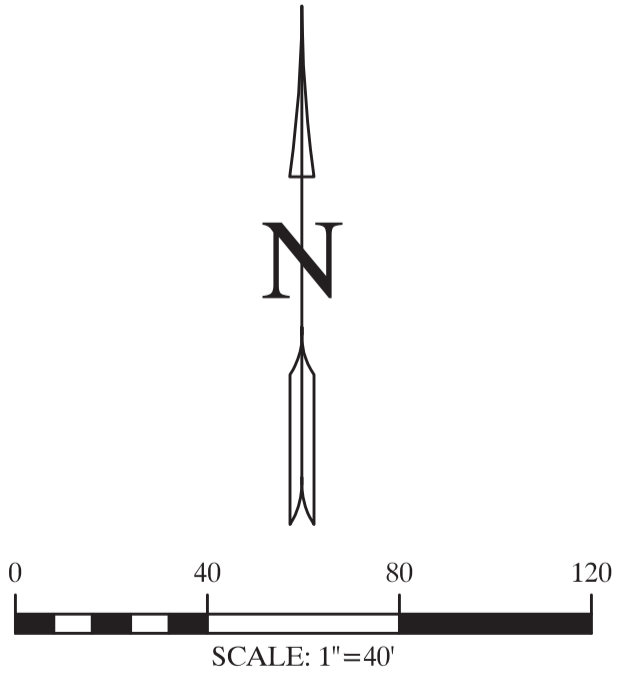
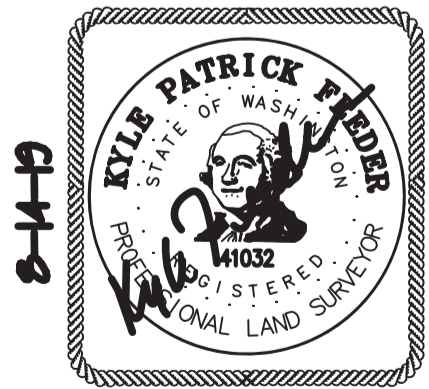
MATCHLINE, SEE SHEET C2.0

SE COLUMBIA HOUSE BLVD.



RECORD DRAWING

- LEGEND
- INDICATES FOUND MONUMENT AS NOTED
 - INDICATES CALCULATED POSITION
 - ⊕ INDICATES POWER POLE
 - INDICATES GUY ANCHOR
 - ⊕ INDICATES TRAFFIC SIGNAL BOX
 - ⊕ INDICATES STREET LIGHT
 - ⊕ INDICATES SIGN AS NOTED
 - INDICATES DECIDUOUS TREE
 - INDICATES PROPERTY BOUNDARY
 - — — INDICATES EDGE OF PAVEMENT
 - — — INDICATES CENTERLINE
 - X — INDICATES FENCELINE
 - - - - - INDICATES 1 FOOT INTERVAL CONTOUR
 - INDICATES 10 FOOT INTERVAL CONTOUR



DATE:	8-14-19
SCALE:	1"=40'
JOB NO.:	15-069
CALC BY:	KPF
DRAWN BY:	GLF
CHECKED BY:	KPF
SHEET	C 2.1

KPF
SURVEYING, INC.
1514 N.E. 267TH AVE CAMAS, WA 98607
360-834-0174 fax: 360-838-0155

EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

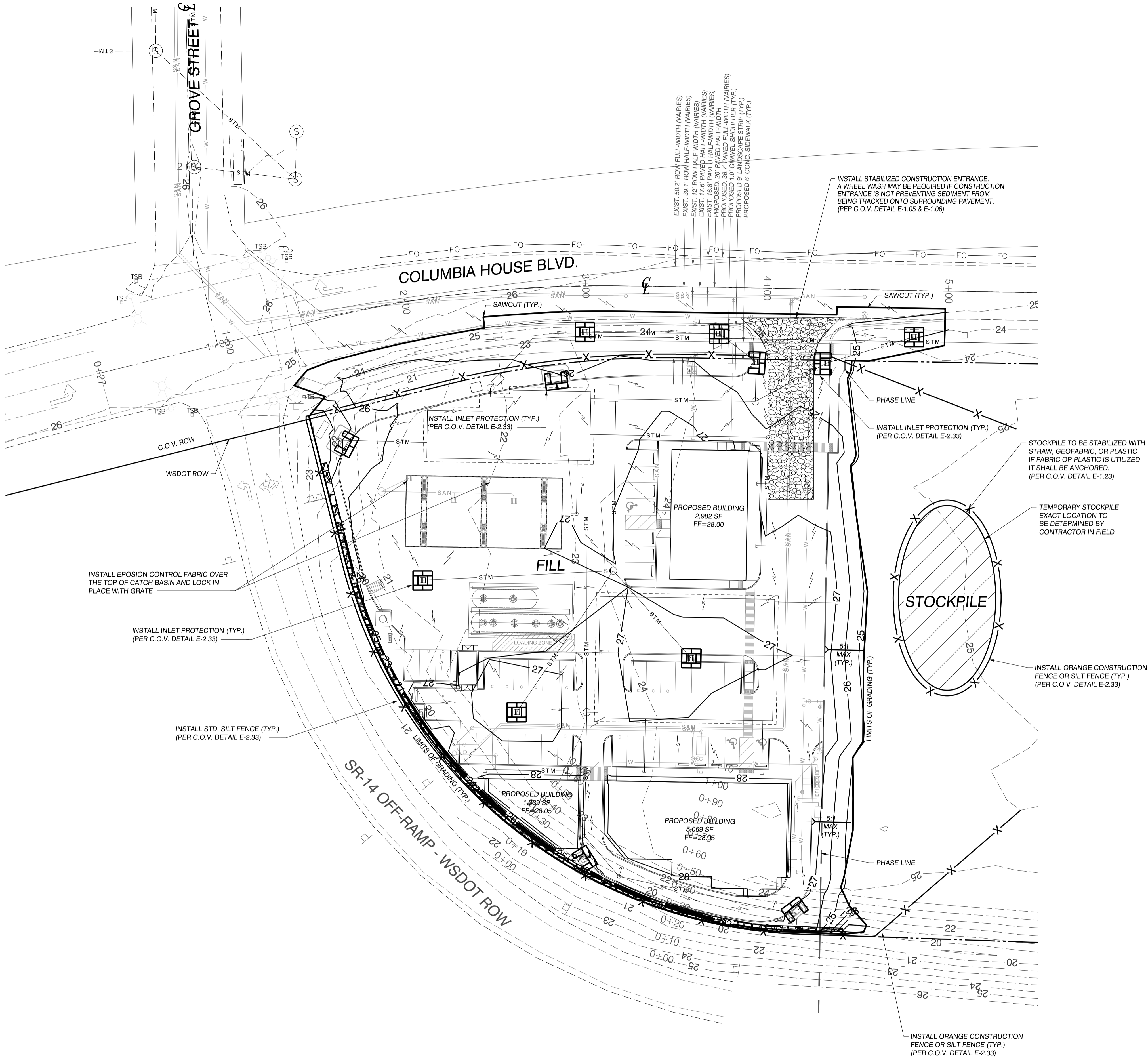
CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

GRADING AND EROSION CONTROL PLAN FOR:
DELTA PLAZA PHASE 1



Digitally signed
by Peter A. Tuck
Date: 2022.02.28
14:08:09 -08'00'
E SIGNED BY
PETER A. TUCK
09/18/2020

CHANGES / REVISIONS	
DESCRIPTION:	DATE:
DESIGNED: JRS	
DRAWN: JRS	
CHECKED: PAT	
DATE: APRIL 2019	
SCALE: H: 1"=30' V:	
DELTA PLAZA PHASE 1	
JOB NO.: 9787.01.01	
SHEET	
C3.0	



- NOTES:
- 1) REFER TO STANDARD GRADING AND EROSION CONTROL NOTES ON SHEET C1.1.
 - 2) CONTRACTOR TO FOLLOW RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT BY COLUMBIA WEST GEOTECHNICAL, INC. DATED DECEMBER 4, 2017.
 - 3) CONTRACTOR TO CONSTRUCT EQUIPMENT AND PARKING AREA AT A SUITABLE LOCATION PRIOR TO BEGINNING GRADING ACTIVITIES. LOCATION TO BE DETERMINED PRIOR TO THE PRECONSTRUCTION CONFERENCE.
 - 4) IF TRACKING OF SEDIMENT FROM THE SITE BECOMES A PROBLEM A WHEEL WASH SHALL BE INSTALLED AT THE CONSTRUCTION ENTRANCE (SEE C.O.V. STD. DETAIL E-1.06)
 - 5) STOCKPILE AREAS PLACED ONSITE SHALL BE COORDINATED BY THE CONTRACTOR AND SURROUNDED WITH EROSION FENCE (COV DETAIL E-2.33) AND COVERED WITH PLASTIC (COV DETAIL E-1.23) AS NECESSARY DURING CONSTRUCTION. MATERIAL NOT STOCKPILED ONSITE SHALL BE REMOVED TO AN APPROPRIATE IMPORT SITE.
 - 6) CONTRACTOR TO INSTALL INLET PROTECTION ON ALL INLETS ADJACENT TO THE SITE THAT MAY BE IMPACTED BY SEDIMENT FROM THE PROPOSED DEVELOPMENT.
 - 7) IF ANY CULTURAL OR HISTORICAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION ACTIVITY, CONSTRUCTION SHALL CEASE UNTIL A QUALIFIED ARCHAEOLOGIST ASSESSES THE FIND. THE APPLICANT WILL CONTACT ALL APPLICABLE AUTHORITIES IN THE CITY AND IN OLYMPIA.
 - 8) SEE SHEET C3.1 FOR STANDARD EROSION PREVENTION & SEDIMENT CONTROL NOTES.

GRADING AND EROSION CONTROL LEGEND

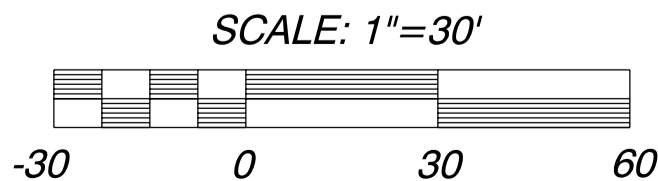
- GRADED CONTOUR
- EXISTING CONTOUR
- CUT / FILL LINE
- AREA OF CUT
- AREA OF FILL
- SILT FENCE
- ORANGE CONSTRUCTION FENCE
- INLET PROTECTION

RECORD DRAWING

APPROXIMATE EARTHWORK VOLUMES

CUT..... 0 C.Y.
FILL..... 10,630 C.Y.

NOTE:
THE FIGURES ABOVE REPRESENT APPROXIMATE QUANTITIES CALCULATED FROM THE EXISTING SURFACE TO FINISHED GRADE AND DO NOT INCLUDE STRIPPINGS, ROAD EXCAVATION, TRENCH SPOILS, OVER EXCAVATION, SHRINKAGE, AND SWELL ETC. CONTRACTORS ARE SOLELY RESPONSIBLE FOR QUANTITY ESTIMATES FOR BIDDING PURPOSES.



CITY OF VANCOUVER

THESE PLANS HAVE BEEN REVIEWED FOR COMPLIANCE WITH CITY CODES, ORDINANCES AND POLICIES AND ARE

APPROVED

THE APPROVAL OF THESE PLANS BY THE CITY OF VANCOUVER DOES NOT AUTHORIZE ANY NONCOMPLIANCE WITH LOCAL ORDINANCE, CODE OR STATE LAW.

THESE PLANS SHALL BE AVAILABLE FOR ALL REQUESTED INSPECTIONS

ENG-75171
10/20/20

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

STANDARD EROSION PREVENTION & SEDIMENT CONTROL NOTES FOR:
DELTA PLAZA PHASE 1

LAND SURVEYORS
OLSON ENGINEERS
ENGINEERING INC. 222 E. EVERGREEN, VANCOUVER, WA 98660
1987-2019 42 YEARS

COPYRIGHT 2017, OLSON ENGINEERING INC.

RECORD DRAWING

CHANGES / REVISIONS
DESCRIPTION: DATE:

DESIGNED: JRS
DRAWN: JRS
CHECKED: PAT
DATE: APRIL 2019
SCALE: H: N.T.S.
V:
DELTA PLAZA PHASE 1
JOB NO.: 9787.01.01

SHEET

C3.1

GENERAL EROSION PREVENTION & SEDIMENT CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAND DISTURBING ACTIVITY INCLUDING CLEARING OR GRADING. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY EROSION SPECIALIST PRIOR TO THE COMMENCEMENT OF WORK. AN ON-SITE INSPECTOR SHALL BE REQUESTED WHEN EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND PRIOR TO COMMENCEMENT OF WORK. ONCE APPROVED, THE SITE MUST BE MAINTAINED THROUGH THE LIFE OF THE PROJECT. AS SHOWN ON THE PLANS, ADDITIONAL MEASURES MAY BE REQUIRED TO MEET THE PROVISIONS OF THE CITY EROSION PREVENTION AND SEDIMENT CONTROL ORDINANCE WAC 14.24.
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3. THE DEVELOPER AND/OR OWNER IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL BMP'S DURING AND AFTER INSTALLATION OF ALL UTILITY WORK ASSOCIATED WITH UTILITY TRENCHES.
4. PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAIN INLETS SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREAS PER STANDARD DETAIL E-2.23 TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREAS. CLEAN INLET FILTER AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER AND CLEAN CATCH BASIN FOLLOWING COMPLETION OF SITE WORK.
5. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT IMMEDIATELY UPON INSTALLATION.
6. THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS. IF THIS OCCURS, THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, AND STORM PIPES IMMEDIATELY. FINAL ACCEPTANCE WILL NOT BE ISSUED BY THE CITY UNTIL THIS OCCURS.
7. PRIOR TO LEAVING A CONSTRUCTION SITE OR PRIOR TO DISCHARGING INTO AN INFILTRATION SYSTEM, SEDIMENT-LADEN WATER SHALL PASS THROUGH A SEDIMENT POND, TRAP, OR OTHER APPROVED BMP SYSTEM.
8. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S), FROM OCTOBER 1 TO APRIL 30, NO SOILS SHALL BE EXPOSED AND UNWORKED FOR MORE THAN TWO (2) DAYS. FROM MAY 1 TO SEPTEMBER 30, NO SOILS SHALL BE EXPOSED AND UNWORKED FOR MORE THAN SEVEN (7) DAYS.
9. SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHEN POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATER WAYS AND DRAINAGE CHANNLES.
10. CONSTRUCTION ROADS AND PARKING AREAS SHALL BE STABILIZED WHEREVER THEY ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR THE USE OF CONSTRUCTION TRAFFIC.
11. IF THE BMP'S APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, STORM FACILITIES OR PUBLIC RIGHT-OF-WAY, THEN THE CITY SHALL REQUIRE ADDITIONAL BMP'S.
12. IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMP'S, CEASING AND /OR A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF VANCOUVER.
13. PROTECTION OF ADJACENT PROPERTIES, ROADS/STREETS AND PAVED SURFACES
PROVIDE A 12-INCH DEEP PAD OF CRUSHED ROCK FOR A DISTANCE OF 100 FEET INTO THE SITE FOR ALL ACCESS POINTS UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS. PAD WIDTH SHALL BE A MINIMUM OF 20 FEET. ALL VEHICLES LEAVING THE SITE SHALL CROSS THE PAD. ACCUMULATED SEDIMENT SHALL BE PERIODICALLY REMOVED, OR ADDITIONAL ROCK SHALL BE PLACED UPON THE PAD SURFACE. ROCK SHALL BE CLEAN 4-INCH TO 8-INCH QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS SHALL BE REMOVED IMMEDIATELY. MECHANICAL BROOM SWEEPERS ARE NOT ALLOWED.
14. IF SEDIMENT, MUD OR DEBRIS IS TRANSPORTED ONTO A PAVED SURFACE OR ROADWAY, THE PAVED SURFACES SHALL BE THOROUGHLY CLEANED WITH HIGH EFFICIENCY STREET SWEEPERS AT THE END OF EACH WORKDAY OR MORE OFTEN IF NECESSARY. FULLY TRAVELED PAVED SURFACES NEED TO BE CLEANED IMMEDIATELY. SIGNIFICANT SOIL DEPOSITS SHALL BE REMOVED FROM ROADS BY SHOVELING AND SWEEPING. STREET WASHING IS NOT ALLOWED UNLESS APPROVED BY THE DIRECTOR AND ONLY AFTER SEDIMENT IS REMOVED IN THE MANNER DESCRIBED ABOVE. MECHANICAL BROOM SWEEPERS ARE NOT ALLOWED.
15. SLURRY AND CUTTINGS SHALL BE VACUUMED DURING CUTTING AND SURFACING OPERATIONS. COLLECTED SLURRY AND CUTTINGS SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.
16. A WHEEL WASH MAY BE REQUIRED IF CONSTRUCTION ENTRANCE IS NOT SUFFICIENT IN PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT. WHEEL WASH SHALL BE PER STANDARD PLAN E-1.06 AND THE STORMWATER MANUAL.
17. INSTALL SEDIMENT FENCE PER STANDARD PLAN E-2.33 PRIOR TO BUILDING CONSTRUCTION AND/OR EXCAVATION TO PREVENT SILT INTRUSION UPON ADJACENT LOTS. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE LOTS HAVE THE SAME OWNER DURING CONSTRUCTION, THE SILT FENCE ALONG THE COMMON LOT LINE MAY BE ELIMINATED.



EROSION PREVENTION & SEDIMENT CONTROL				
CITY OF VANCOUVER				
DEPARTMENT OF PUBLIC WORKS				
SURFACE WATER MANAGEMENT				
REV. NO.	DATE	BY	APPROVED	
1	11/01/206	KAG	AMS	
2	08/10/209	DN	AMS	
3	07/17/18	DN	AMS	
4	06/25/19	DN	AMS	

STANDARD PLAN NO.
E-1.00a

GENERAL EROSION PREVENTION & SEDIMENT CONTROL NOTES
(CONTINUED)

18. PROPOSED PERMEABLE PAVEMENT AREAS SHALL BE SHOWN ON THE EROSION CONTROL PLAN. PERMEABLE PAVEMENT AREAS SHALL BE PROTECTED FROM SEDIMENT DURING AND AFTER INSTALLATION UNTIL THE DEVELOPMENT CONSTRUCTION IS COMPLETED.
19. WASHOUT OF CONCRETE TRUCKS MUST BE PERFORMED OFF-SITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY. WASHING OUT CONCRETE TRUCKS, CHUTES, TOOLS OR EQUIPMENT ON THE GROUND OR INTO STORM DRAINS, OPEN DITCHES, STREETS OR STREAMS IS PROHIBITED.
20. SUBMIT Dewatering PLAN PRIOR TO DISCHARGING TURBID AND CONTAMINATED STORMWATER AND GROUNDWATER OFF-SITE. TREATMENT OR DISPOSAL OPTIONS MAY INCLUDE INFILTRATION, TRANSPORT OFF-SITE IN A VEHICLE FOR LEAK DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATER, ECOLOGY APPROVED ON-SITE CHEMICAL TREATMENT, SANITARY OR COMBINED SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, USE OF THE SEDIMENTATION BASIN WITH OUTFALL TO A DITCH OR SHALE FOR SMALL VOLUMES OF LOCALIZED Dewatering.
21. PERMANENT STORM WATER FACILITIES SHALL BE ISOLATED AND PROTECTED FROM SEDIMENTATION WITH AN APPROVED BMP.
22. MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S
ALL EROSION PREVENTION AND SEDIMENT CONTROL BMP'S SHALL BE REGULARLY INSPECTED AND MAINTAINED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
23. THE CONTRACTOR/LESSOR SHALL MAINTAIN AND HAVE ON-SITE A WRITTEN LOG OF EROSION PREVENTION AND SEDIMENT CONTROL BMP MAINTENANCE. CONSTRUCTION SITES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT.
24. ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED PER THE STORMWATER MANUAL.
25. DUST CONTROL
IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, REFER TO THE STORMWATER MANUAL FOR DUST CONTROL BMP'S.
26. TEMPORARY SEEDING
EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADE OR GIVEN A PERMANENT COVER TREATMENT WITHIN 30 DAYS OF THE EXPOSURE SHALL HAVE SEED MIX AND MULCH PLACED TO STABILIZE THE SOIL AND REDUCE EROSION. SEEDING AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STAND OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT EROSION WILL BE RESEED AS SOON AS SUCH AREAS ARE IDENTIFIED.
27. AN APPROVED TEMPORARY SEEDING MIXTURE SHALL BE APPLIED TO THE PREPARED SEED BED AT A RATE OF 120 LBS./ACRE. NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.
28. PROTECTION OF LOW IMPACT DEVELOPMENT (LID) BMP'S
PROTECT ALL BIORETENTION AND RAIN GARDEN FACILITIES FROM SEDIMENTATION THROUGH INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BMP'S.
29. RESTORE LID FACILITIES TO FULL FUNCTIONING CONDITION IF THEY ACCUMULATE SEDIMENT DURING CONSTRUCTION.
30. MAINTAIN THE INFILTRATION CAPABILITIES OF BIORETENTION AND RAIN GARDEN FACILITIES BY PROTECTING AGAINST COMPACTION.
31. CONTROL EROSION AND PREVENT SEDIMENT FROM CONTAMINATING PERMEABLE PAVEMENTS. CLEAN PERMEABLE PAVEMENT FOULED WITH SEDIMENT OR NO LONGER PASSING AN INFILTRATION TEST.
32. KEEP HEAVY EQUIPMENT OFF EXISTING SOILS UNDER PROPOSED LID FACILITIES THAT HAVE BEEN EXCAVATED TO FINAL GRADE TO RETAIN THE SOIL INFILTRATION RATE.
33. CLEARING LIMITS FOR CRITICAL AREAS AND THEIR BUFFERS, AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA SHALL BE CLEARLY MARKED PRIOR TO LAND-DISTURBING ACTIVITY.



EROSION PREVENTION & SEDIMENT CONTROL				
CITY OF VANCOUVER				
DEPARTMENT OF PUBLIC WORKS				
SURFACE WATER MANAGEMENT				
REV. NO.	DATE	BY	APPROVED	
1	11/01/206	KAG	AMS	
2	08/10/209	DN	AMS	
3	07/17/18	DN	AMS	
4	06/25/19	DN	AMS	

STANDARD PLAN NO.
E-1.00b

EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

DELTA PLAZA PHASE 1

PAVING PLAN FOR:



Digitally signed
by Peter A. Tuck
Date: 2022.02.18
14:08:54 -08'00'

E SIGNED BY
PETER A. TUCK
09/18/2020

CHANGES / REVISIONS	
DESCRIPTION:	DATE:
ADJUST PAVING SECTIONS	04/14/2021
ADJUST PAVING SECTIONS	06/10/2021

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: 1"=30'

V:

DELTA PLAZA PHASE 1

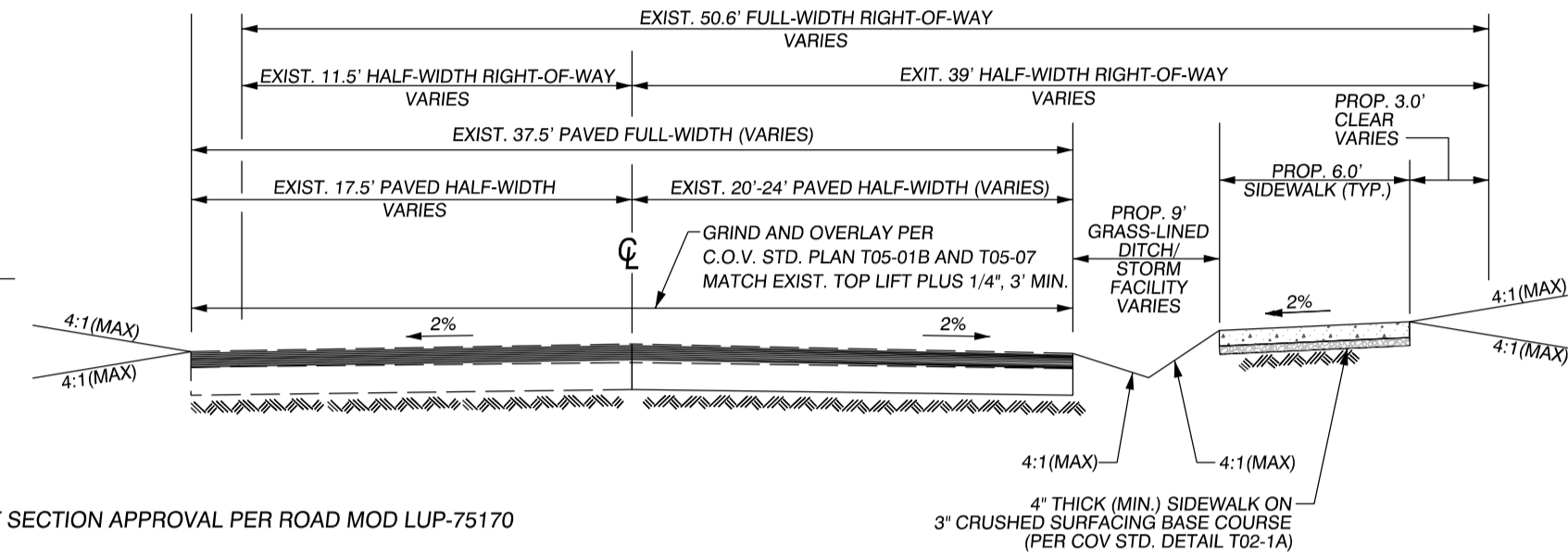
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SHEET

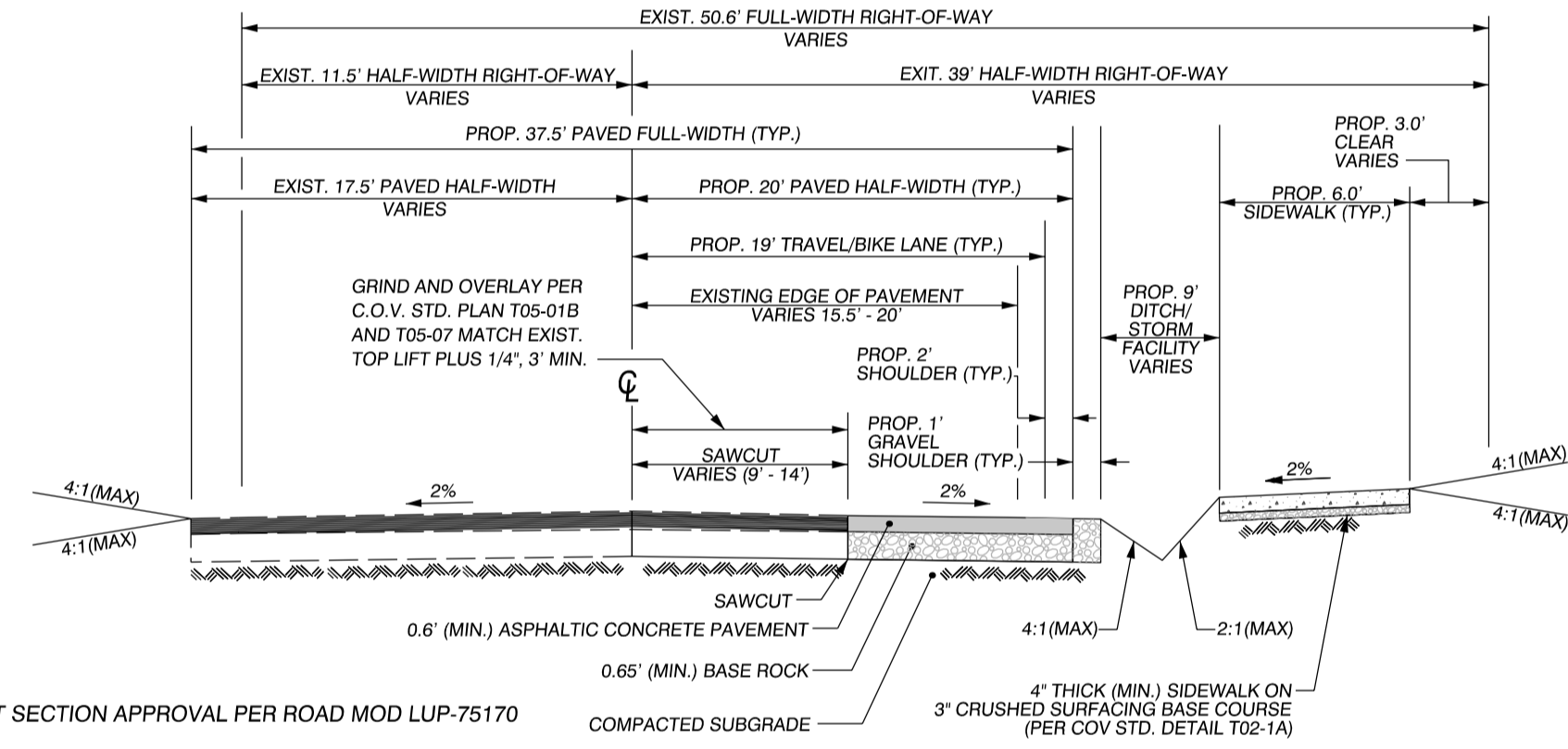
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COLUMBIA HOUSE BLVD. - STREET CUT NOTES:

- CARE SHALL BE TAKEN TO PROTECT THE RECENTLY INSTALLED SURFACE TREATMENT. DAMAGE TO THE TREATMENT WILL REQUIRE ADJUSTMENTS TO THE LIMITS OF THE RESTORATION CONDITIONS ABOVE.
- THE WIDENING OF COLUMBIA HOUSE BLVD. AND CONNECTION TO THE CITY'S WATER AND SEWER SYSTEMS IN COLUMBIA HOUSE BLVD. SHALL BE COMPLETED PURSUANT TO THE CIVIL PLANS. SEE SHEETS C4.0 AND C5.0.
- A NOTE SHALL BE PLACED ON ALL APPLICABLE SHEETS OF THE CIVIL DRAWINGS TO INDICATE ANY UTILITY TRENCHES OR RELOCATION OF UTILITY TRENCHES IN COLUMBIA HOUSE BLVD., INCLUDING BUT NOT LIMITED TO, WATER, SEWER, STORM, POSER, PHONE, CABLE, GAS AND FIBER OPTIC THAT VARY FROM THIS ORIGINAL REQUEST WILL NOT BE ALLOWED WITHOUT FURTHER ROAD MODIFICATION APPROVAL.
- PRIOR TO CONSTRUCTION, THE APPLICANT SHALL OBTAIN A RIGHT-OF-WAY PERMIT AND AN APPROVED TRAFFIC CONTROL PLAN FROM THE CITY.
- THE WARRANTY PERIOD FOR STREET CUT RESTORATION IS 5 YEARS ON ARTERIAL STREETS PER VMC 11.80.100(E)(2). THE WARRANTY PERIOD SHALL BE INCLUDED IN THE GENERAL NOTES ON THE CIVIL PLANS.
- ANY PAVEMENT JOINT OPENING WITHIN THE WARRANTY PERIOD SHALL RECEIVE A CRACK SEAL TREATMENT PRIOR TO THE EXPIRATION OF THE WARRANTY.

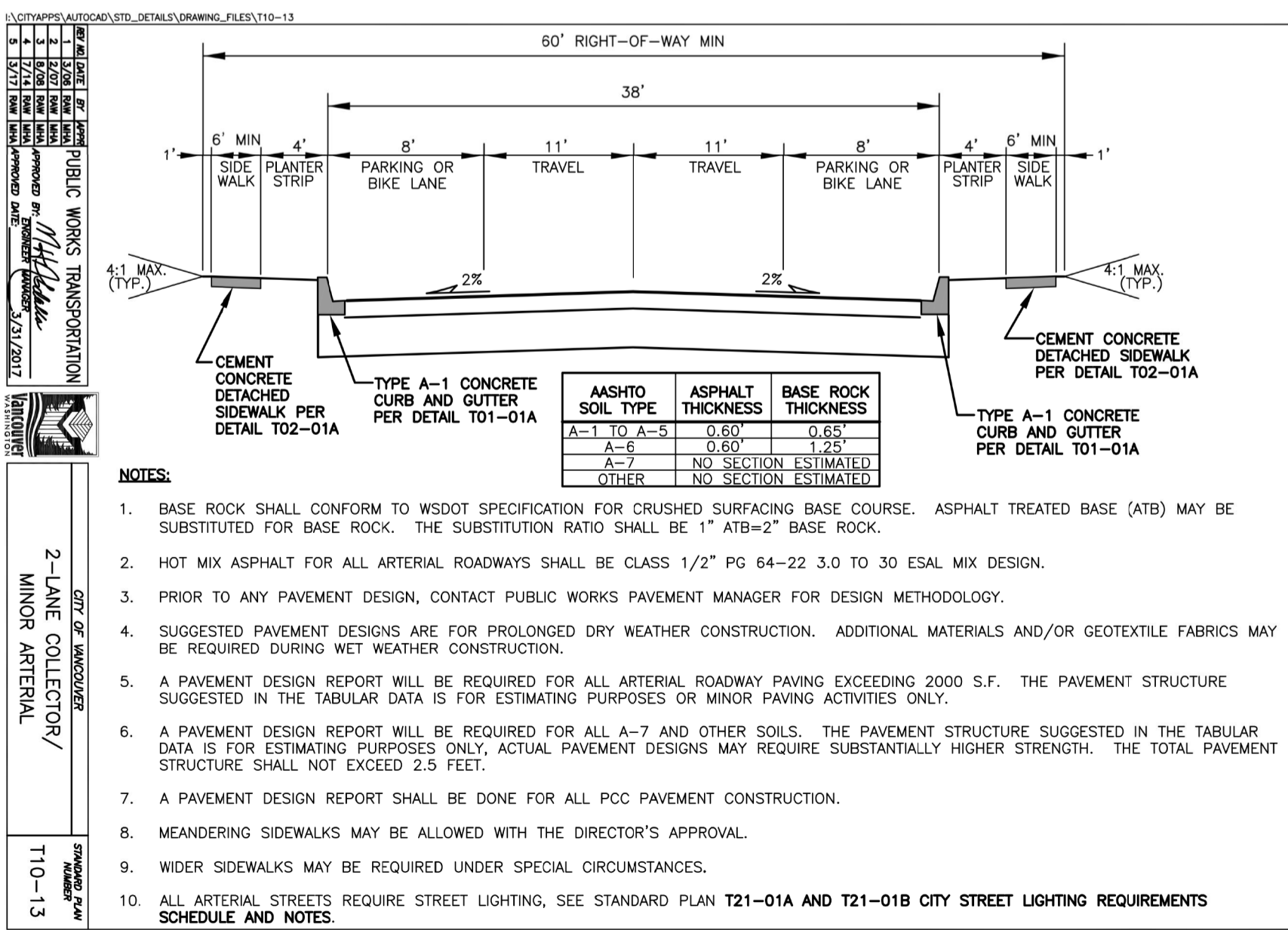


COLUMBIA HOUSE BLVD.
STA 1+29.41 TO STA 2+41.88
2 LANE COLLECTOR /
MINOR ARTERIAL (T10-13)
AASHTO SOIL TYPE A-1 TO A-5
NTS



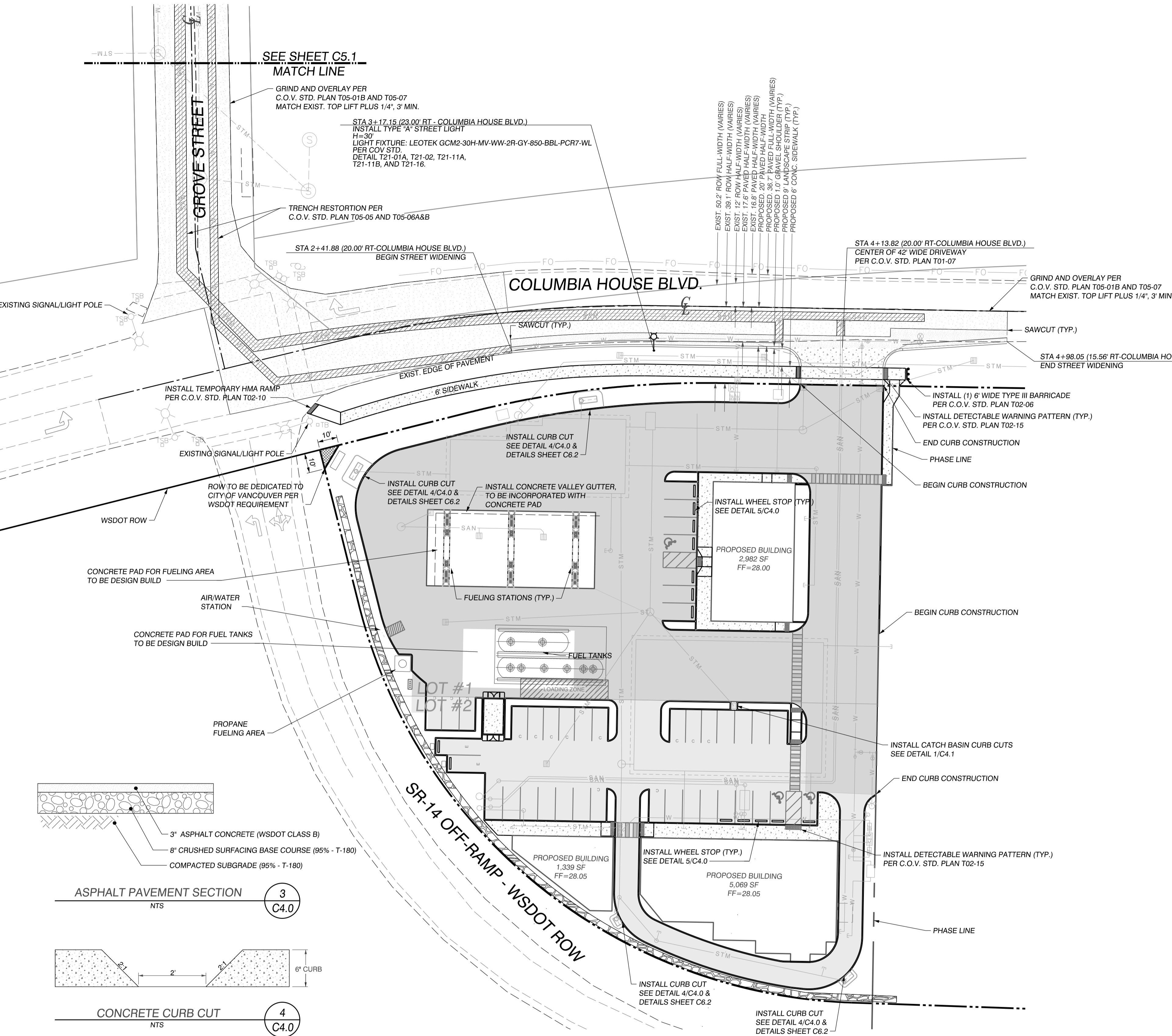
COLUMBIA HOUSE BLVD.
STA 2+41.88 TO STA 4+89.95
2 LANE COLLECTOR /
MINOR ARTERIAL (T10-13)
AASHTO SOIL TYPE A-1 TO A-5
NTS

RECORD DRAWING



NOTES:

- BASE ROCK SHALL CONFORM TO WSDOT SPECIFICATION FOR CRUSHED SURFACING BASE COURSE. ASPHALT TREATED BASE (ATB) MAY BE SUBSTITUTED FOR BASE ROCK. THE SUBSTITUTION RATIO SHALL BE 1" ATB=2" BASE ROCK.
- HOT MIX ASPHALT FOR ALL ARTERIAL ROADWAYS SHALL BE CLASS 1/2" PG 64-22 3.0 TO 30 ESAL MIX DESIGN.
- PRIOR TO ANY PAVEMENT DESIGN, CONTACT PUBLIC WORKS PAVEMENT MANAGER FOR DESIGN METHODOLOGY.
- SUGGESTED PAVEMENT DESIGNS ARE FOR PROLONGED DRY WEATHER CONSTRUCTION. ADDITIONAL MATERIALS AND/OR GEOTEXTILE FABRICS MAY BE REQUIRED DURING WET WEATHER CONSTRUCTION.
- A PAVEMENT DESIGN REPORT WILL BE REQUIRED FOR ALL ARTERIAL ROADWAY PAVING EXCEEDING 2000 S.F. THE PAVEMENT STRUCTURE SUGGESTED IN THE TABULAR DATA IS FOR ESTIMATING PURPOSES ONLY. ACTUAL PAVEMENT DESIGNS MAY REQUIRE SUBSTANTIALLY HIGHER STRENGTH. THE TOTAL PAVEMENT STRUCTURE SHALL NOT EXCEED 2.5 FEET.
- A PAVEMENT DESIGN REPORT SHALL BE DONE FOR ALL PCC PAVEMENT CONSTRUCTION.
- MEANDERING SIDEWALKS MAY BE ALLOWED WITH THE DIRECTOR'S APPROVAL.
- WIDER SIDEWALKS MAY BE REQUIRED UNDER SPECIAL CIRCUMSTANCES.
- ALL ARTERIAL STREETS REQUIRE STREET LIGHTING, SEE STANDARD PLAN T21-01A AND T21-01B CITY STREET LIGHTING REQUIREMENTS SCHEDULE AND NOTES.



EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEVYANI
EMAIL: kkevyani@gmail.com

SPOT ELEVATION PLAN FOR:
DELTA PLAZA PHASE 1

OLSON LAND SURVEYORS
ENGINEERS
3080 160th Ave S.E.
Everett, WA 98203
Copyright 2017, OLSON ENGINEERING, INC.

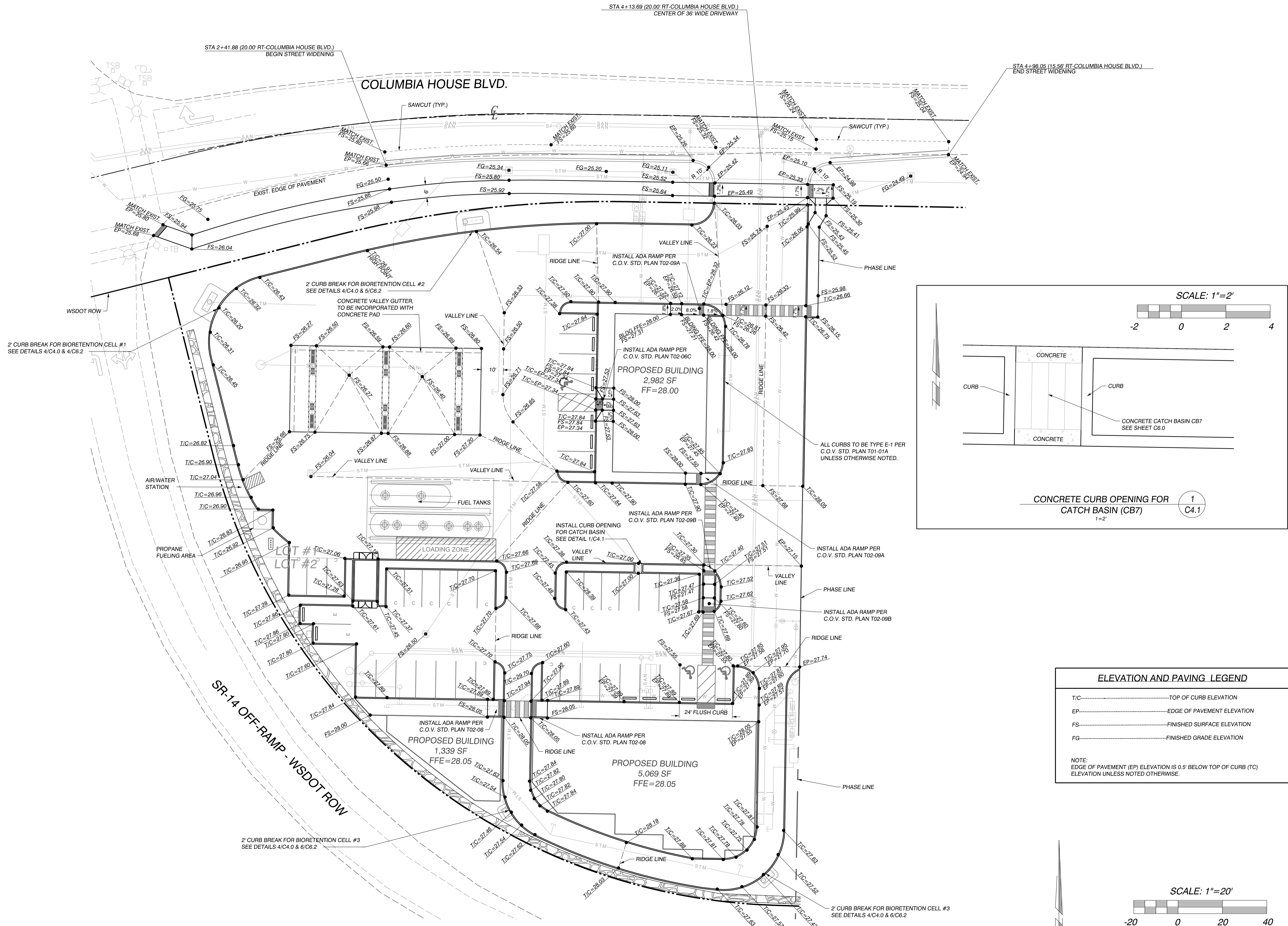
Digitally signed
by Peter Tuck
Date: 2021.12.30
12:08:04 -0800
E SIGNED BY
PETER A. TUCK
09/18/2020

CHANGES / REVISIONS	
DESCRIPTION:	DATE:
FUEL ISLAND UPDATES	01/06/2021
FUEL ISLAND UPDATES	06/21/2021
NE BLDG 1 UPDATES	07/27/2021

DESIGNED: JRS
DRAWN: JRS
CHECKED: PAT
DATE: APRIL 2019
SCALE: H: 1"=20'
V:
DELTA PLAZA PHASE 1
JOB NO.: 9787.01.01

SHEET

C4.1



**ALL WATER PIPE, JOINTS AND FITTINGS
SHALL BE MECHANICALLY RESTRAINED**

EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75717

IENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEYVANI
EMAIL: kiakeyvani@gmail.com

AS-BUILT

ND WATER PLAN FOR:
DELTA PLAZA PHASE 1

CLSON LAND SURVEYORS
ENGINEERS

E SIGNED BY
PETER A. TUCK
08/18/2020

[illegible]

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

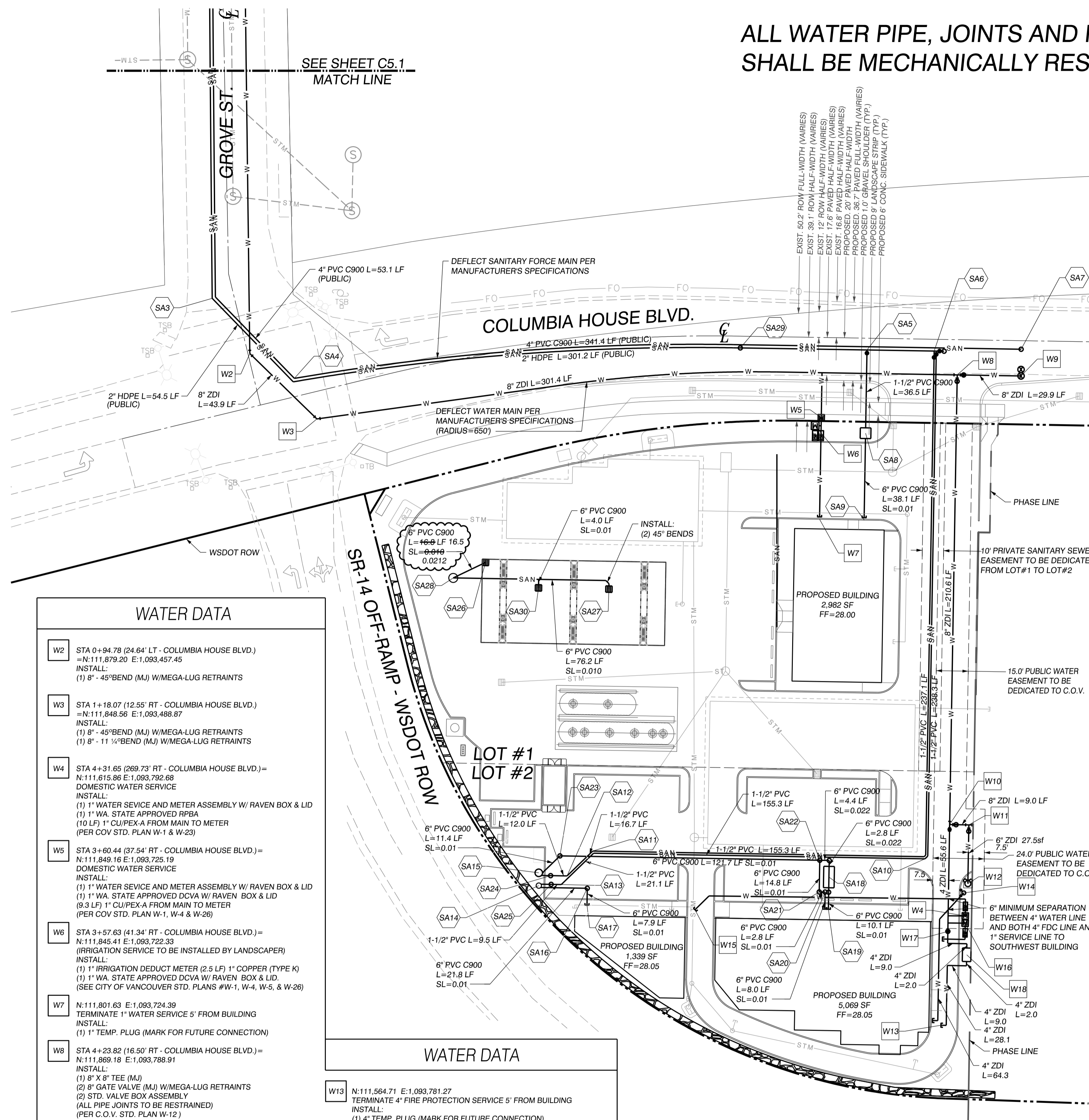
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DELTA PLAZA PHASE :

SHEET

C5.0



WATER DATA

- W2 STA 0+94.78 [24.64' LT - COLUMBIA HOUSE BLVD.)
= N+11,879.20 E: 1,059,457.45
INSTALL:
(1) 8" 45°BEND (M/J) W/MEGA-LUG RETRAINTS

W3 STA 1+18.07 [12.55' RT - COLUMBIA HOUSE BLVD.)
= N+11,848.56 E:1,093,488.7
INSTALL:
(1) 1" 45°BEND (M/J) W/MEGA-LUG RETRAINTS
(1) 8" 11°WBEND (M/J) W/MEGA-LUG RETRAINTS

W4 STA 4+31.65 [269.73' RT - COLUMBIA HOUSE BLVD.)=
= N+11,615.96 E:1,093,792.68
DOMESTIC WATER SERVICE
INSTALL:
(1) WATER SERVICE AND METER ASSEMBLY W/ RAVEN BOX & LID
(1) 1" STD. VALVE APPROVED RPBA
(10 LF) 1" CU/PEX-A FROM MAIN TO METER
(PER COV STD. PLAN W-1 & W-23)

W5 STA 3+60.44 [37.54' RT - COLUMBIA HOUSE BLVD.)=
= N+11,849.16 E:1,093,725.19
DOMESTIC WATER SERVICE
INSTALL:
(1) WATER SERVICE AND METER ASSEMBLY W/ RAVEN BOX & LID
(1) " WA. STD. APPROVED DCVA W/ RAVEN BOX & LID
(9.3 LF) 1" CU/PEX-A FROM MAIN TO METER
(PER COV STD. PLAN W-1, W-4 & W-26)

W6 STA 3+57.63 [41.34' RT - COLUMBIA HOUSE BLVD.)=
= N+11,645.41 E:1,093,722.33
(IRRIGATION SERVICE TO BE INSTALLED BY LANDSCAPER)
INSTALL:
(1) IRRIGATION DUCT METER (2.5 LF) 1" COPPER (TYPE K)
(1) " WA. STD. APPROVED DCVA W/ RAVEN BOX & LID.
(SEE CITY OF VANCOUVER STD. PLANS #W-1, W-4, W-5, & W-26)

W7 N:11,801.63 E:1,093,724.39
TERMINATE 1" WATER SERVICE 5' FROM BUILDING
INSTALL:
(1) 1" TEMP. PLUG (MARK FOR FUTURE CONNECTION)

W8 STA 4+23.82 [16.50' RT - COLUMBIA HOUSE BLVD.)=
= N+11,869.18 E:1,093,788.91
INSTALL:
(1) 8" X 8" TEE (M/J)
(2) 8" GATE VALVE (M/J) W/MEGA-LUG RETRAINTS
(2) STD. VALVE BOX ASSEMBLY
(ALL PIPE JOINTS TO BE RESTRAINED)
(PER C.O.V. STD. PLAN W-12)

W9 STA 4+53.70 [16.50' RT - COLUMBIA HOUSE BLVD.)=
= N+11,868.70 E:1,093,818.79
INSTALL:
(1) 2.5" TEMPORARY BLOWOFF ASSEMBLY
(PER C.O.V. STD. PLAN W-15)

W10 STA 4+23.65 [227.06' RT - COLUMBIA HOUSE BLVD.)=
= N+11,658.65 E:1,093,785.36
INSTALL:
(1) 8" X 8" MJ TEE
(1) 8" GATE VALVE W/MEGA-LUG RETRAINTS
(1) 8" X 4" MJ REDUCER
(1) STD. VALVE BOX ASSEMBLY
(ALL PIPE JOINTS TO BE RESTRAINED)
(PER C.O.V. STD. PLAN W-12)

W11 STA 4+32.65 [227.07' RT - COLUMBIA HOUSE BLVD.)=
= N+11,658.50 E:1,093,794.36
INSTALL:
(1) 8" MJ X 6" FLG TEE
(1) 8" MJ PLUG
(1) 8" GATE VALVE (FLG X MJ) W/MEGA-LUG RETRAINTS
(1) STD. VALVE BOX ASSEMBLY
(ALL PIPE JOINTS TO BE RESTRAINED)
(PER C.O.V. STD. PLANS W-12)

W12 STA 4+32.63 [254.57' RT - COLUMBIA HOUSE BLVD.)=
= N+11,651.01 E:1,093,793.89
INSTALL:
(1) STD. FIRE HYDRANT ASSEMBLY
(27.5 LF) 6" D.I. PIPE
(1) 4" X 4" CONCRETE COLLAR
(ALL PIPE JOINTS TO BE RESTRAINED)
(PER C.O.V. STD. PLANS W-10 & W-12)

WATER DATA

- | | |
|-----|--|
| W13 | N:111,564.71 E:1,093,781.27
TERMINATE 4" FIRE PROTECTION SERVICE S/ FROM BUILDING
INSTALL:
(1) 4" TEMP. PLUG (MARK FOR FUTURE CONNECTION) |
| W14 | N:111,626.66 E:1,093,791.99
PROPOSED F.D.C. LOCATION. F.D.C. LINE TO BE DESIGNED AND
INSTALLED BY A LICENSED FIRE SYSTEM INSTALLER (PRIVATE). |
| W15 | N:111,618.78 E:1,093,686.02
TERMINATE 1" WATER SERVICE S/ FROM BUILDING
INSTALL:
(2) 1" TEMP. PLUG (MARK FOR FUTURE CONNECTION) |
| W16 | STA 4+31.67 (273.10' RT - COLUMBIA HOUSE BLVD.) =
N:111,612.48 E:1,093,792.64
DOMESTIC WATER SERVICE
INSTALL:
(1) 1-1/2" WATER METER W/ RAVEN BOX & LID
(2) 2" W.A. STATE APPROVED RP&B
(10 LF) 2" CUIPEX-A FROM MAIN TO METER
(PER C.O.V. STD. PLAN W-1 & W-23) |
| W17 | STA 4+23.65 (227.06' RT - COLUMBIA HOUSE BLVD.) =
N:111,658.65 E:1,093,795.36
INSTALL:
(1) 4" MU GATE VALVE W/MEGA-LUG RETRAINTS
(1) STD. VALVE BOX ASSEMBLY
(WATER LINE IS PRIVATE FROM VALVE TO BUILDING CONNECTION)
(ALL FIRE JOINTS TO BE RESTRAINED)
(PER C.O.V. STD. PLAN W-12) |

WATER NOTES

- 1) WATER CONSTRUCTION NOTES SEE SHEET C1.1.
- 2) STD. 1" WATER SERVICE PER C.O.V. STD. PLAN W-1, W-4.
- 3) STD. VALVE BOXES PER C.O.V. STD. PLAN W-12.
- 4) WATER PIPE TRENCH BEDDING & BACKFILL PER C.O.V. STD. PLAN W-13.
- 5) STD. BLOWOFF ASSEMBLY PER C.O.V. STD. PLAN W-14.
- 6) STD. DOUBLE CHECK VALVE ASSEMBLY PER C.O.V. STD. PLAN W-21.
- 7) ALL DUCTILE IRON PIPE TO BE EXTERNALLY ZINC COATED CLASS 52.
- 8) ALL WATER PIPE, JOINTS AND FITTINGS SHALL BE MECHANICALLY RESTRAINED
- 9) ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER FACILITIES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES' GENERAL REQUIREMENTS AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER SYSTEMS' (LATEST REVISION). CONSTRUCTION SHALL BE AS PER THE STANDARD DETAILS' (LATEST REVISION) CONTAINED THEREIN.
- 10) UNDERGROUND FIRE SPRINKLER SUPPLY MAINS SHALL BE INSTALLED ONLY BY CONTRACTORS IN COMPLIANCE WITH WAC 212-80 AND ENDORSED IN ACCORDANCE WITH VMC 16.04.095 UNDER SEPARATE PERMIT.

SANITARY DATA

- (S4) STA 1+03.75 (53.91' LT. - COLUMBIA HOUSE BLVD.)
=STA 1+00 (SAY LINE "A")
=N 111.905.04 E:1,093.439.82
INSTALL:
(1) 4" - 45° BEND (MJ)
(1) 2" - 45° BEND (MJ)

(S4) STA 1+11.44 (6.94' LT. - COLUMBIA HOUSE BLVD.)
=N 111.865.93 E:1,093.477.81
INSTALL:
(1) 2" - 45° BEND (MJ)
(1) 2" - 11/2" BEND (MJ)
(1) 4" - 45° BEND (MJ)
(1) 4" - 11/2" BEND (MJ)

(S4) STA 3+81.36 (5.52' RT. - COLUMBIA HOUSE BLVD.)
=N 111.880.88 E:1,093.745.63
PRESSURE LATERAL CONNECTION
INSTALL:
(1) 2" X 2" X 2" TEE
(1) 2" GATE VALVE
(1) STD. VALVE BOX ASSEMBLY
(1) 2" X 1-1/2" REDUCER
(PER C.O.V. STD. PLAN S-5.3)

(S4) STA 4+12.83 (5.50' RT. - COLUMBIA HOUSE BLVD.)
=N 111.880.38 E:1,093.778.10
(1) PRESSURE LATERAL CONNECTIONS
INSTALL:
(1) 2" X 2" X 2" TEE
(1) 2" GATE VALVE
(1) STD. VALVE BOX ASSEMBLY
(1) 2" X 1-1/2" REDUCER
(PER C.O.V. STD. PLAN S-5.3)
(1) TYPICAL PRESSURE CLEANOUT
(1) 2" GATE VALVE
(1) STD. VALVE BOX ASSEMBLY
(PER C.O.V. STD. PLAN S-5.1)

(S4) STA 4+53.54 (4.00' RT. - COLUMBIA HOUSE BLVD.)
=N 111.841.20 E:1,093.818.82
TERMINATE 4" SANITARY FORCE MAIN
INSTALL:
SANITARY STUB, CAP & MARKER
(PER C.O.V. STD. PLAN S-3.0)

(S4) N 111.841.91 E:1,093.745.97
GRINDER PUMP
INSTALL:
(1) SIMPLEX GRINDER PUMP PACKAGE
RIM = ~~20.00~~ 26.29
IE OUT = ~~20.00~~ 22.35
SUMP = 19.23 22.16
(LIBRARY PUMPS MODEL #2484 LSG, SEE DETAILS/SHEET C5.2)

(S4) N 111.801.28 E:1,093.745.28
TERMINATE 6" SANITARY LATERAL 5' FROM BUILDING
INSTALL:
(1) 6" TEMP. PLUG (MARK FOR FUTURE CONNECTION)
IE = 23.01 N.V. BUILT TO PLAN BY CONTRACTOR
(PER C.O.V. STD. PLAN S-3.0)

(S4) N 111.642.60 E:1,093.773.79
INSTALL:
(1) 12" - 45° BEND (MJ)
(PER C.O.V. STD. PLAN S-5.3)

(S4) N 111.646.23 E:1,093.618.12
INSTALL:
(2) 1-1/4" - 45° BEND (MJ)

(S4) N 111.634.62 E:1,093.606.11
INSTALL:
(1) 1-1/4" - 45° BEND (MJ)

(S4) N 111.630.59 E:1,093.603.38
INSTALL:
(1) 1-1/4" - 45° BEND (MJ)

(S4) N 111.630.06 E:1,093.592.83
GRINDER PUMP
INSTALL:
(1) SIMPLEX GRINDER PUMP PACKAGE
RIM = ~~20.00~~ 27.87
IE = ~~23.05~~ N.V. BUILT TO PLAN BY CONTRACTOR
IE OUT = ~~24.04~~ 24.75
SUMP = ~~20.04~~ 20.54
(LIBRARY PUMPS MODEL #2484 LSG, SEE DETAILS/SHEET C5.2)

(S4) N 111.636.06 E:1,093.592.83
GRINDER PUMP
INSTALL:
(1) DUPLEX GRINDER PUMP PACKAGE
RIM = ~~20.00~~ 27.91
IE = ~~22.38~~ N.V. BUILT TO PLAN BY CONTRACTOR
IE OUT = ~~24.04~~ 24.12
SUMP = 20.78
(LIBRARY PUMPS MODEL #D3684 LSG, SEE DETAILS/SHEET C5.2)

(S4) N 111.628.81 E:1,093.615.56
SANITARY CLEANOUT
INSTALL:
(1) SANITARY SEWER CLEANOUT
RIM = ~~20.00~~ 30.83
IE = 23.87 24.98 TOP OF ELBOW
(PER C.O.V. STD. PLAN S-3.1)

(S4) N 111.620.63 E:1,093.615.43
TERMINATE 6" SANITARY LATERAL 5' FROM BUILDING
INSTALL:
(1) 6" TEMP. PLUG (MARK FOR FUTURE CONNECTION)
IE = 23.95 N.V. BUILT TO PLAN BY CONTRACTOR
(PER C.O.V. STD. PLAN S-3.0)

(S4) N 111.634.05 E:1,093.728.78
GREASE TRAP
INSTALL:
(1) STANDARD 1500 GALLON GREASE INTERCEPTOR
(2) STANDARD SANITARY SEWER CLEANOUTS
RIM = ~~20.00~~ 26.05
IE = 23.85 N.V.
(PER C.O.V. STD. PLANS S-2.1, S-2.2, S-2.3, S-2.4, S-2.5, S-3.1 & S-4.2)

(S4) N 111.619.02 E:1,093.728.53
TERMINATE 6" SANITARY LATERALS 5' FROM BUILDING
INSTALL:
(2) 6" TEMP. PLUG (MARK FOR FUTURE CONNECTION)
IE = 23.95 N.V. BUILT TO PLAN BY CONTRACTOR
(PER C.O.V. STD. PLAN S-3.0)

(S4) N 111.627.05 E:1,093.727.00
SANITARY CLEANOUT
INSTALL:
(1) SANITARY SEWER CLEANOUT
RIM = ~~20.00~~ 28.15
IE = 23.87 28.47 TOP OF ELBOW
(PER C.O.V. STD. PLAN S-3.1)

(S4) N 111.627.10 E:1,093.724.25
SANITARY CLEANOUT
INSTALL:
(1) SANITARY SEWER CLEANOUT
RIM = ~~20.00~~ 28.12
IE = 23.86 28.46 TOP OF ELBOW
(PER C.O.V. STD. PLAN S-3.1)

(S4) N 111.641.94 E:1,093.724.50
SANITARY CLEANOUT
INSTALL:
(1) SANITARY SEWER CLEANOUT
RIM = ~~20.00~~ 28.71
IE = 23.69 28.21 TOP OF ELBOW
(PER C.O.V. STD. PLAN S-3.1)

(S4) N 111.643.99 E:1,093.602.79
SANITARY CLEANOUT
INSTALL:
(1) SANITARY SEWER CLEANOUT
RIM = ~~20.00~~ 30.37
IE = 23.49 28.14 TOP OF ELBOW
(PER C.O.V. STD. PLAN S-3.1)

(S4) N 111.634.75 E:1,093.598.39
INSTALL:
(1) TESTING STATION
(PER C.O.V. STD. PLANS S-5.2 & S-5.4)
500' MAXIMUM SPACING (TYP.)

(S4) N 111.630.67 E:1,093.598.63
INSTALL:
(1) TESTING STATION
(PER C.O.V. STD. PLANS S-5.2 & S-5.4)
500' MAXIMUM SPACING (TYP.)

(S4) N 111.781.39 E:1,093.567.90
INSTALL:
(1) STD. CATCH BASIN
RIM = ~~20.00~~ 26.20
IE = ~~20.00~~ 23.70
(PER C.O.V. STD. PLAN D-1)
FREE FLOWING (NO TURN DOWN ELBOW)

(S4) N 111.768.81 E:1,093.625.71
INSTALL:
(1) STD. CATCH BASIN
RIM = ~~20.00~~ 26.07
IE = ~~20.00~~ 24.16
(PER C.O.V. STD. PLAN D-1)
FREE FLOWING (NO TURN DOWN ELBOW)

(S4) N 111.774.13 E:1,093.552.77
DEAD END SUMP
INSTALL:
(1) CONCRETE VAULT 6' L X 4' W X 5' D
OR EQUIVALENT CAPACITY
RIM = ~~20.00~~ 25.82
IE (IN) = ~~20.00~~ 23.35
IE (E) = ~~20.00~~ 23.11
BOT OF SUMP = 20.64 N.V.
(PER C.O.V. STD. PLAN D-4.0)

(S4) STA 3+22.00 (5.50' RT. - COLUMBIA HOUSE BLVD.)
=N 111.881.82 E:1,093.687.28
INSTALL:
(1) TESTING STATION FOR 2" FORCE MAIN
(1) TESTING STATION FOR 4" FORCE MAIN
(PER C.O.V. STD. PLANS S-5.2 & S-5.4)
500' MAXIMUM SPACING (TYP.)

(S4) N 111.769.45 E:1,093.592.71
INSTALL:
(1) STD. CATCH BASIN
RIM = ~~20.00~~ 25.90
IE = ~~20.00~~ 23.80
(PER C.O.V. STD. PLAN D-1)
FREE FLOWING (NO TURN DOWN ELBOW)


SANITARY NOTES

- 1) FOR SANITARY SEWER CONSTRUCTION NOTES SEE SHEET C1.1.
- 2) SANITARY SEWER PIPE BEDDING AND BACKFILL TO BE PER C.O.V. STD. PLANS S-1.2 & S-1.3.
- 3) ALL 4" FORCE MAIN PIPE AND GRAVITY PIPE TO BE PVC C900, AS NOTED ON THE PLAN.
- 4) ALL 2" FORCE MAIN PIPE TO BE HDPE (DR-17), PER SPECIFICATIONS ASTM F-714, ASTM D-3501, PER 34534C & ASTM D-1248, TYPE III, CLASS C, CATEGORY 5, GRADE P34, AND AWWA C906.
- 5) MINIMUM 3' COVER FOR ALL SANITARY SEWER FORCE MAINS.

GENERAL NOTES:

- 1) TRENCH/PAVEMENT RESTORATION WITHIN COLUMBIA HOUSE BOULEVARD AND GROVE STREET RIGHT-OF-WAY TO BE COMPLETED IN ACCORDANCE WITH C.O.V. STANDARD PLANS T05-01B, T05-04A, T05-04B, T05-05, AND T05-07
- 2) MAINTAIN 18" SEPARATION AT SANITARY/WATER CROSSINGS PER C.O.V. STANDARD PLAN W-17.
- 3) PRIOR TO COMBUSTABLE CONSTRUCTION, FIRE HYDRANTS FOR EMERGENCY USE SHALL BE INSTALLED, APPROVED AND MAINTAINED.

Digitally signed
by Peter Luck
Date: 2021.12.30
12:08:51 -08'00'

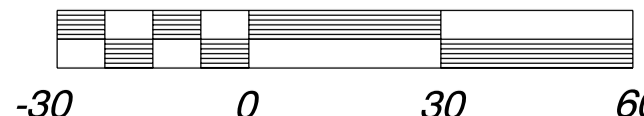
THIS STAMP APPLIES TO THE HORIZONTAL
AND VERTICAL ASBUILT INFORMATION SHOWN
ON THIS SHEET ONLY BY  FOR:

A N/A

<input type="checkbox"/>	<input checked="" type="checkbox"/>	GRADING
<input type="checkbox"/>	<input checked="" type="checkbox"/>	STORM SEWER
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SANITARY SEWER
<input type="checkbox"/>	<input checked="" type="checkbox"/>	WATER

☒ ☐ LOCATIONS FOR WATER VALVES, SERVICES AND FIRE HYDRANTS
CONFIRMED BY VISUAL INSPECTION

SCALE: 1"=30'



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M:\MicroStation V8\open tables\HP5000\san_wtr.tbl

**ALL WATER PIPE, JOINTS AND FITTINGS
SHALL BE MECHANICALLY RESTRAINED**

Digitally signed
by Peter Duck
Date: 2021.12.30
12:10:07 -08'00'

A N/A

<input type="checkbox"/>	<input checked="" type="checkbox"/>	GRADING
<input type="checkbox"/>	<input checked="" type="checkbox"/>	STORM SEWER
<input checked="" type="checkbox"/>	<input type="checkbox"/>	SANITARY SEWER
<input checked="" type="checkbox"/>	<input type="checkbox"/>	WATER

☐ ☒ LOCATIONS FOR WATER VALVES,
SERVICES AND FIRE HYDRANTS
CONFIRMED BY VISUAL INSPECTION

PAVING LEGEND

GRIND AND OVERLAY
(PER GOV STD DETAIL T05-01B & T02-07)

GENERAL NOTE:

TRENCH/PAVEMENT RESTORATION WITHIN COLUMBIA HOUSE BOULEVARD AND GROVE STREET RIGHT-OF-WAY TO BE COMPLETED IN ACCORDANCE WITH C.O.V. STANDARD PLANS T05-01B, T05-04A, T05-04B, T05-05, AND T05-07

WATER DATA

W1 STA 5+125.08 (9.45' RT - GROVE STREET)
= N:112.266 S: 1.083 452-57
IF EXISTING 12" X 12" X 8' TEE, REMOVE EXISTING 12" PLUG
INSTALL:
(1) 12" X 8" REDUCER (M)
(1) 8" MJ GATE VALVE W/ MEGA-LUG REINTRA
(1) STANDARD VALVE BOX ASSEMBLY

DEFLECT 8" ZDI WATER MAIN BELOW EXISTING STORMWATER
LATERALS
INSTALL:
(2) 8" - 45° BEND (MJ) W/ MEGA-LUG REINTRAITS
RESTAIN FIRST VERTICAL 45° BEND WITH THRUST BLOCKING R
COV STD PLAN W-16.

CONTRACTOR TO VERIFY EXISTING FITTINGS AT CONNECTION
POINT WELL IN ADVANCE OF CONSTRUCTION.

WATER NOTES

- 1) WATER CONSTRUCTION NOTES SEE SHEET C1.1.
- 2) STD. 1" WATER SERVICE PER C.O.V. STD. PLAN W-1, W-4.
- 3) STD. VALVE BOXES PER C.O.V. STD. PLAN W-12.
- 4) WATER PIPE TRENCH BEDDING & BACKFILL PER C.O.V. STD. PLAN W-13.
- 5) STD. BLOWOFF ASSEMBLY PER C.O.V. STD. PLAN W-14.
- 6) STD. DOUBLE CHECK VALVE ASSEMBLY PER C.O.V. STD. PLAN W-21.
- 7) ALL DUCTILE IRON PIPE TO BE EXTERNALLY ZINC COATED CLASS 52.
- 8) ALL WATER PIPE, JOINTS AND FITTINGS SHALL BE MECHANICALLY RESTRAINED
- 9) ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER FACILITIES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES "GENERAL REQUIREMENTS AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER SYSTEMS" (LATEST REVISION). CONSTRUCTION SHALL BE AS PER THE STANDARD DETAILS (LATEST REVISION) CONTAINED THEREIN
- 10) THRUST BLOCK PER C.O.V. STD. PLAN W-16.

GENERAL NOTES:

- 1) TRENCH/PAVEMENT RESTORATION WITHIN COLUMBIA HOUSE BOULEVARD AND GROVE STREET RIGHT-OF-WAY TO BE COMPLETED IN ACCORDANCE WITH C.O.V. STANDARD PLANS T05-01B, T05-04A, T05-04B, T05-05, AND T05-07
- 2) MAINTAIN 18" SEPARATION AT SANITARY/WATER CROSSINGS PER C.O.V. STANDARD PLAN W-17.

SANITARY DATA

(SA1) STA R+05.75 (363.83 RT - GROVE STREET)
=N112.542 I4 E.1.093.767.43
CONNECT A 1" 2" FORCE MAINS TO
EXISTING SANITARY SEWER MAIN
RIM=26.88
6" STUB IE (NW)=21.36 (EXIST.)
6" IE IN (NW)=21.28 (EXIST.)
8" IE OUT (SE)=21.07 (EXIST.)

CONNECT 4" FORCE MAIN TO EXISTING 6" STUB
INSTALL:
(1) 6" X 4" REDUCER

IF FORCE MAIN DOES NOT ALIGN WITH EXISTING 6" STUB,
BURY 6" CONNECTIONS INTO MANHOLE WITH AN I.E.
OF 21.36. SEE CROSS SECTION DETAIL 1/Cs.1.

MH TO BE PLINED (PER C.O.V. STANDARDS SECTION 3-7.05)

(SA2) STA R+32.88 (93.3 LT. GROVE STREET)
=N112.580.50 E.1.093.395.29
INSTALL:
(1) 2" - 45º BEND (MJ)
(1) 2" - WYE (MJ)
(1) 4" - 45º BEND (MJ)
(1) 4" - WYE (MJ)
(1) 2" TYPICAL PRESSURE CLEANOUT
(1) 4" TYPICAL PRESSURE CLEANOUT
PER C.O.V. STD PLANS

(SA30) STA R+75.18 (5.36 LT. GROVE STREET)
=N112.128.50 E.1.093.457.89
INSTALL:
(1) TESTING STATION FOR 2" FORCE MAIN
(1) TESTING STATION FOR 4" FORCE MAIN
PER C.O.V. STD PLANS S-S-2 & S-S-4
500' MAXIMUM SPACING (TYP.)

(SA31) STA R+34.15 (32.68 RT. GROVE STREET)
=N112.580.50 E.1.093.437.29
INSTALL:
(1) TESTING STATION FOR 2" FORCE MAIN
(1) TESTING STATION FOR 4" FORCE MAIN
PER C.O.V. STD PLANS S-S-2 & S-S-4
500' MAXIMUM SPACING (TYP.)

(SA32) STA R+10.06 (341.83 RT - GROVE STREET)
=N112.547.07 E.1.093.745.57
INSTALL:
(1) TESTING STATION FOR 2" FORCE MAIN
(1) TESTING STATION FOR 4" FORCE MAIN
PER C.O.V. STD PLANS S-S-2 & S-S-4
500' MAXIMUM SPACING (TYP.)

SANITARY NOTES

- 1) FOR SANITARY SEWER PIPE CONSTRUCTION NOTES SEE SHEET C1.1.
- 2) SANITARY SEWER PIPE BEDDING AND BACKFILL TO BE PER C.O.V. STD. PLANS S-1.2 & S-1.3.
- 3) ALL 4" FORCE MAIN PIPE AND GRAVITY PIPE TO BE PVC C900, AS NOTED ON THE PLAN.
- 4) ALL 2" FORCE MAIN PIPE TO BE HDPE (DR-17), PER SPECIFICATIONS ASTM F-714, ASTM D-350, PE 34534C & ASTM D-1248, TYPE III, CLASS C, CATEGORY 5, GRADE P34, AND AWWA C906.
- 5) MINIMUM 3' COVER FOR ALL SANITARY SEWER FORCE MAINS.

NOTES:

- 2) IF EXISTING 6" STUB DOES NOT ALIGN WITH PROPOSED 2" AND 4" FORCE MAIN, CONTRACTOR TO BORE NEW CONNECTION WITH AN IE OF 21.36.

SANITARY SEWER MANHOLE "SA1" CROSS SECTION

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661

PH: (360) 696-4448
CONTACT: KIA KEYVANI
EMAIL: kiakeyvani@gmail.com

AS-BUILT

SEWER AND WATER PLAN FOR: DELTA PLAZA PHASE 1

LAND SURVEYORS
ENGINEERS

OLSON
ENGINEERING INC.

E SIGNED BY
PETER A. TUCK
08/18/2020

CHANGES / REVISIONS

DESCRIPTION:	DATE:
--------------	-------

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: 1"=30'

DELTA PLAZA PHASE :

JOB NO.: 9787.01.01

SHEET

C5.1

CITY OF VANCOUVER

THESE PLANS HAVE BEEN REVIEWED FOR
COMPLIANCE WITH CITY CODES, ORDINANCES
AND POLICIES AND ARE

APPROVED

THE APPROVAL OF THESE PLANS BY THE CITY OF
VANCOUVER DOES NOT AUTHORIZE ANY
NONCOMPLIANCE WITH LOCAL ORDINANCE,
CODE OR STATE LAW.

THESE PLANS SHALL BE AVAILABLE FOR ALL
REQUESTED INSPECTIONS.

ENG-75171
10/20/20

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

SANITARY DETAILS FOR:
DELTA PLAZA PHASE 1

OLSON LAND SURVEYORS
ENGINEERS
3180 15TH AVENUE
VANCOUVER, BC V6M 1Y7
222 E. EVERGREEN, VANCOUVER, WA 98060
COPYRIGHT 2017, OLSON ENGINEERING, INC.

Digitally signed
by Peter Luck
Date: 2020.01.23
11:13:24 -08'00'

CHANGES / REVISIONS
DESCRIPTION: DATE:

RECORD DRAWING

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: N.T.S.
V:

DELTA PLAZA PHASE 1

JOB NO.: 9787.01.01

SHEET

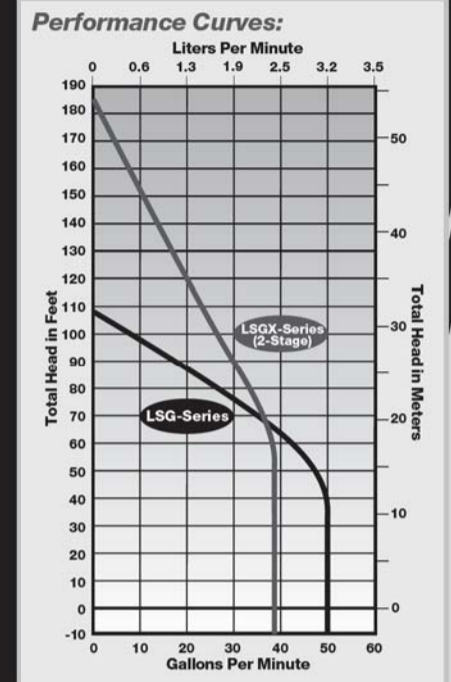
C5.2

2400-Series Specifications

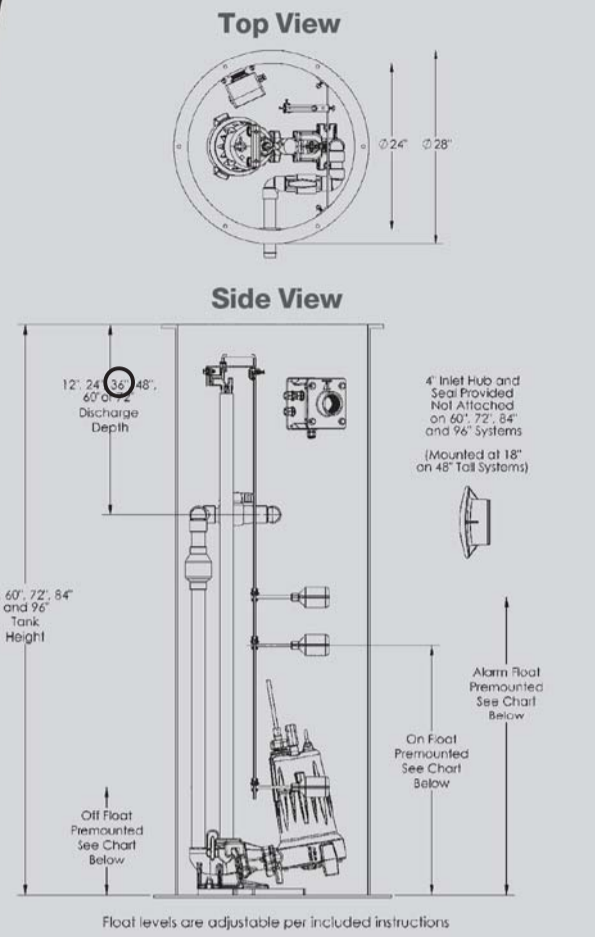
Features:

- 2 hp. Grinder Pump
- Choose from single stage LSG or two stage LSGX-Series pumps
- Available in a wide range of voltages
- 1-1/4" discharge
- 25' power cable length

(See LSG or LSGX-Series literature for complete pump specifications.)



Dimensional Data



Galvanized guide rails standard. For stainless steel rails add "S" to model number. Example: 2472LSG24-S

For steel cover option add "SC" suffix to model number. Example: (steel) 2472LSG24-SC

Factory set control levels 2400-Series

Model	Off level	On Level	Alarm Level	Volume per Pump Cycle	Total Basin Capacity
2448	9.5" (42 cm)	16.5" (41.9 cm)	21" (79 cm)	13.5 gal. (51 liters)	94 gal. (356 liters)
2460	13" (33 cm)	27" (69 cm)	33" (86 cm)	27 gal. (102 liters)	119 gal. (447 liters)
2472	13" (33 cm)	37" (94 cm)	37" (94 cm)	35 gal. (132 liters)	141 gal. (534 liters)
2484	13" (33 cm)	37" (94 cm)	37" (94 cm)	35 gal. (132 liters)	141 gal. (534 liters)
2496	13" (33 cm)	37" (94 cm)	43" (109 cm)	47 gal. (178 liters)	196 gal. (742 liters)

Specifications are subject to change without notice.

SSPMA

SP

CASPE

US Pumps

in

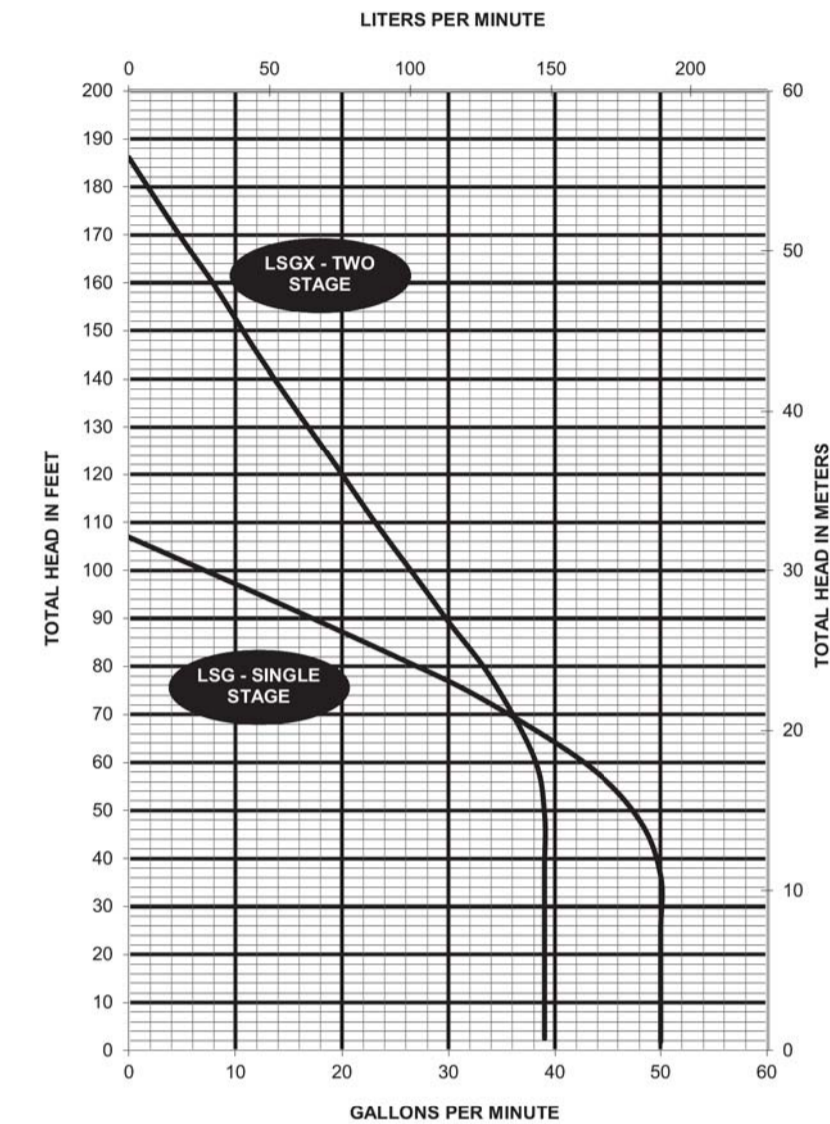
Liberty Pumps

A Family and Employee Owned Company

Pump Specification

2484LSG, 2484LSGX

Omnivore® 2HP Simplex Grinder Packages



2484LSG_P1 R1/17/2019

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Liberty Pumps

www.libertypumps.com

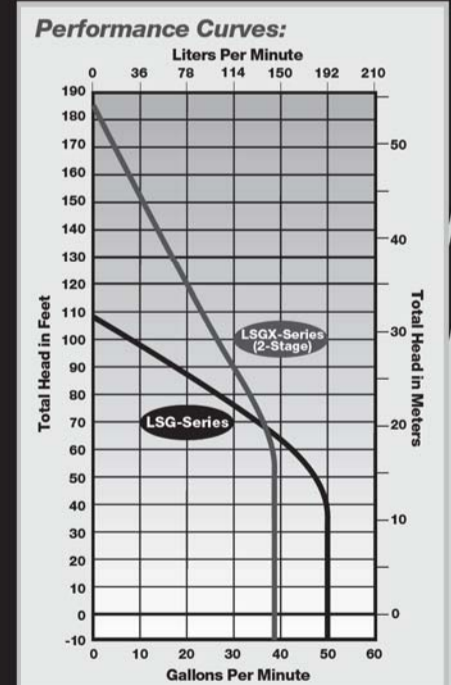
Liberty Pumps

D3600-Series Specifications

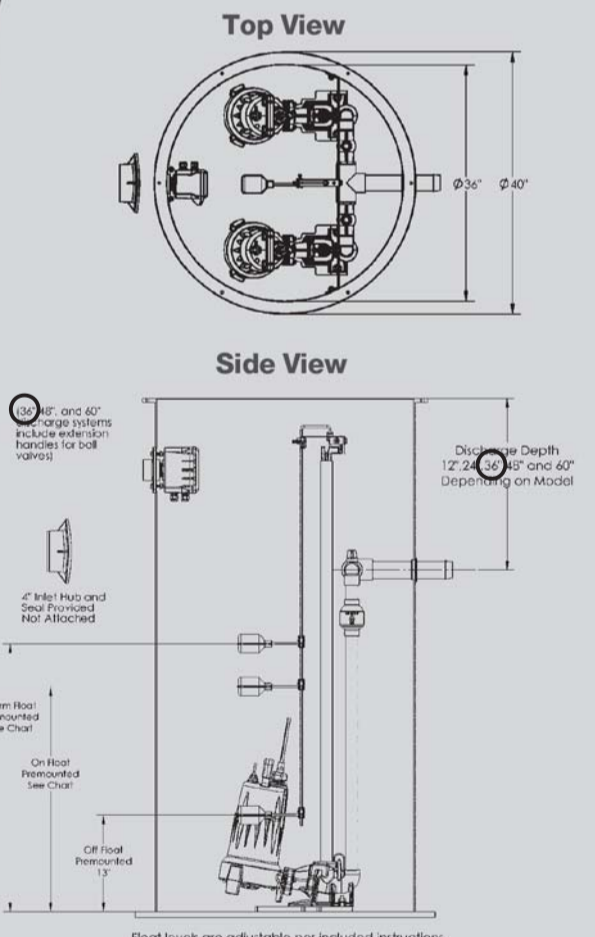
Features:

- 2 hp. Grinder Pump
- Choose from single stage LSG or two stage LSGX-Series pumps
- Available in a wide range of voltages
- 2" discharge (existing basin)
- 25' power cable length

(See LSG or LSGX-Series literature for complete pump specifications.)



Dimensional Data



Galvanized guide rails standard. For stainless steel rails add "S" to model number. Example: (Galvanized) D3672LSGX202-24-S

For steel cover option add "SC" suffix to model number. Example: (steel) D3672LSGX202-24-SC

Factory set control levels 3600-Series

Model	Off level	On Level	Alarm Level	Volume per Pump Cycle	Total Basin Capacity
D3648	13" (33 cm)	25" (64 cm)	31" (79 cm)	62 gal. (235 liters)	211 gal. (799 liters)
D3660	13" (33 cm)	28" (71 cm)	34" (86 cm)	75 gal. (284 liters)	264 gal. (999 liters)
D3672	13" (33 cm)	34" (86 cm)	37" (94 cm)	89 gal. (333 liters)	317 gal. (1200 liters)
D3684	13" (33 cm)	34" (86 cm)	40" (102 cm)	101 gal. (382 liters)	370 gal. (1400 liters)
D3696	13" (33 cm)	37" (94 cm)	43" (109 cm)	115 gal. (435 liters)	423 gal. (1601 liters)

Specifications are subject to change without notice.

SSPMA

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US Pumps

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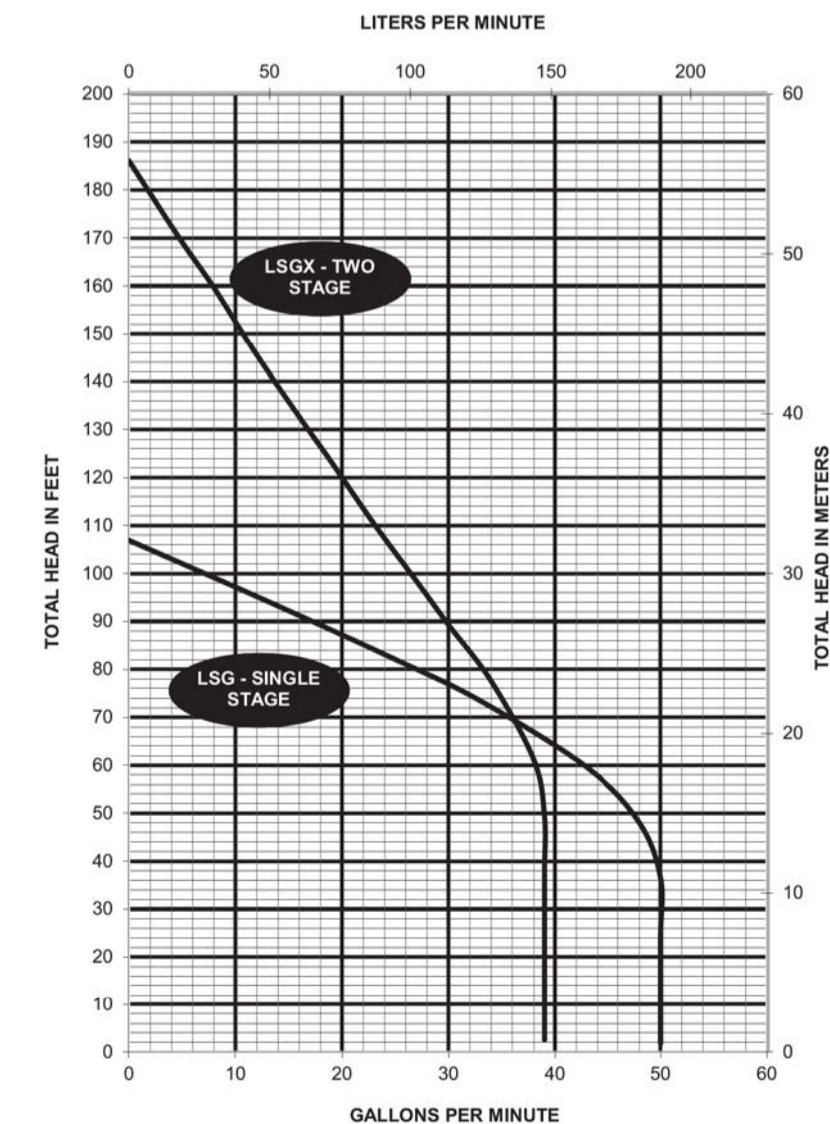
Liberty Pumps

A Family and Employee Owned Company

Pump Specification

D3684LSG, D3684LSGX

Omnivore® 2HP Duplex Grinder Packages



D3684LSG_P1 R1/17/2018

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Liberty Pumps

www.libertypumps.com

Liberty Pumps

D3600-Series Duplex Model

36" diameter fiberglass basin available in heights of 48", 60", 72", 84" and 96".

Available with standard AE-Series control panel or upgrade to the new IP-Series Intelligent Panel.

Systems listed to the right are shipped with a standard AE-Series control panel. To upgrade to an IP-Series panel add "IP" suffix to the above model number. Example: D3672LSGX202-24-IP. See AE-Series or IP-Series literature for complete specifications.

Models	Volts	Phase	Wgt.	Standard Panel AE-Series	(Optional) Panel IP-Series
D3648-LSGX202	208/230	1	470 lbs.	AE24H-3	IPD-24H
D3648-LSGX202-C	208/230	1	470 lbs.	AE24HC-3	IPD-24HC
D3648-LSGX203	208/230	3	479 lbs.	AE34-3-511	IPD-34-511
D3648-LSGX204	440-480	3	479 lbs.	AE34-3-171	IPD-34-171
D3648-LSGX205	575	3	479 lbs.	AE34-3-161	IPD-34-161
D3648-LSGX202	208-230	1	482 lbs.	AE24H-3	IPD-24H
D3648-LSGX202-C	208-230	1	482 lbs.	AE24HC-3	IPD-24HC
D3648-LSGX203	208/230	3	491 lbs.	AE34-3-511	IPD-34-511
D3648-LSGX204	440-480	3	491 lbs.	AE34-3-171	IPD-34-171
D3648-LSGX205	575	3	491 lbs.	AE34-3-161	IPD-34-161

D3660 - 30" x 80" basin (Discharge depth is available in 24", 36" or 36" from top of basin. Add -24, -36 or -48 to model when ordering.)	208/230	1	490 lbs.	AE24H-3	IPD-24H
D3660-LSGX202-C (24 or -36)	208/230	1	490 lbs.	AE24HC-3	IPD-24HC
D3660-LSGX203 (24 or -36)	208/230	3	499 lbs.	AE34-3-511	IPD-34-511
D3660-LSGX204 (24 or -36)	440-480	3	499 lbs.	AE34-3-171	IPD-34-171
D3660-LSGX205 (24 or -36)	575	3	499 lbs.	AE34-3-161	IPD-34-161
D3660-LSGX203 (24 or -36)	208-230	1	502 lbs.	AE24H-3	IPD-24H
D3660-LSGX203-C (24 or -36)	208-230	1	502 lbs.	AE24HC-3	IPD-24HC
D3660-LSGX203 (24 or -36)	208/230	3	511 lbs.	AE34-3-511	IPD-34-511
D3660-LSGX204 (24 or -36)	440-480	3	511 lbs.	AE34-3-171	IPD-34-171
D3660-LSGX205 (24 or -36)	575	3	511 lbs.	AE34-3-161	IPD-34-161

D3672 - 30" x 72" basin (Discharge depth is available in 24", 36" or 36" from top of basin. Add -24, -36 or -48 to model when ordering.)	208/230	1	515 lbs.	AE24H-3	IPD-24H
D3672-LSGX202-C (24, -36 or -48)	208/230	1	515 lbs.	AE24HC-3	IPD-24HC
D3672-LSGX203 (24, -36 or -48)	208/230	3	524 lbs.	AE34-3-511	IPD-34-511
D3672-LSGX204 (24, -36 or -48)	440-480	3	524 lbs.	AE34-3-171	IPD-34-171
D3672-LSGX205 (24, -36 or -48)	575	3	524 lbs.	AE34-3-161	IPD-34-161
D3672-LSGX202 (24, -36 or -48)	208-230	1	527 lbs.	AE24H-3	IPD-24H
D3672-LSGX202-C (24, -36 or -48)	208-230	1	527 lbs.	AE24HC-3	IPD-24HC
D3672-LSGX203 (24, -36 or -48)	208/230	3	536 lbs.	AE34-3-511	IPD-34-511
D3672-LSGX204 (24, -36 or -48)	440-480	3	536 lbs.	AE34-3-171	IPD-34-171
D3672-LSGX205 (24, -36 or -48)	575	3	536 lbs.	AE34-3-161	IPD-34-161

D3684 - 30" x 84" basin (Discharge depth is available in 24", 36" or 36" from top of basin. Add -24, -36 or -48 to model when ordering.)	208/230	1	540 lbs.	AE24H-3	IPD-24H
D3684-LSGX202-C (24, -36, -48 or -60)	208/230	1	540 lbs.	AE24HC-3	IPD-24HC
D3684-LSGX203 (24, -36, -48 or -60)	208/230	3	549 lbs.	AE34-3-511	IPD-34-511
D3684-LSGX204 (24, -36, -48 or -60)	440-480	3	549 lbs.	AE34-3-171	IPD-34-171
D3684-LSGX205 (24, -36, -48 or -60)	575	3	549 lbs.	AE34-3-161	IPD-34-161
D3684-LSGX202 (24, -36, -48 or -60)	208-230	1	552 lbs.	AE24H-3	IPD-24H
D3684-LSGX202-C (24, -36, -48 or -60)	208-230	1	552 lbs.	AE24HC-3	IPD-24HC
D3684-LSGX203 (24, -36, -48 or -60)	208/230	3	561 lbs.	AE34-3-511	IPD-34-511
D3684-LSGX204 (24, -36, -48 or -60)	440-480	3	561 lbs.	AE34-3-171	IPD-34-171
D3684-LSGX205 (24, -36, -48 or -60)	575	3	561 lbs.	AE34-3-161	IPD-34-161

D3696 - 30" x 96" basin (Discharge depth is available in 24", 36", 36", 60" or 72" from top of basin. Add -24, -36, -48, -60 or -72 to model when ordering.)	208/230	1	565 lbs.	AE24H-3	IPD-24H
D3696-LSGX202-C (24, -36, -48, -60 or -72)	208/230	1	565 lbs.	AE24HC-3	IPD-24HC
D3696-LSGX203 (24, -36, -48, -60 or -72)	208/230	3	574 lbs.	AE34-3-511	IPD-34-511
D3696-LSGX204 (24, -36, -48, -60 or -72)	440-480	3	574 lbs.	AE34-3-171	IPD-34-171
D3696-LSGX205 (24, -36, -48, -60 or -72)	575	3	574 lbs.	AE34-3-161	IPD-34-161
D3696-LSGX202 (24, -36, -48, -60 or -72)	208-230	1	577 lbs.	AE24H-3	IPD-24H
D3696-LSGX202-C (24, -36, -48, -60 or -72)	208-230	1	577 lbs.	AE24HC-3	IPD-24HC
D3696-LSGX203 (24, -36, -48, -60 or -72)	208/230	3	586 lbs.	AE34-3-511	IPD-34-511
D3696-LSGX204 (24, -36, -48, -60 or -72)	440-480	3	586 lbs.	AE34-3-171	IPD-34-171
D3696-LSGX205 (24, -36, -48, -60 or -72)	575	3	586 lbs.	AE34-3-161	IPD-34-161

Liberty Pumps • 7000 Apple Tree Avenue • Bergen, New York 14416
Phone 800-543-2550 Fax (585) 494-1839

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EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75717

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEVYANI
EMAIL: kkevyani@gmail.com

AS-BUILT

SANITARY SEWER PROFILE PLAN FOR:
DELTA PLAZA PHASE 1

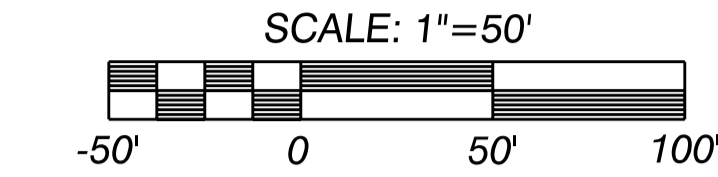
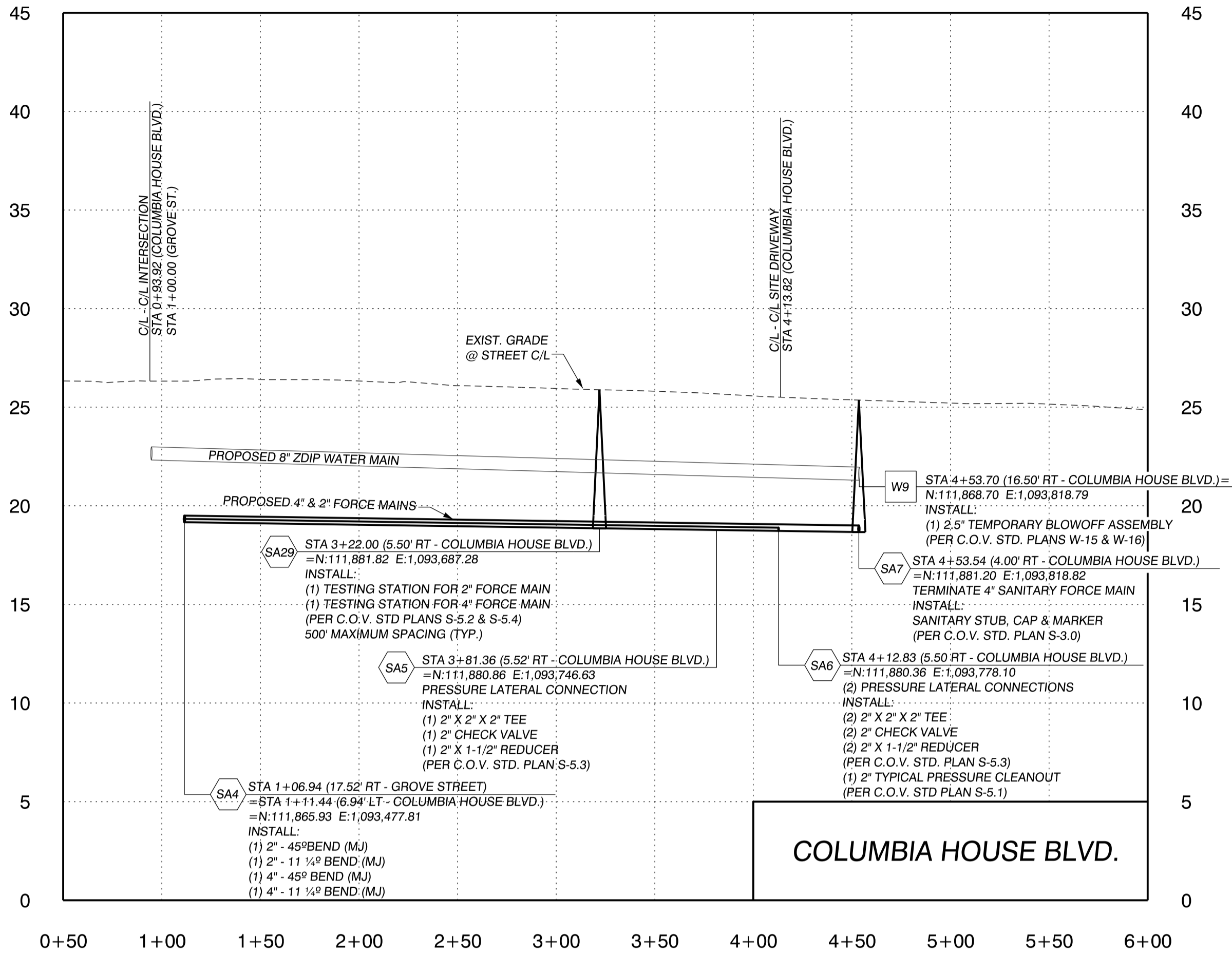


E SIGNED BY
PETER A. TUCK
08/18/2020

CHANGES / REVISIONS	
DESCRIPTION:	DATE:

DESIGNED: JRS
DRAWN: JRS
CHECKED: PAT
DATE: APRIL 2019
SCALE: H: 1"=50'
V: 1"=5'
DELTA PLAZA PHASE 1
JOB NO.: 9787.01.01

SHEET
C5.3



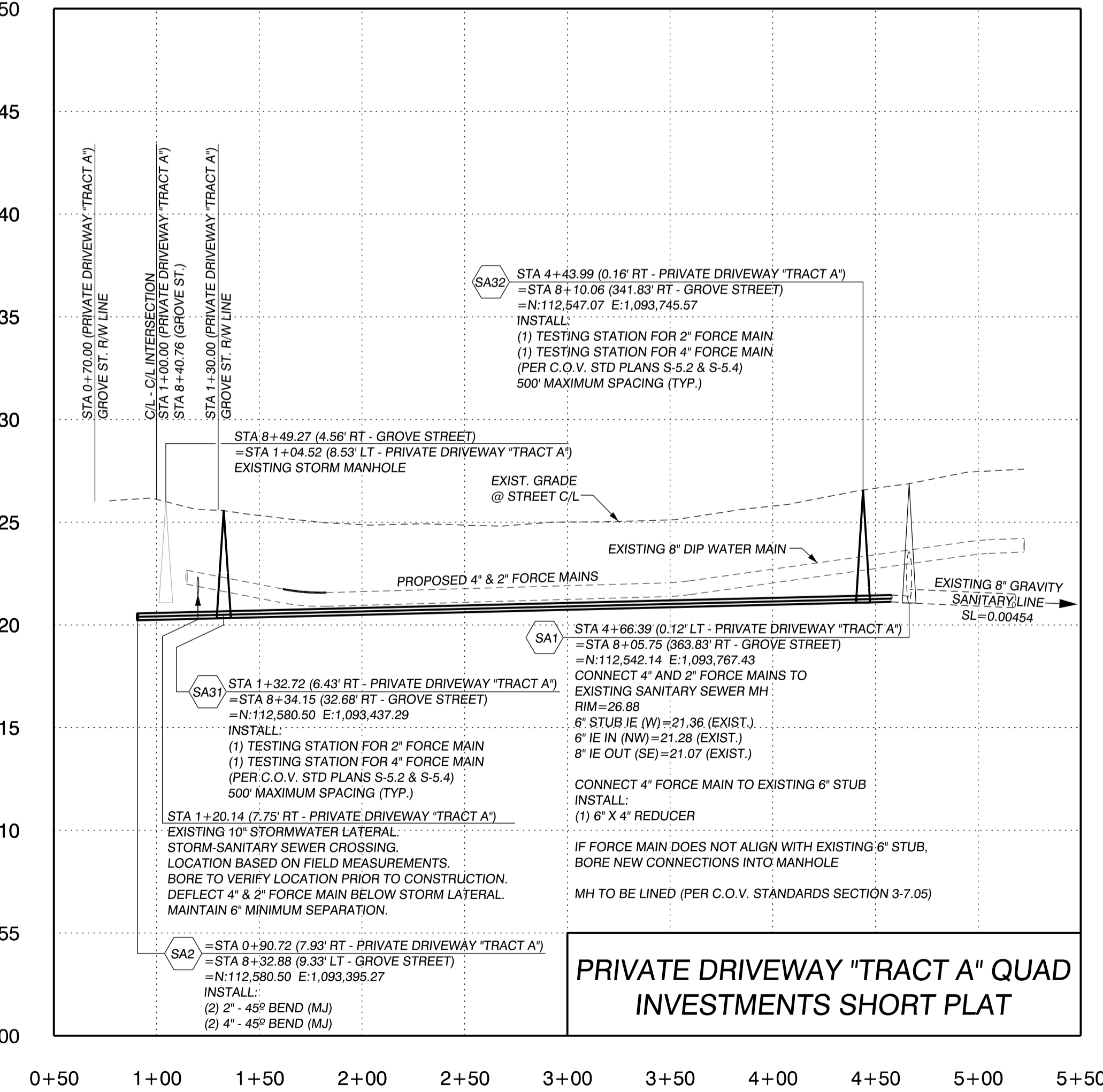
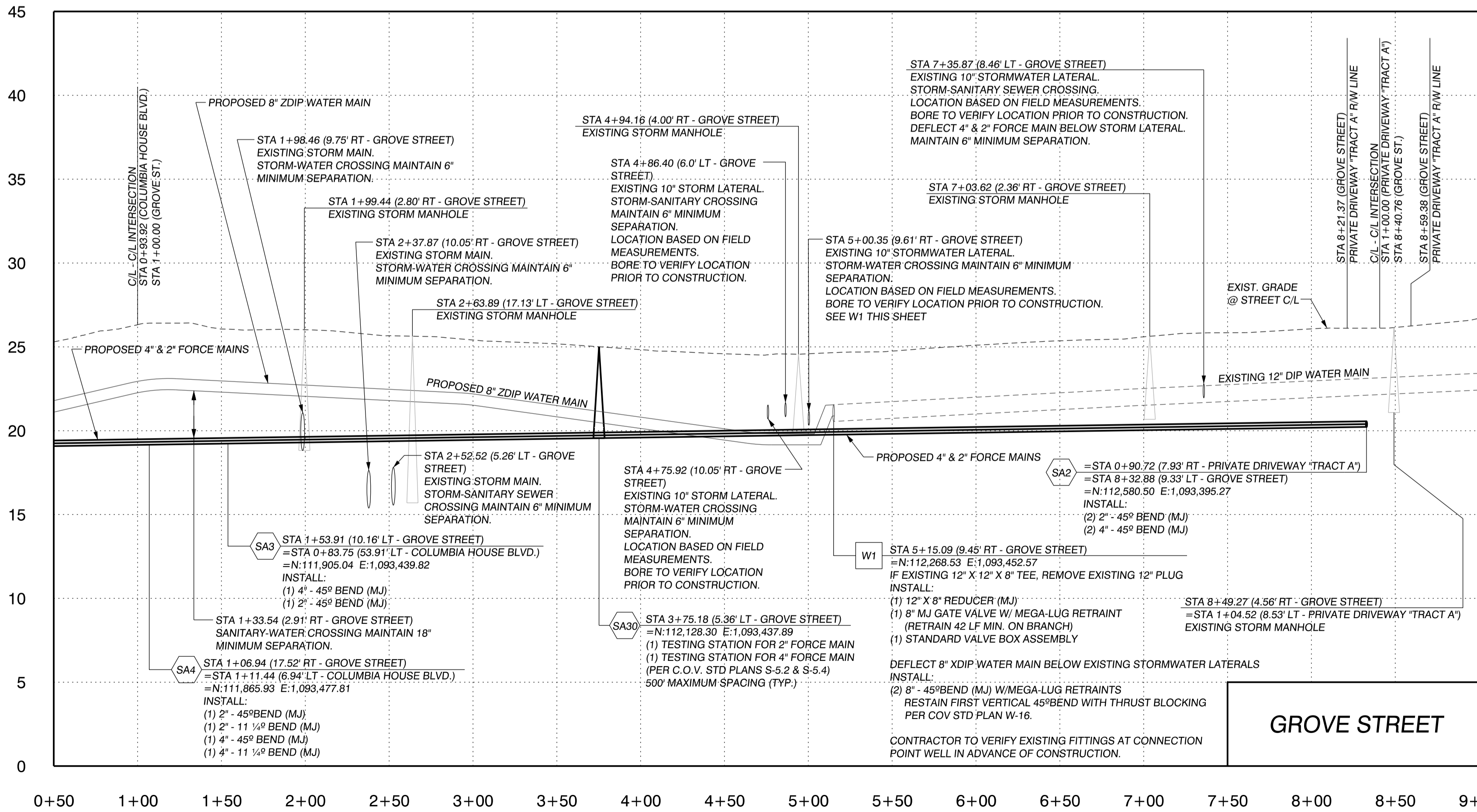
SANITARY NOTES

- 1) FOR SANITARY SEWER CONSTRUCTION NOTES SEE SHEET C1.1.
- 2) SANITARY SEWER PIPE BEDDING AND BACKFILL TO BE PER C.O.V. STD. PLANS S-1.2 & S-1.3.
- 3) ALL 4" FORCE MAIN PIPE AND GRAVITY PIPE TO BE PVC C900, AS NOTED ON THE PLAN.
- 4) ALL 2" FORCE MAIN PIPE TO BE HDPE, AS NOTED ON THE PLAN.
- 5) MINIMUM 3" COVER FOR ALL SANITARY SEWER FORCE MAINS.

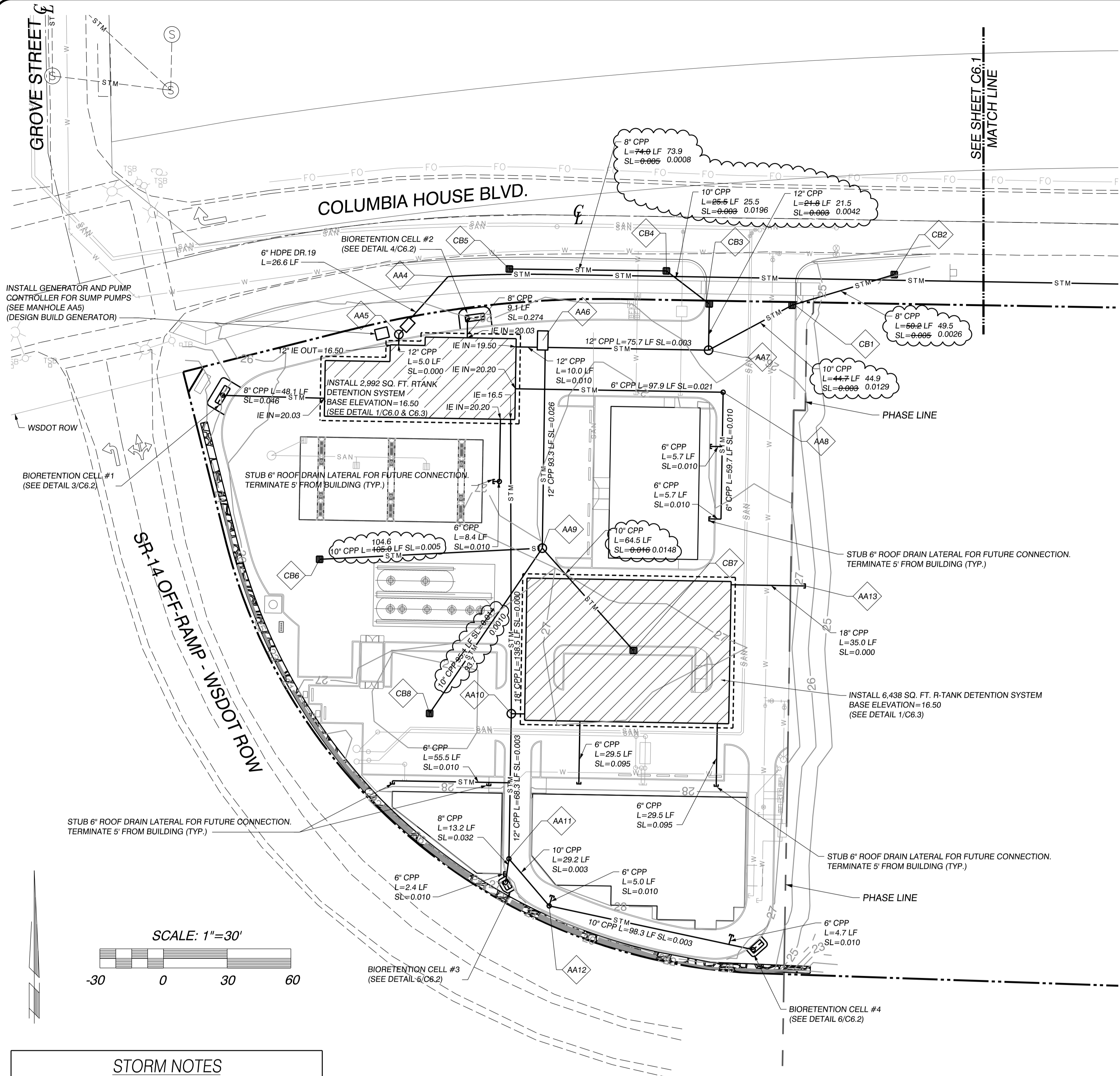
Digitally signed
by Peter A. Tuck
Date: 2021.12.30
12:10:55 -08'00'

THIS STAMP APPLIES TO THE HORIZONTAL
AND VERTICAL ASBUILT INFORMATION SHOWN
ON THIS SHEET ONLY BY FOR:

A N/A
X GRADING
X STORM SEWER
X SANITARY SEWER
X WATER
X LOCATIONS FOR WATER VALVES,
SERVICES AND FIRE HYDRANTS
CONFIRMED BY VISUAL INSPECTION



PRIVATE DRIVEWAY "TRACT A" QUAD
INVESTMENTS SHORT PLAT



STORM NOTES

- FOR STORM SEWER CONSTRUCTION NOTES SEE C.O.V. STD. PLAN D-1.0 AND SHEET C1.1.
- STORM SEWER PIPE BEDDING PER C.O.V. STD. PLAN D-3.1.
- STORM SEWER PIPE BACKFILL PER C.O.V. STD. PLAN D-3.2.
- TRENCH/PAVEMENT RESTORATION WITHIN COLUMBIA HOUSE BOULEVARD AND GROVE STREET RIGHT-OF-WAY TO BE COMPLETED IN ACCORDANCE WITH C.O.V. STANDARD PLANS T05-01B, T05-04A, T05-04B, T05-05, AND T05-07.
- MINIMUM 3' COVER FOR ALL STORMWATER MAINS.
- ALL STORMWATER FACILITIES TO BE PRIVATELY OWNED AND MAINTAINED WITH AN ACCESS AND INSPECTION EASEMENT OVER EACH LOT DEDICATED TO CITY OF VANCOUVER.
- ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR STORM SEWER FACILITIES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES' GENERAL REQUIREMENTS AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER SYSTEMS' (LATEST REVISION). CONSTRUCTION SHALL BE AS PER THE STANDARD DETAILS CONTAINED THEREIN.
- ROOF DRAINS WILL BE CONVEYED TO DETENTION SYSTEM WITHOUT PRETREATMENT.
- GENERATOR TO BE INSTALLED FOR SUMP PUMPS LOCATED WITHIN MANHOLE 'AA5' TO BE AUTOMATICALLY TURNED ON DURING A POWER OUTAGE EVENT.
- A COVENANT RUNNING WITH THE LAND SHALL BE DEDICATED TO THE CITY OF VANCOUVER REGARDING OWNERSHIP AND MAINTENANCE OF THE STORMWATER FORCE MAIN AND APPURTENANCES IN COLUMBIA HOUSE BOULEVARD.

Digitally signed
by Peter A. Tuck
Date: 2021.12.30
12:11:40 -08'00'

THIS STAMP APPLIES TO THE HORIZONTAL AND VERTICAL AS-BUILT INFORMATION SHOWN ON THIS SHEET ONLY BY _____ FOR: _____

A N/A
☒ GRADING
☒ STORM SEWER
☒ SANITARY SEWER
☒ WATER
☐ LOCATIONS FOR WATER VALVES, SERVICES AND FIRE HYDRANTS CONFIRMED BY VISUAL INSPECTION

STORM DATA

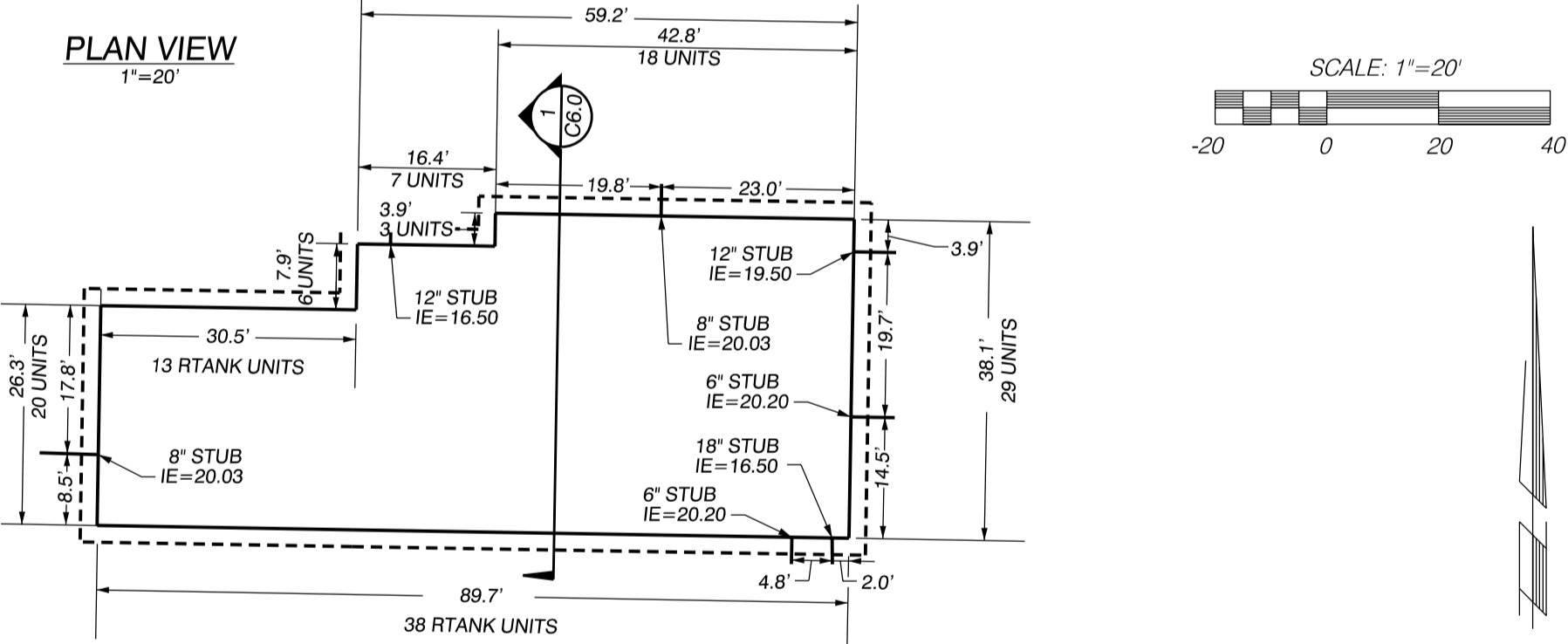
- AA4 STA 2+68.82 (28.02' RT - COLUMBIA HOUSE BLVD.)
=N: 111,858.29 E: 1,093,635.91
INSTALL:
(1) 6" - 45° BEND (M/J)
- AA5 STA 2+41.84 (53.22' RT - COLUMBIA HOUSE BLVD.)
=N: 111,831.12 E: 1,093,612.75
INSTALL:
(1) STORM SEWER MANHOLE
(2) SUMP PUMP GOULD MODEL #3SD52F8DA
1.5 HP - 6.5" IMPELLER
RIM = 24.40
12" IE IN (S) = 24.40
3" IE OUT (NE) = 23.00 NV
SUMP: 13.50
(SEE DETAIL 1/C6.4)
- (1) WATER METER BOX (48" W X 72" L X 48" D)
(MODEL = OLDCASTLE FRP 4872 OR APPROVED EQUIVALENT)
(2) 3" STRAINER
(3) SWING CHECK VALVE
(4) 3" X 6" BUSHINGS
(1) 6" 90° BEND
(1) 6" X 6" X 6" TEE
(1) 6" GATE VALVE
- AA6 N: 111,818.52 E: 1,093,768.74
INSTALL:
OLDCASTLE BIOPOD BIOFILTER UNDERGROUND VAULT
W/ INTERVAL BYPASS (MODEL #BPU-1B-48)
RIM = 26.42
12" IE IN (E) = 20.60 NOT VISIBLE
12" IE IN (S) = 20.60 NOT VISIBLE
12" IE OUT (W) = 19.73
(SEE DETAILS, SHEET C6.4) 4" PVC (N) 19.87
- AA7 N: 111,823.69 E: 1,093,758.63
INSTALL:
STORM SEWER MANHOLE
RIM = 26.70
12" IE IN (N) = 24.42
10" IE IN (NE) = 20.97
12" IE OUT (W) = 20.89
(PER C.O.V. STD PLAN D-2.0)
- AA8 N: 111,803.89 E: 1,093,765.49
INSTALL:
STORM CLEANOUT
RIM = 26.40
IE = 22.51 TOP OF ELBOW
(PER C.O.V. STD PLAN D-2.0)
- AA9 N: 111,730.49 E: 1,093,680.31
INSTALL:
STORM SEWER MANHOLE
RIM = 27.44
10" IE IN (W) = 23.15
10" IE IN (SE) = 23.17
10" IE IN (SW) = 23.17
12" IE OUT (N) = 23.14
(PER C.O.V. STD PLAN D-2.0)
- AA10 N: 111,652.60 E: 1,093,665.73
INSTALL:
STORM SEWER MANHOLE
RIM = 27.42
12" IE IN (S) = 23.24
18" IE (E) = 17.01
18" IE (N) = 17.00
(PER C.O.V. STD PLAN D-2.0)
- AA11 N: 111,584.32 E: 1,093,664.59
INSTALL:
STORM CLEANOUT
RIM = 27.44
IE = 25.56
(PER C.O.V. STD PLAN D-2.0)
- AA12 N: 111,582.16 E: 1,093,683.58
INSTALL:
STORM CLEANOUT
RIM = 27.23
IE = 23.54
(PER C.O.V. STD PLAN D-2.0)
- AA13 N: 111,712.71 E: 1,093,804.24
TERMINATE 18" STORMWATER LINE
INSTALL:
(1) 18" TEMP. PLUG (MARK FOR FUTURE CONNECTION)
RIM = 26.57
IE (W) = 16.50

CATCH BASIN DATA

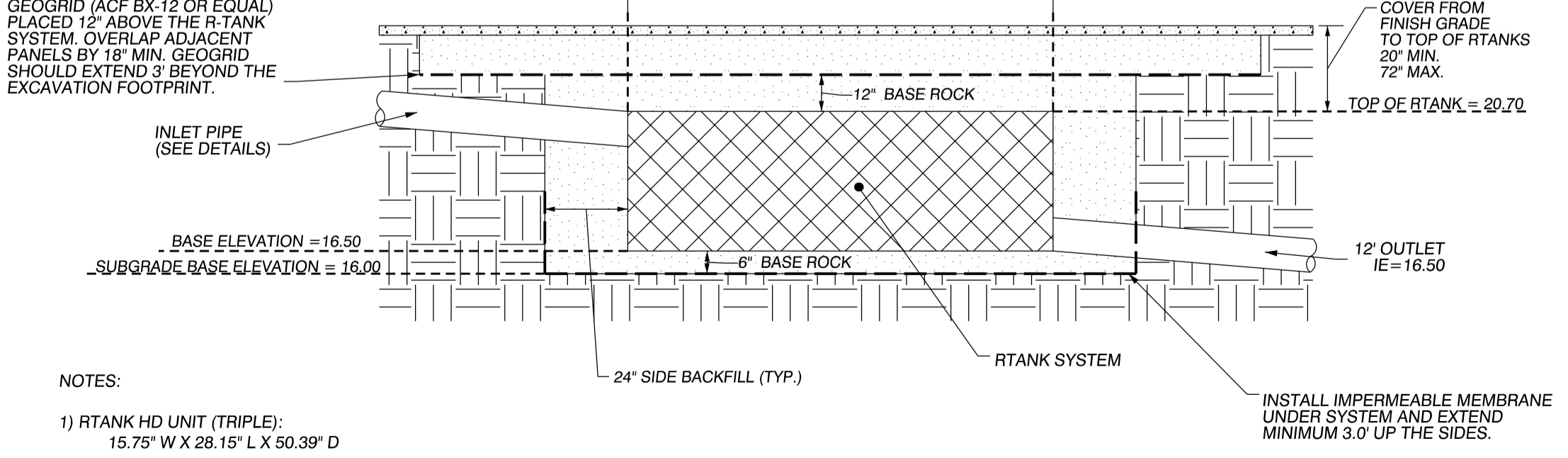
- CB1 N: 111,844.81 E: 1,093,799.50
INSTALL STANDARD CATCH BASIN
RIM = 25.44
8" IE IN (NE) = 24.67
10" IE OUT (SW) = 24.07
21.55
- CB2 N: 111,859.26 E: 1,093,846.10
INSTALL STANDARD CATCH BASIN
RIM = 24.40
IE (SW) = 24.02
21.76
- CB3 N: 111,845.54 E: 1,093,757.40
INSTALL STANDARD CATCH BASIN
RIM = 25.45
10" IE IN (NW) = 22.60
12" IE OUT (S) = 24.16
21.25
- CB4 N: 111,860.99 E: 1,093,738.79
INSTALL STANDARD CATCH BASIN
RIM = 25.44
8" IE IN (W) = 22.04
10" IE OUT (SE) = 22.01
23.01
- CB5 N: 111,861.89 E: 1,093,664.81
INSTALL STANDARD CATCH BASIN
RIM = 25.34
IE = 25.39
23.16
- CB6 N: 111,725.26 E: 1,093,575.44
INSTALL STANDARD CATCH BASIN
RIM = 26.04
IE = 26.70
23.68
- CB7 N: 111,682.35 E: 1,093,723.25
INSTALL STANDARD CATCH BASIN
RIM = 26.60
IE = 24.16
24.13
- CB8 N: 111,652.73 E: 1,093,627.24
INSTALL STANDARD CATCH BASIN
RIM = 26.60
IE = 24.16
24.11

STANDARD CATCH BASINS PER C.O.V. STD. PLAN D-1.0
*NORTHING AND EASTING AT C/L EDGE OF GRATE @ FACE OF CURB

PLAN VIEW



SECTION VIEW



- NOTES:
- RTANK HD UNIT (TRIPLE):
15.75" W X 28.15" L X 50.39" D
 - SEE RTANK DETAILS ON SHEET C6.3

RTANK DETENTION SYSTEM

1
C6.0

EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75717

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevanyi@gmail.com

AS-BUILT
STORM PLAN FOR:
DELTA PLAZA PHASE 1
LAND SURVEYORS
ENGINEERS
ENGINEERING INC. 222 E. EVERGREEN, VANCOUVER, WA 98660
360.696.4448
360.290.4490
Years



E SIGNED BY
PETER A. TUCK
06/17/2020

CHANGES / REVISIONS	
DESCRIPTION:	DATE:
FUEL ISLAND UPDATES	01/06/2021
STORM UPDATES	05/27/2021

DESIGNED: JRS
DRAWN: JRS
CHECKED: PAT
DATE: APRIL 2019
SCALE: H: 1"=30'
V: 1"
DELTA PLAZA PHASE 1
JOB NO.: 9787.01.01

SHEET

C6.0

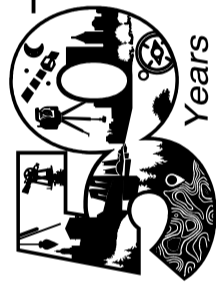
EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

AS-BUILT

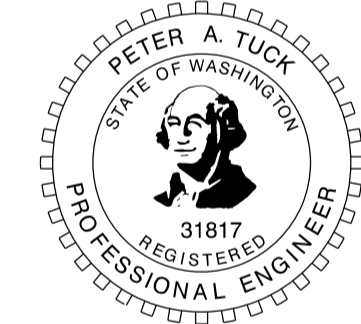
DELTA PLAZA PHASE 1

LAND SURVEYORS
ENGINEERS



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OFFSITE STORM PLAN FOR:



E SIGNED BY
PETER A. TUCK
03/13/2020

CHANGES / REVISIONS

DESCRIPTION: DATE:

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: 1"=50'

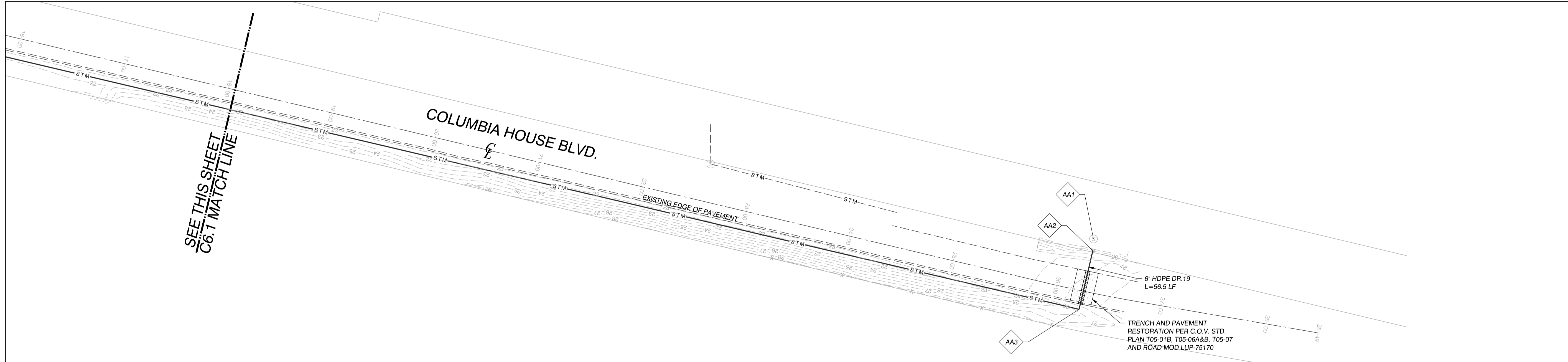
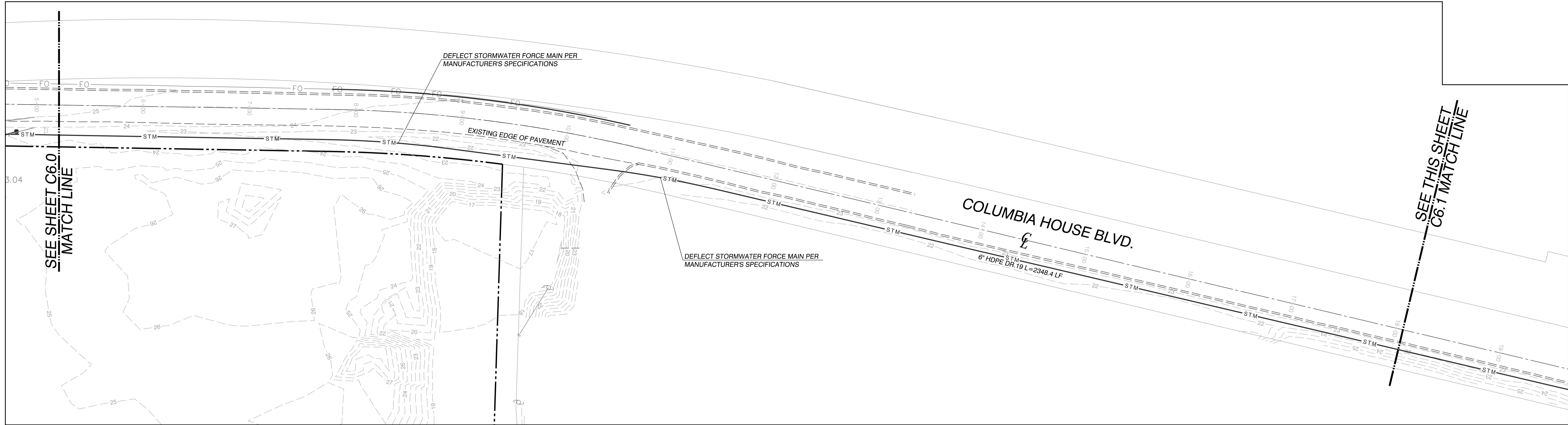
V:

DELTA PLAZA PHASE 1

JOB NO.: 9787.01.01

SHEET

C6.1



STORM NOTES

- FOR STORM SEWER CONSTRUCTION NOTES SEE C.O.V. STD. PLAN D-1.0 AND SHEET C1.1.
- STORM SEWER PIPE BEDDING PER C.O.V. STD. PLAN D-3.1.
- STORM SEWER PIPE BACKFILL PER C.O.V. STD. PLAN D-3.2.
- TRENCH/PAVEMENT RESTORATION WITHIN COLUMBIA HOUSE BOULEVARD AND GROVE STREET RIGHT-OF-WAY TO BE COMPLETED IN ACCORDANCE WITH C.O.V. STANDARD PLANS T05-01B, T05-04A, T05-04B, T05-05, AND T05-07
- MINIMUM 3' COVER FOR ALL STORMWATER MAINS.
- A COVENANT RUNNING WITH THE LAND SHALL BE DEDICATED TO THE CITY OF VANCOUVER REGARDING OWNERSHIP AND MAINTENANCE OF THE STORMWATER FORCE MAIN AND APPURTENANCES IN COLUMBIA HOUSE BOULEVARD.
- ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR STORM SEWER FACILITIES SHALL CONFORM TO CITY OF VANCOUVER ENGINEERING SERVICES 'GENERAL REQUIREMENTS AND CONSTRUCTION OF WATER, SANITARY SEWER, AND SURFACE WATER SYSTEMS' (LATEST REVISION). CONSTRUCTION SHALL BE AS PER THE STANDARD DETAILS CONTAINED THEREIN.

STORM DATA

- AA1 STA 26+24.45 (49.92' LT - COLUMBIA HOUSE BLVD.)
=N:111,533.25 E:1,095,955.19
EXISTING STORMWATER MH
RIM=28.84
36" IE IN (E)=23.44 (EXIST.)
INLET RISER=28.94 (EXIST.)
18" IE OUT (W)=23.0 (EXIST.)
18" IE OUT (S)=24.5 (EXIST.)
EXISTING DATA PER MACKENZIE QUAD BUILDING 1 PLANS (SHEET C2.3C)
- AA2 STA 26+26.18 (39.00' LT - COLUMBIA HOUSE BLVD.)
=N:111,522.23 E:1,095,954.58
CONNECT 6" STORM MAIN TO EXISTING STORMWATER MH
RIM=27.71
6" IE IN (SW)=23.0 (PROPOSED)
36" IE OUT (S)=18.5 (EXIST.)
18" IE IN (N)=20.0 (EXIST.)
- AA3 STA 26+24.87 (17.52' RT - COLUMBIA HOUSE BLVD.)
=N:111,467.18 E:1,095,941.65
INSTALL:
(1) 6" - 90° BEND (MJ)

Digitally signed
by Peter A. Tuck
Date: 2021.12.30
12:12:24 -08'00'

THIS STAMP APPLIES TO THE HORIZONTAL
AND VERTICAL AS-BUILT INFORMATION SHOWN
ON THIS SHEET ONLY BY [Signature] FOR:

A: N/A
☒ GRADING
☒ STORM SEWER
☒ SANITARY SEWER
☒ WATER
☐ LOCATIONS FOR WATER VALVES,
SERVICES AND FIRE HYDRANTS
CONFIRMED BY VISUAL INSPECTION

SCALE: 1"=50'

-50 0 50 100

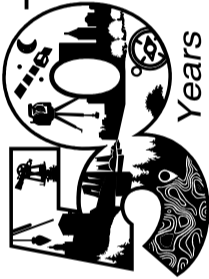
EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

AS-BUILT

DELTA PLAZA PHASE 1

LAND SURVEYORS
OLSON ENGINEERS
ENGINEERING INC. 222 E. EVERGREEN, VANCOUVER, WA 98660
360.696.4306
360.290.4890



STORM DETAILS FOR:



E SIGNED BY
PETER A. TUCK
06/17/2020

CHANGES / REVISIONS

DESCRIPTION: DATE:

FUEL ISLAND UPDATES 01/06/2021

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: 1"=10'

V:

DELTA PLAZA PHASE 1

JOB NO.: 9787.01.01

SHEET

C6.2

Digitally signed
by Peter Tuck
Date: 2021.12.30
12:13:05 -08'00'

THIS STAMP APPLIES TO THE HORIZONTAL
AND VERTICAL ASBUILT INFORMATION SHOWN
ON THIS SHEET ONLY BY FOR:

- A N/A
- ☐ GRADING
☒ STORM SEWER
☒ SANITARY SEWER
☐ WATER
- ☐ LOCATIONS FOR WATER VALVES,
SERVICES AND FIRE HYDRANTS
CONFIRMED BY VISUAL INSPECTION

BIORETENTION CELL SOIL MIX NOTES:

1) GENERAL GUIDELINE FOR BIORETENTION CELL SOIL MIX GRADATION

SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95-100
#10	75-90
#40	25-40
#100	4-10
#200	2-5

2) BIORETENTION CELL SOIL MIX SHALL CONTAIN 40% COMPOST BY VOLUME. COMPOST SHOULD EITHER BE PRODUCED BY A WASHINGTON STATE PERMITTED COMPOSTING FACILITY UNDER WAC 173-350.220 OR AT LEAST MEET THE PATHOGEN AND CONTAMINANT STANDARDS IN THE WAC.

3) COMPOST USED SHOULD BE STABLE, MATURE AND DERIVED FROM ORGANIC WASTE MATERIALS INCLUDING YARD DEBRIS, WOOD WASTES OR OTHER ORGANIC MATERIALS THAT MEET THE INTENT OF THE ORGANIC SOIL AMENDMENT SPECIFICATION. BIOSOLIDS AND MANURE COMPOSTS CAN BE HIGHER IN BIO-AVAILABLE PHOSPHORUS THAN COMPOST DERIVED FROM YARD OR PLANT WASTE AND THEREFORE ARE NOT ALLOWED IN RAINGARDEN AREAS DUE TO THE POSSIBILITY OF EXPORTING BIO-AVAILABLE PHOSPHORUS IN EFFLUENT.

4) REFER TO LANDSCAPE PLAN FOR PLANTING DETAILS.

5) BIORETENTION CELL SOIL MIX CAN BE PROVIDED BY DAN JONES, INC. CONVEYOR TRUCKS (danjonesconveyor.com; 360-834-1282) OR ANY SUPPLIER WHO CAN PROVIDE AN APPROVED BIORETENTION CELL SOIL MIX.

BIORETENTION CELL #2 POINTS TABLE

BASE AREA MINIMUM = 9.0' L X 3.0' W = 27.0 SF

POINT	NORTHING	EASTING	ELEV. (FG)	8" PERF PIPE IE
B1	111,835.47	1,093,656.58	26.10	-
B2	111,833.63	1,093,641.69	26.10	-
B3	111,837.02	1,093,644.30	25.04	-
B4	111,840.00	1,093,643.94	25.04	-
B5	111,841.12	1,093,652.87	25.04	-
B6	111,839.64	1,093,653.05	-	22.53
B7	111,838.15	1,093,653.23	25.04	-

NOTES:

- REFER TO PLANTING SOIL MIX NOTES ON SHEET C6.2 FOR BIORETENTION SOIL SPECIFICATIONS.
- REFER TO LANDSCAPE PLANS FOR BIORETENTION CELL PLANTING REQUIREMENTS.
- SEE COV STD PLAN B-3.2 FOR BIORETENTION CELL TYPICAL CROSS-SECTION.
- INSTALL SEPARATION GEOTEXTILE BETWEEN UNDERDRAIN AGGREGATE AND AMENDED SOILS.

BIORETENTION CELL #2

C6.2

BIORETENTION CELL #1 POINTS TABLE

BASE AREA MINIMUM = 9.0' L X 3.0' W = 27.0 SF

POINT	NORTHING	EASTING	ELEV. (FG)	8" PERF PIPE IE
A1	111,793.27	1,093,530.53	26.00	-
A2	111,797.87	1,093,528.70	24.70	-
A3	111,798.65	1,093,527.41	-	22.22
A4	111,799.42	1,093,526.13	24.70	-
A5	111,807.13	1,093,530.77	24.70	-
A6	111,806.36	1,093,532.05	-	22.22
A7	111,805.58	1,093,533.34	24.70	-
A8	111,806.13	1,093,538.26	26.00	-

NOTES:

- REFER TO PLANTING SOIL MIX NOTES ON SHEET C6.2 FOR BIORETENTION SOIL SPECIFICATIONS.
- REFER TO LANDSCAPE PLANS FOR BIORETENTION CELL PLANTING REQUIREMENTS.
- SEE COV STD PLAN B-3.2 FOR BIORETENTION CELL TYPICAL CROSS-SECTION.
- INSTALL SEPARATION GEOTEXTILE BETWEEN UNDERDRAIN AGGREGATE AND AMENDED SOILS.

BIORETENTION CELL #1

C6.2

BIORETENTION CELL #4 POINTS TABLE

BASE AREA MINIMUM = 6.5' L X 3.0' W = 19.5 SF

POINT	NORTHING	EASTING	ELEV. (FG)	8" PERF PIPE IE
D1	111,541.30	1,093,776.57	26.97	-
D2	111,542.05	1,093,777.92	26.43	-
D3	111,546.35	1,093,782.79	26.43	-
D4	111,547.72	1,093,783.58	26.96	-
D5	111,545.23	1,093,783.78	-	23.84
D6	111,544.10	1,093,784.77	26.43	-
D7	111,539.80	1,093,779.90	26.43	-

NOTES:

- REFER TO PLANTING SOIL MIX NOTES ON SHEET C6.2 FOR BIORETENTION SOIL SPECIFICATIONS.
- REFER TO LANDSCAPE PLANS FOR BIORETENTION CELL PLANTING REQUIREMENTS.
- SEE BIORETENTION CELL TYPICAL CROSS-SECTION DETAIL 2, SHEET C6.2.

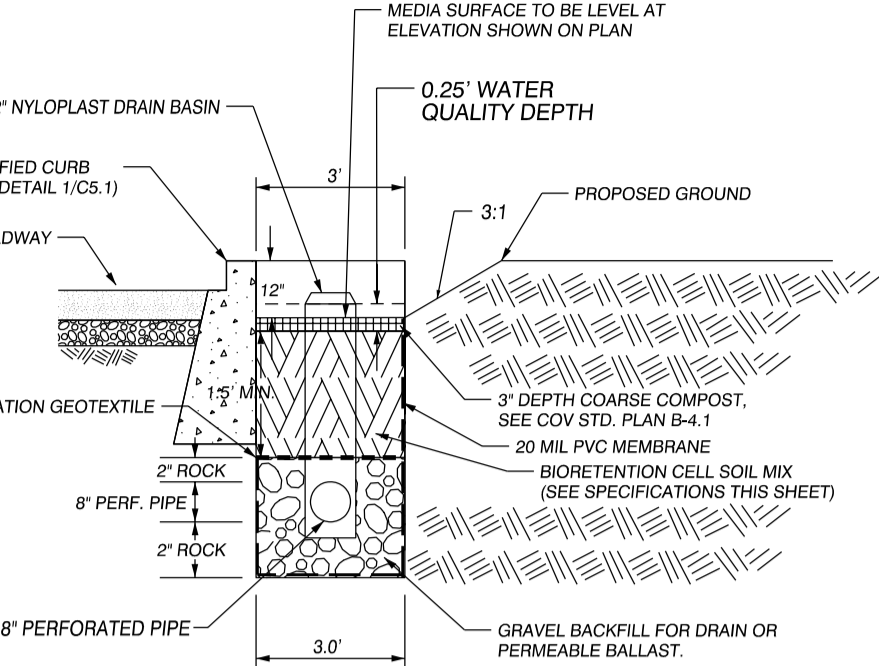
BIORETENTION CELL #4

C6.2

ELEVATION AND PAVING LEGEND

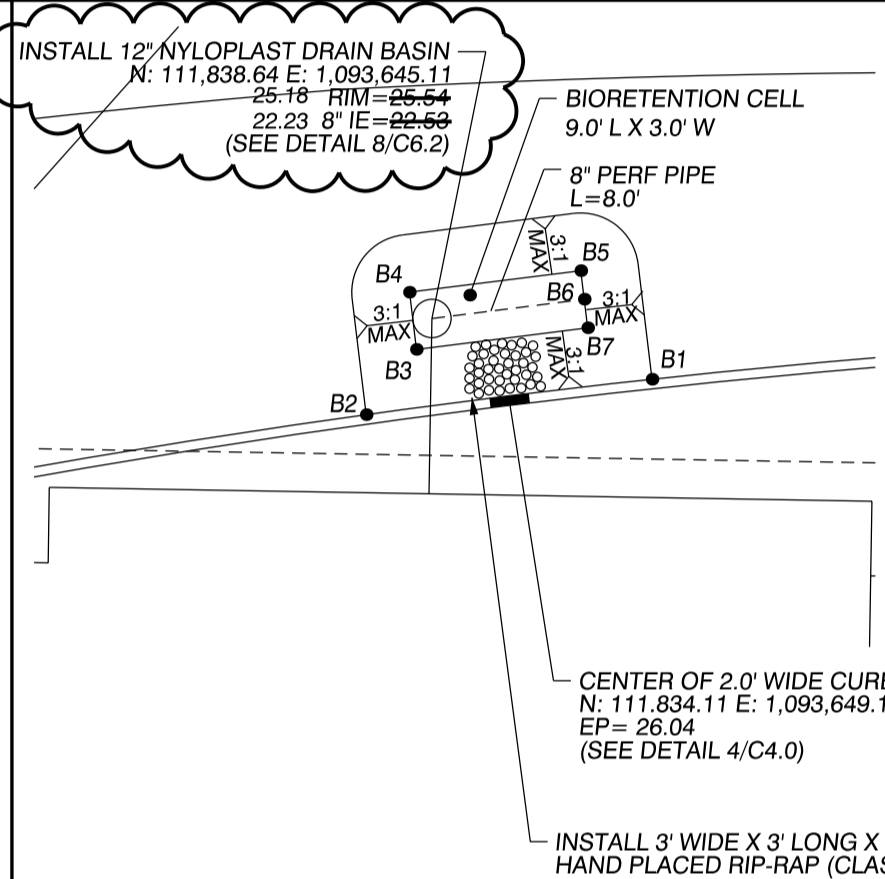
T/C-----TOP OF CURB ELEVATION
EP-----EDGE OF PAVEMENT ELEVATION
FS-----FINISHED SURFACE ELEVATION
FG-----FINISHED GRADE ELEVATION

NOTE:
EDGE OF PAVEMENT (EP) ELEVATION IS 0.5' BELOW TOP OF CURB (TC) ELEVATION UNLESS NOTED OTHERWISE.



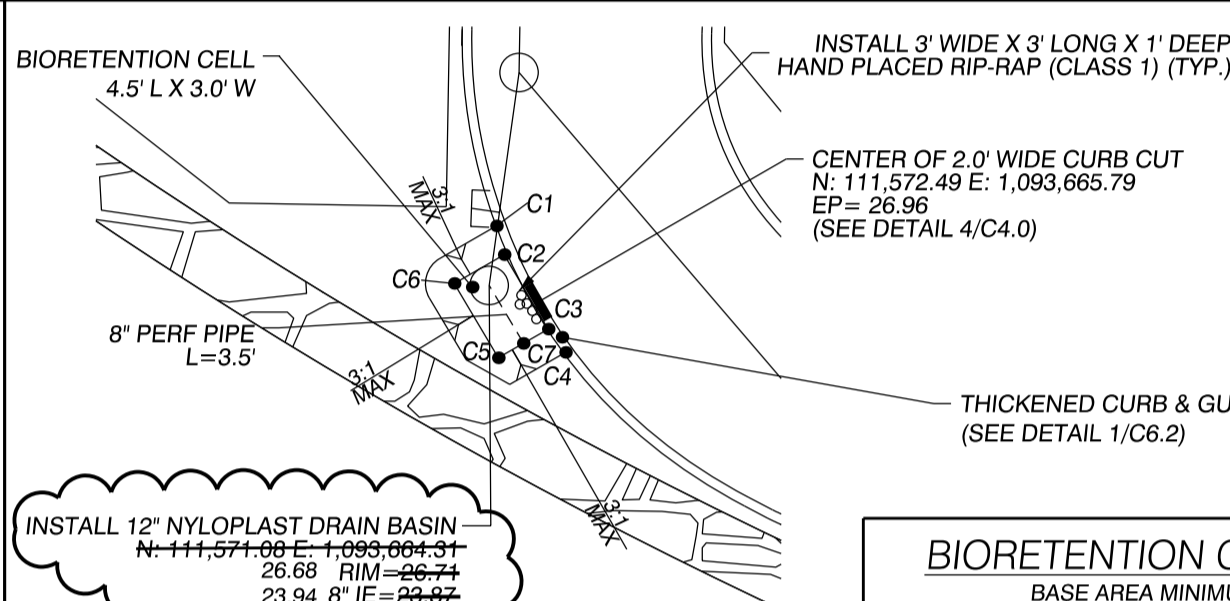
BIORETENTION CELL CROSS SECTION

C6.2



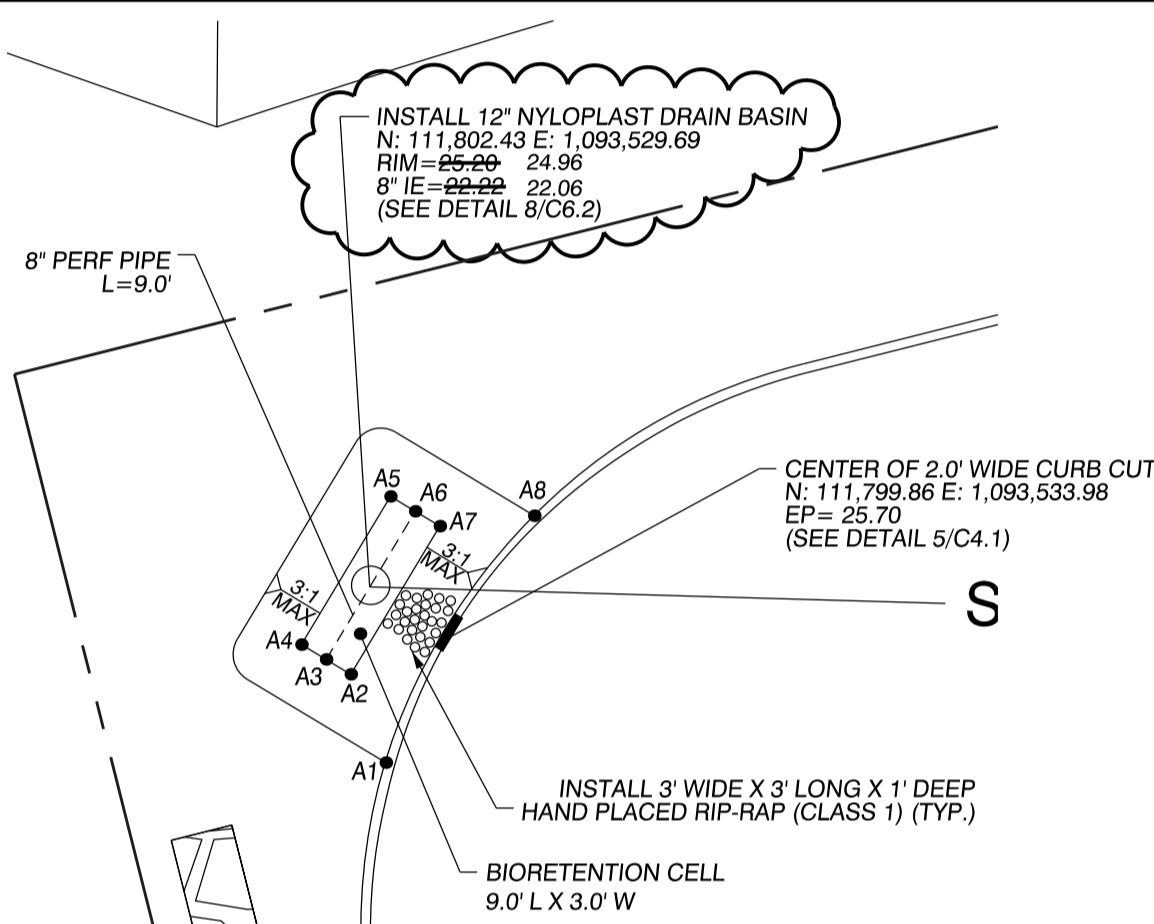
BIORETENTION CELL #2

C6.2



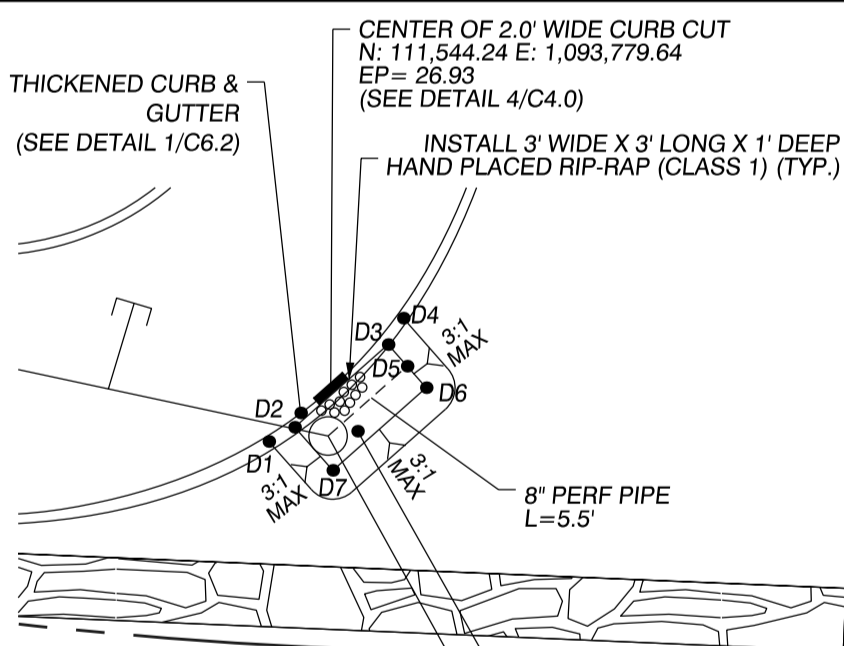
BIORETENTION CELL #3

C6.2



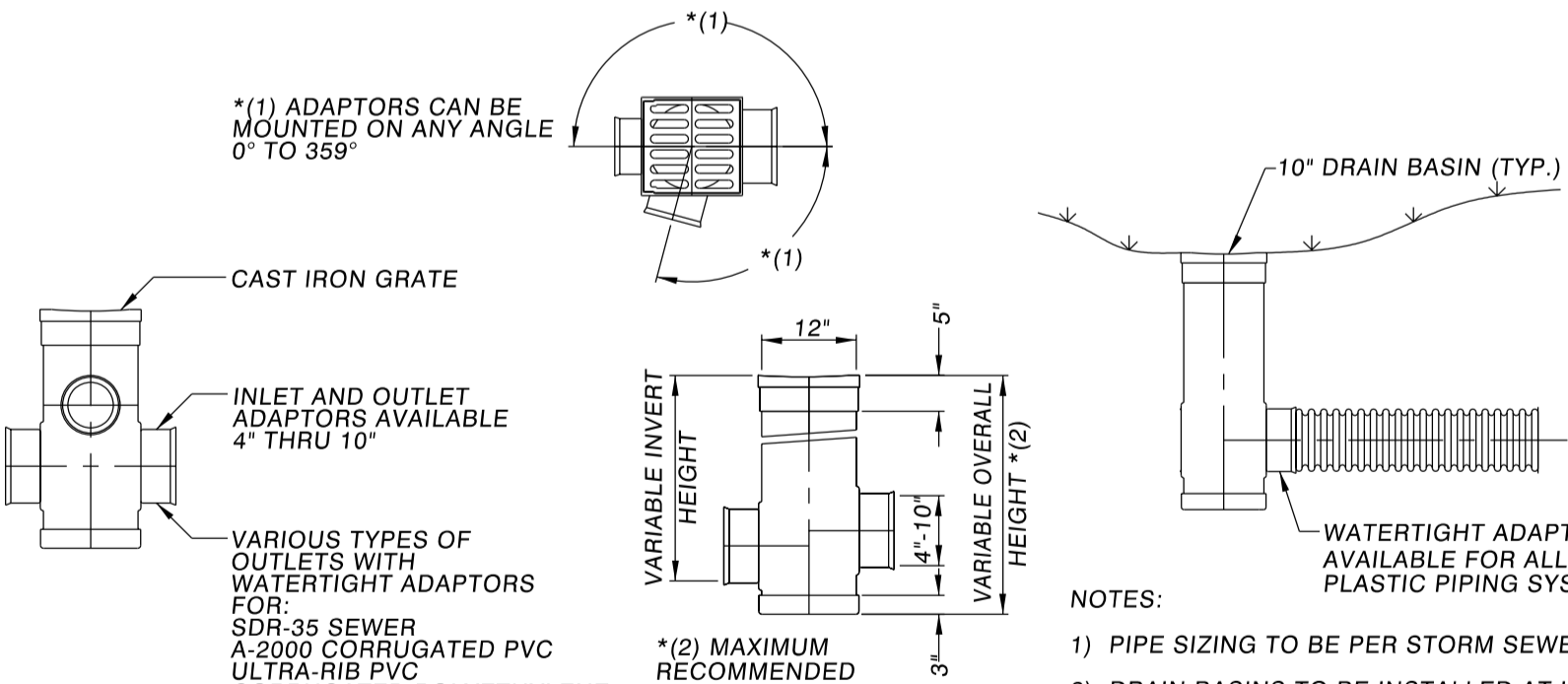
BIORETENTION CELL #1

C6.2



BIORETENTION CELL #4

C6.2

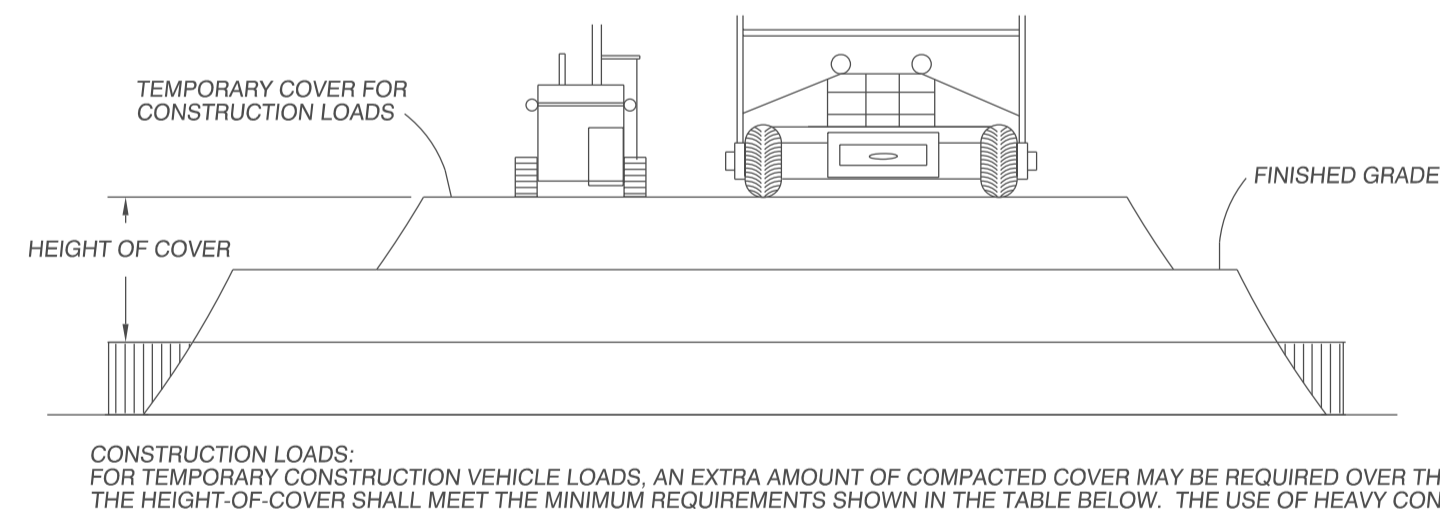


12" DRAIN BASIN

TYPICAL INSTALLATION OF NYLOPLAST DRAIN BASIN

NYLOPLAST AREA DRAIN DRAIN DETAILS

C6.2



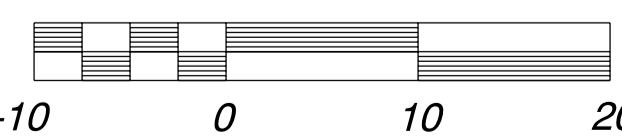
PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
MINIMUM COVER (FT)				
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DETAIL

C6.2

SCALE: 1"=10'



EPLAN APPROVAL FOR
CONSTRUCTION BY CITY OF
VANCOUVER ON 10/20/20
ENG-75171

CLIENT:
DELTA MANAGEMENT COMPANY
203 E RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIRA KEVYANI
EMAIL: kkevyani@gmail.com

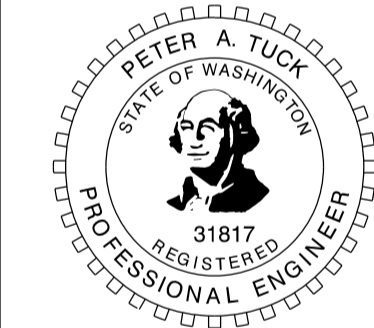
AS-BUILT

DELTA PLAZA PHASE 1

LAND SURVEYORS
ENGINEERS



STORM DETAILS FOR:



E SIGNED BY
PETER A. TUCK
06/17/2020

CHANGES / REVISIONS

DESCRIPTION: DATE:
STORM UPDATES 05/27/2021

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: N.T.S.

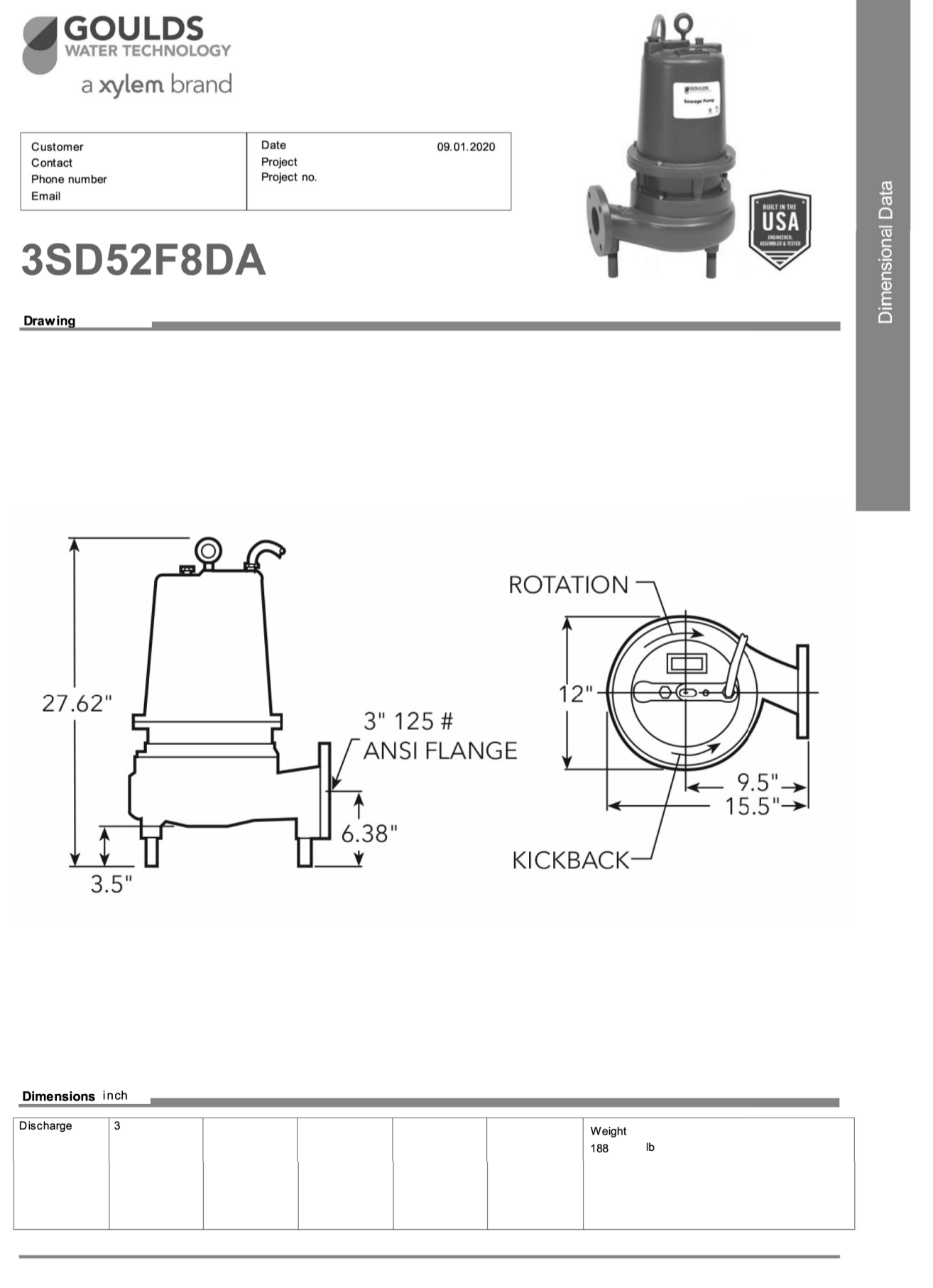
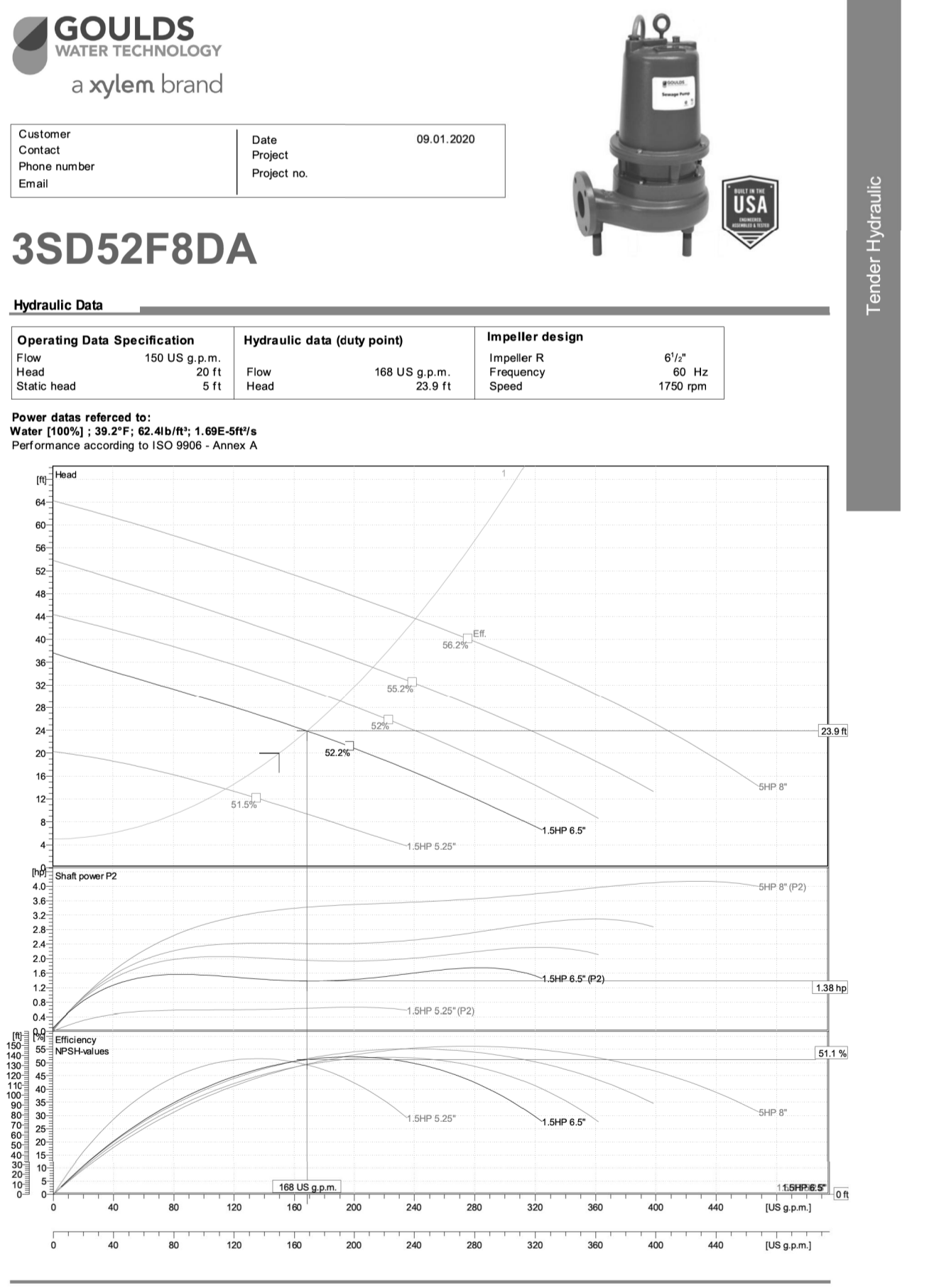
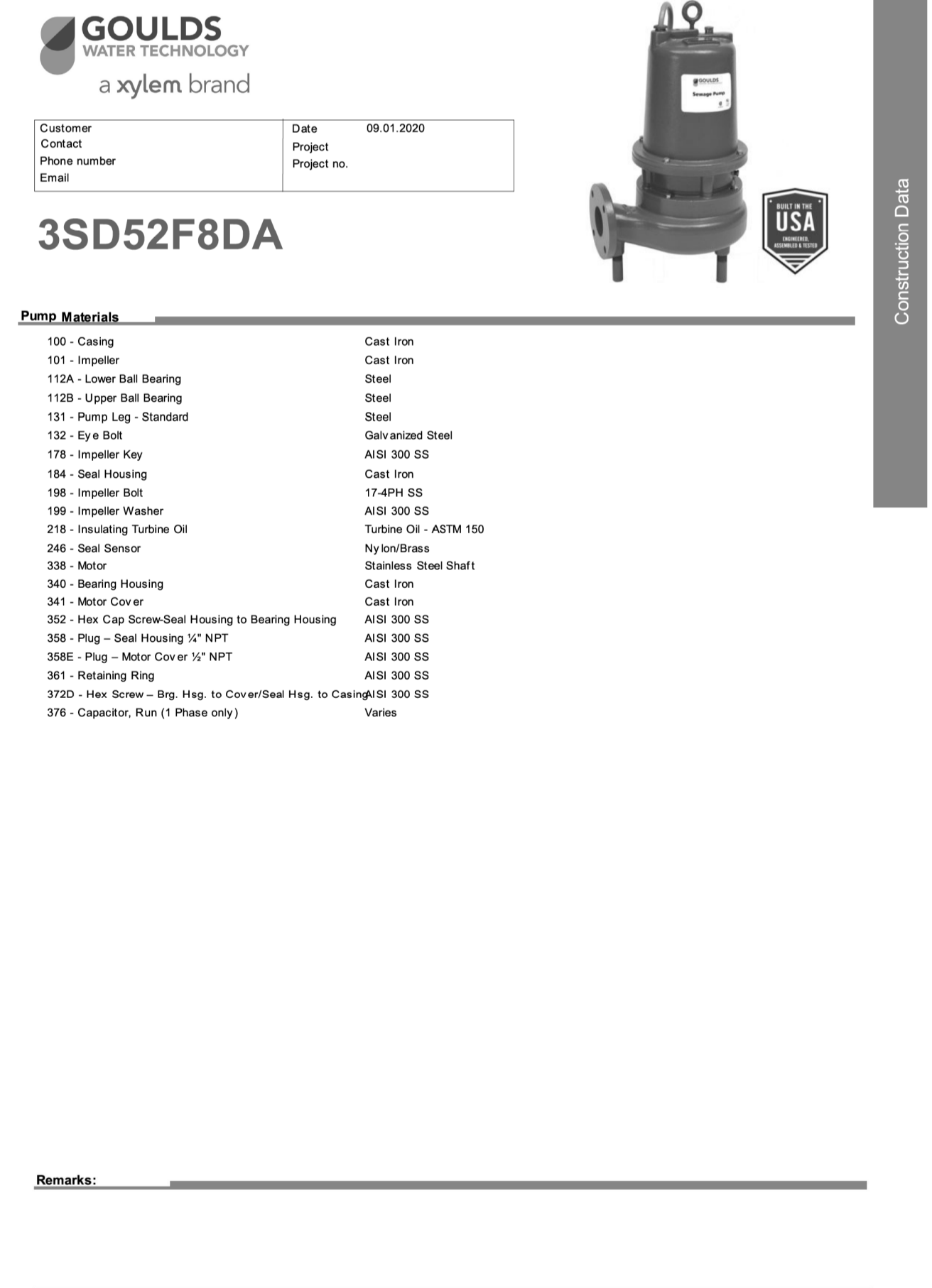
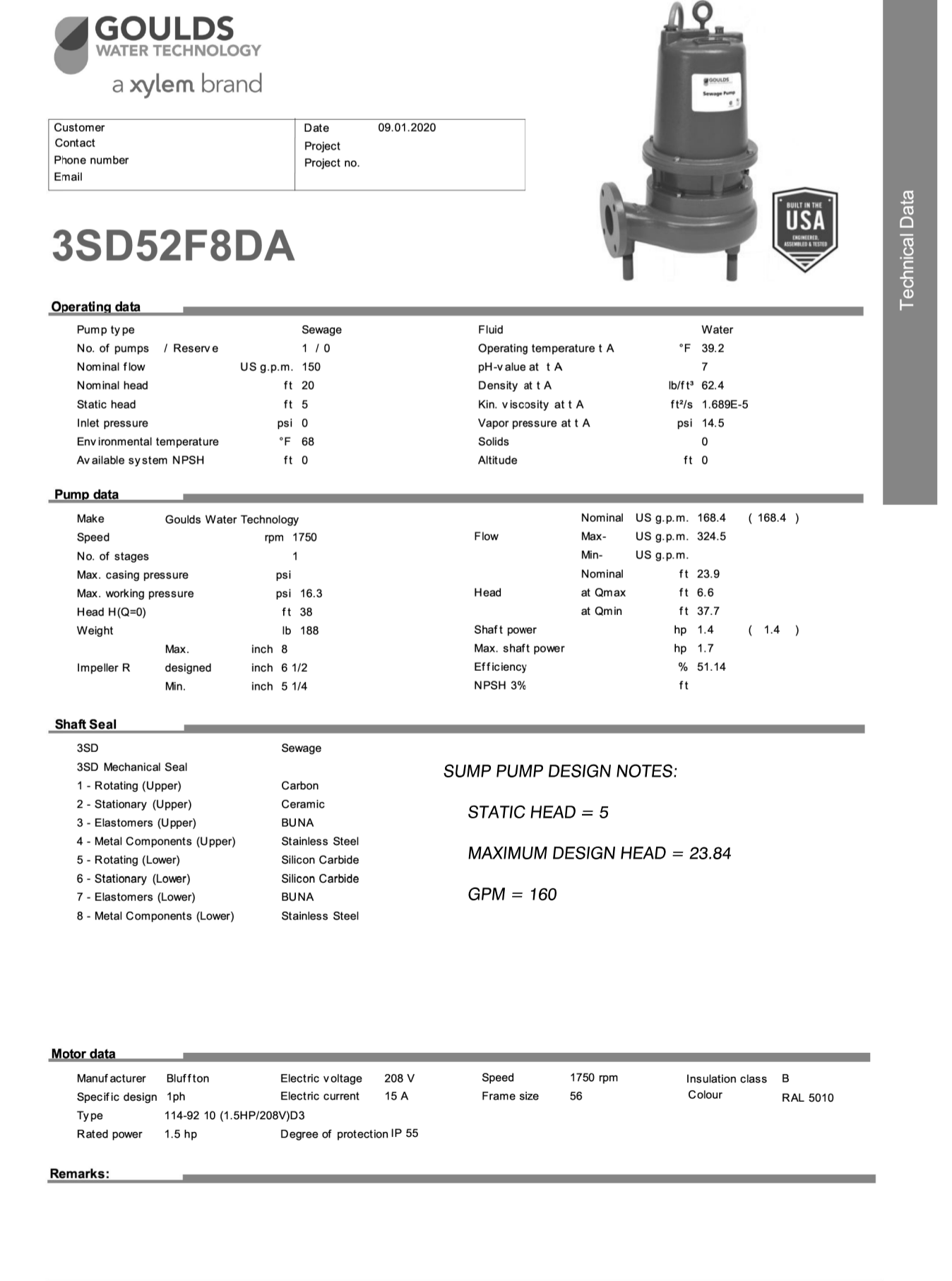
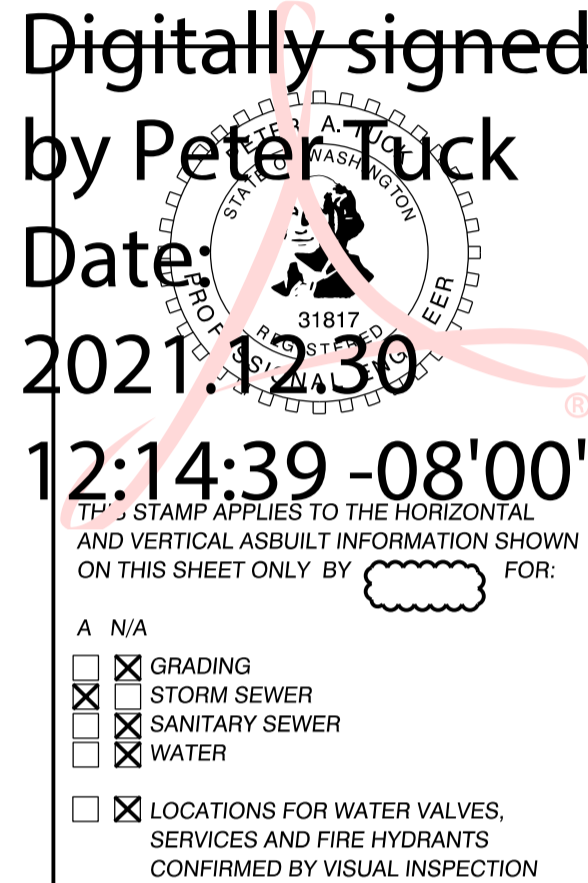
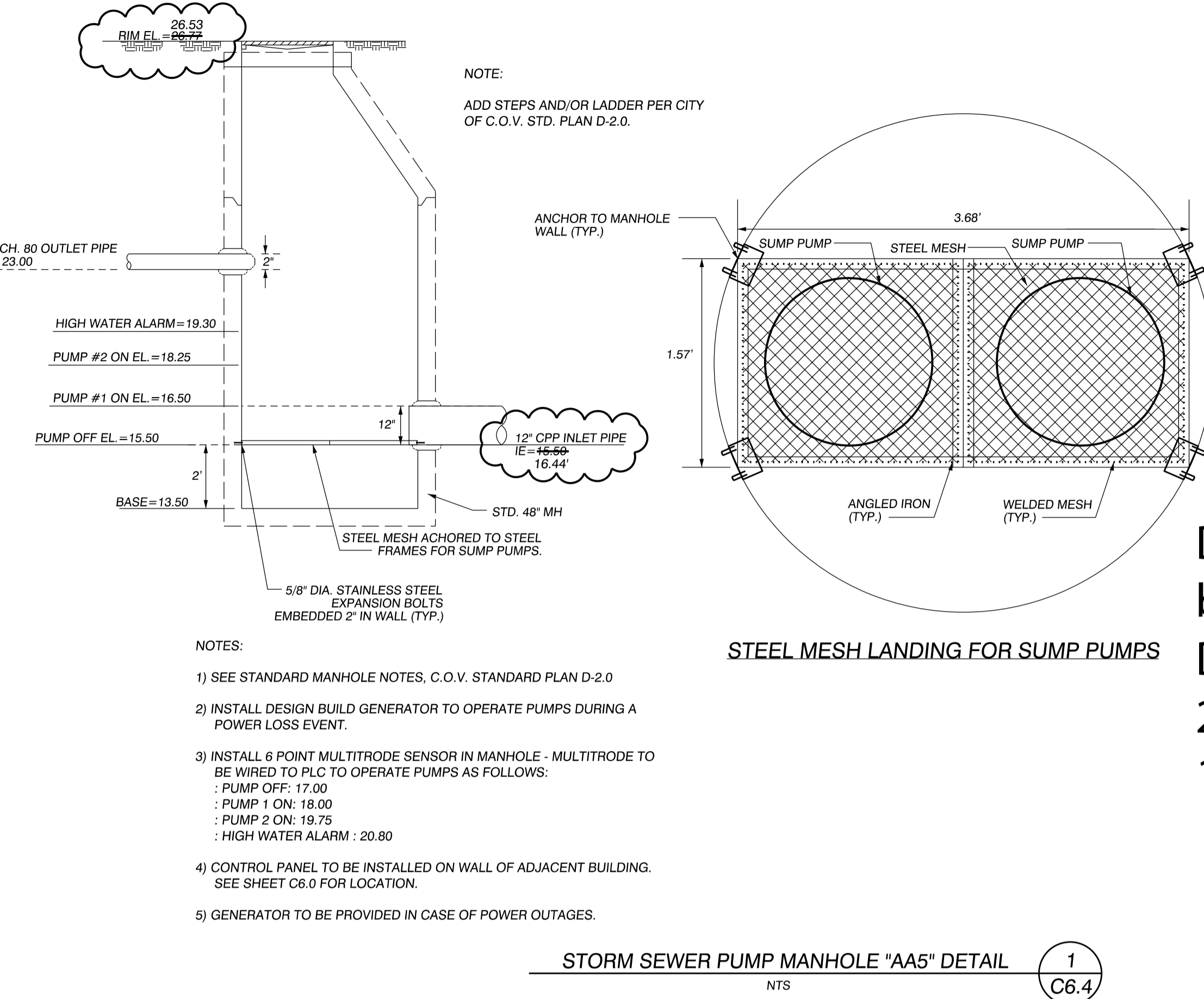
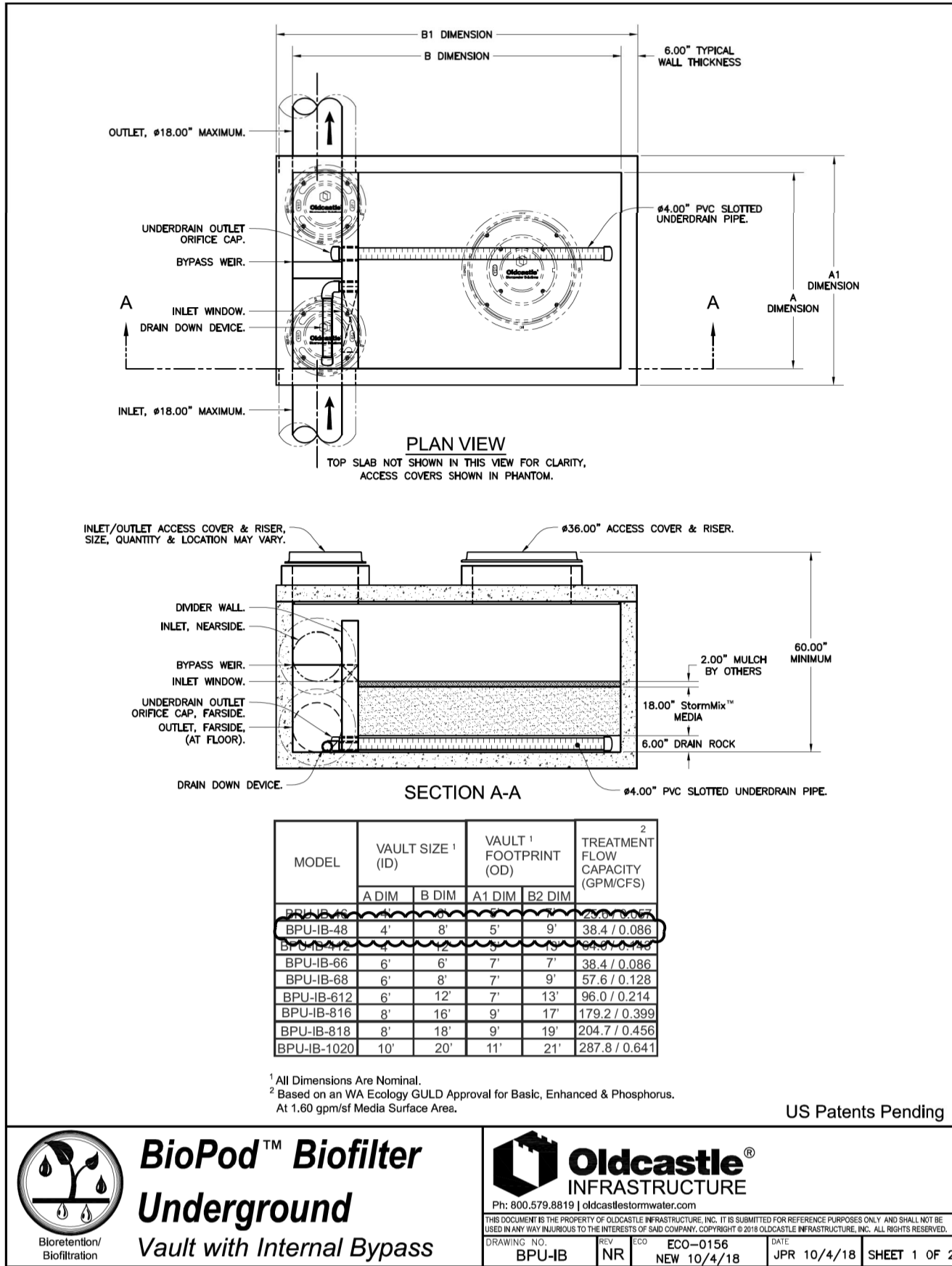
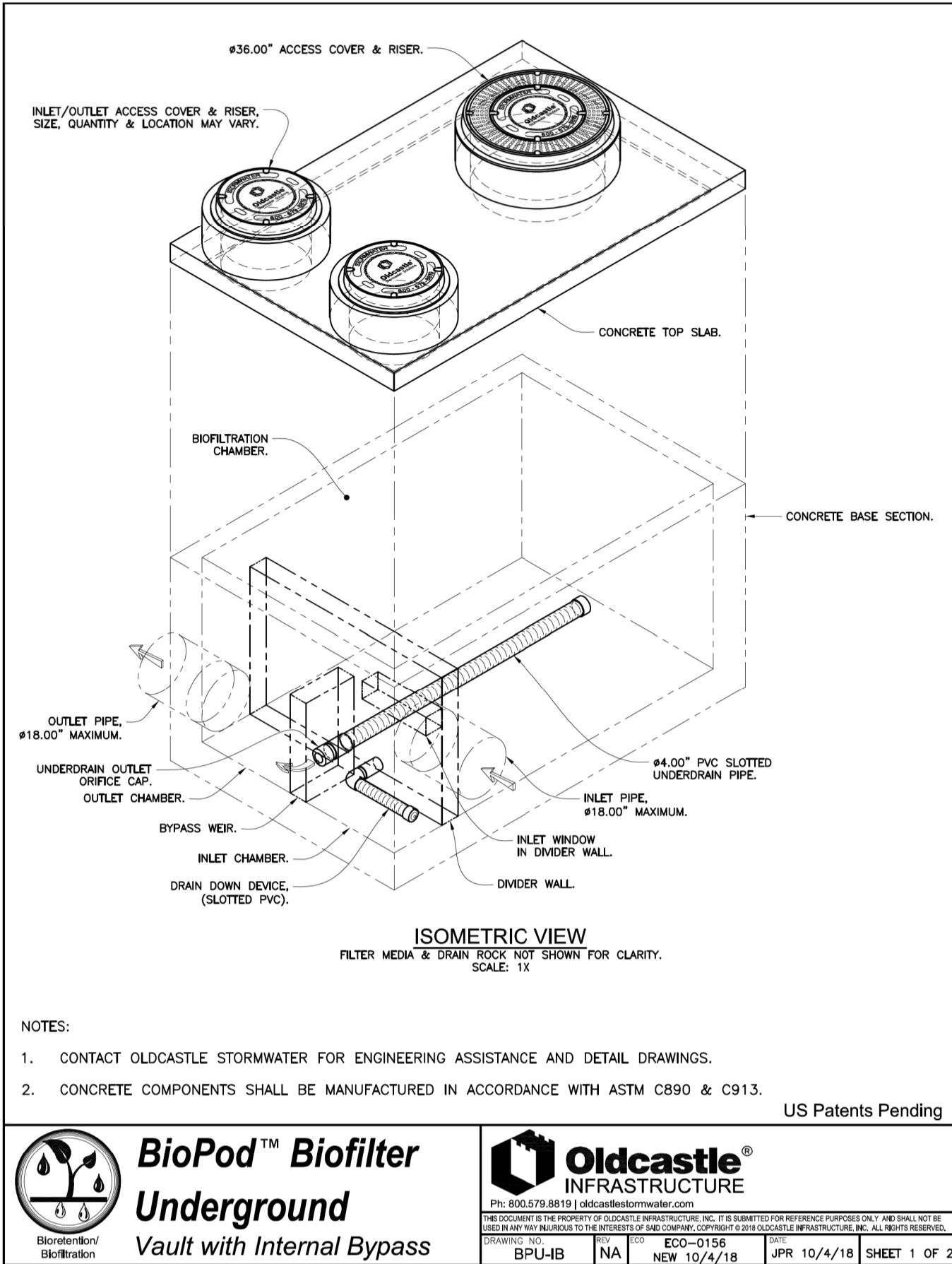
V:

DELTA PLAZA PHASE 1

JOB NO.: 9787.01.01

SHEET

C6.4



CITY OF VANCOUVER
THESE PLANS HAVE BEEN REVIEWED FOR COMPLIANCE WITH CITY CODES, ORDINANCES AND POLICIES AND ARE
APPROVED
THE APPROVAL OF THESE PLANS BY THE CITY OF VANCOUVER DOES NOT AUTHORIZE ANY NONCOMPLIANCE WITH LOCAL ORDINANCE, CODE OR STATE LAW.
THESE PLANS SHALL BE AVAILABLE FOR ALL REQUESTED INSPECTIONS.
ENG-75171
10/20/20

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEYVANI
EMAIL: kkeyvani@gmail.com

RETAINING WALL PLAN FOR:
DELTA PLAZA PHASE 1



Digitally signed
by Peter Tuck
Date: 2020.06.17
11:03:11 -07'00'

CHANGES / REVISIONS
DESCRIPTION: DATE:

RECORD DRAWING

DESIGNED: JRS

DRAWN: JRS

CHECKED: PAT

DATE: APRIL 2019

SCALE: H: 1"=30'
V: 1"=3'

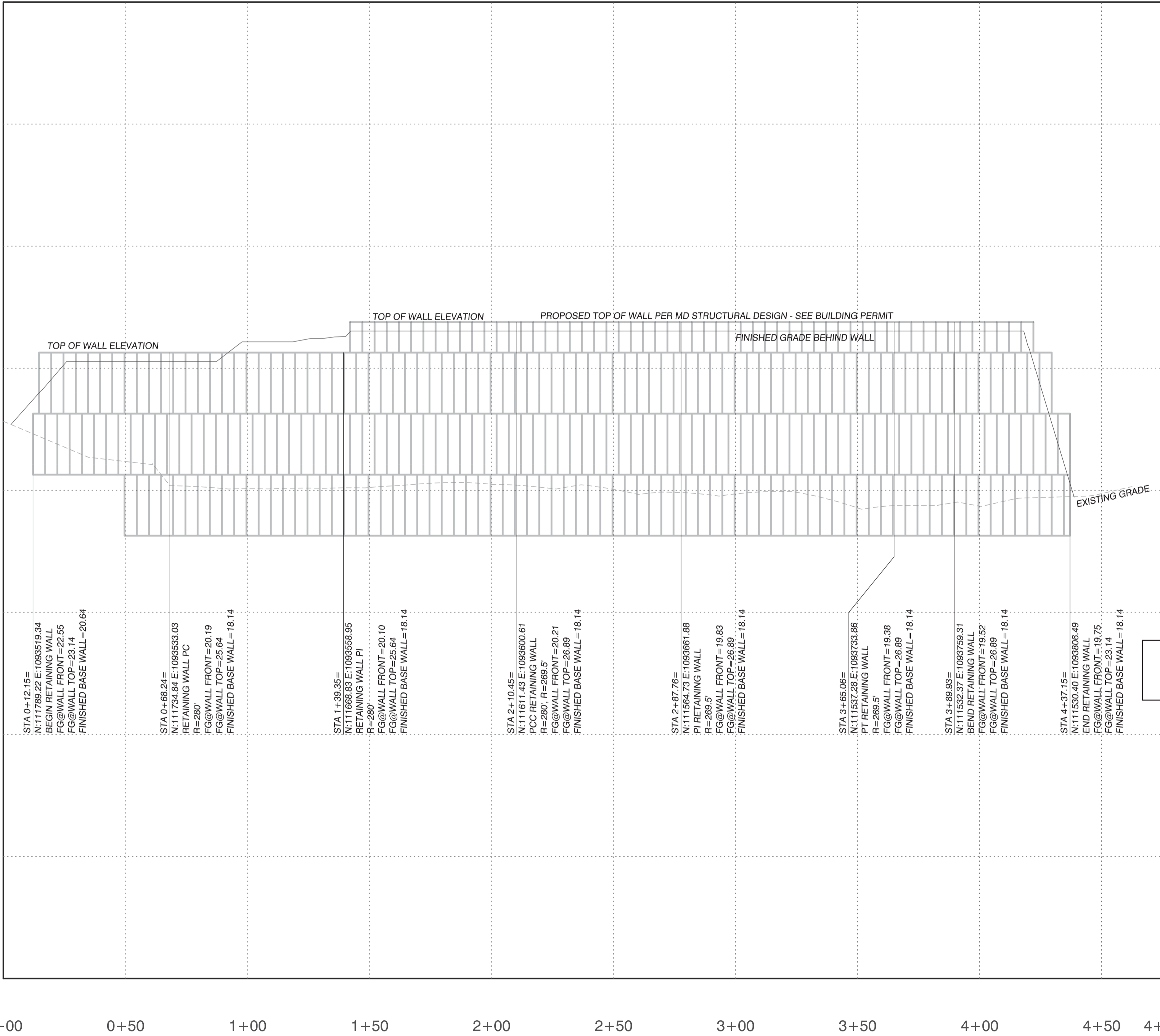
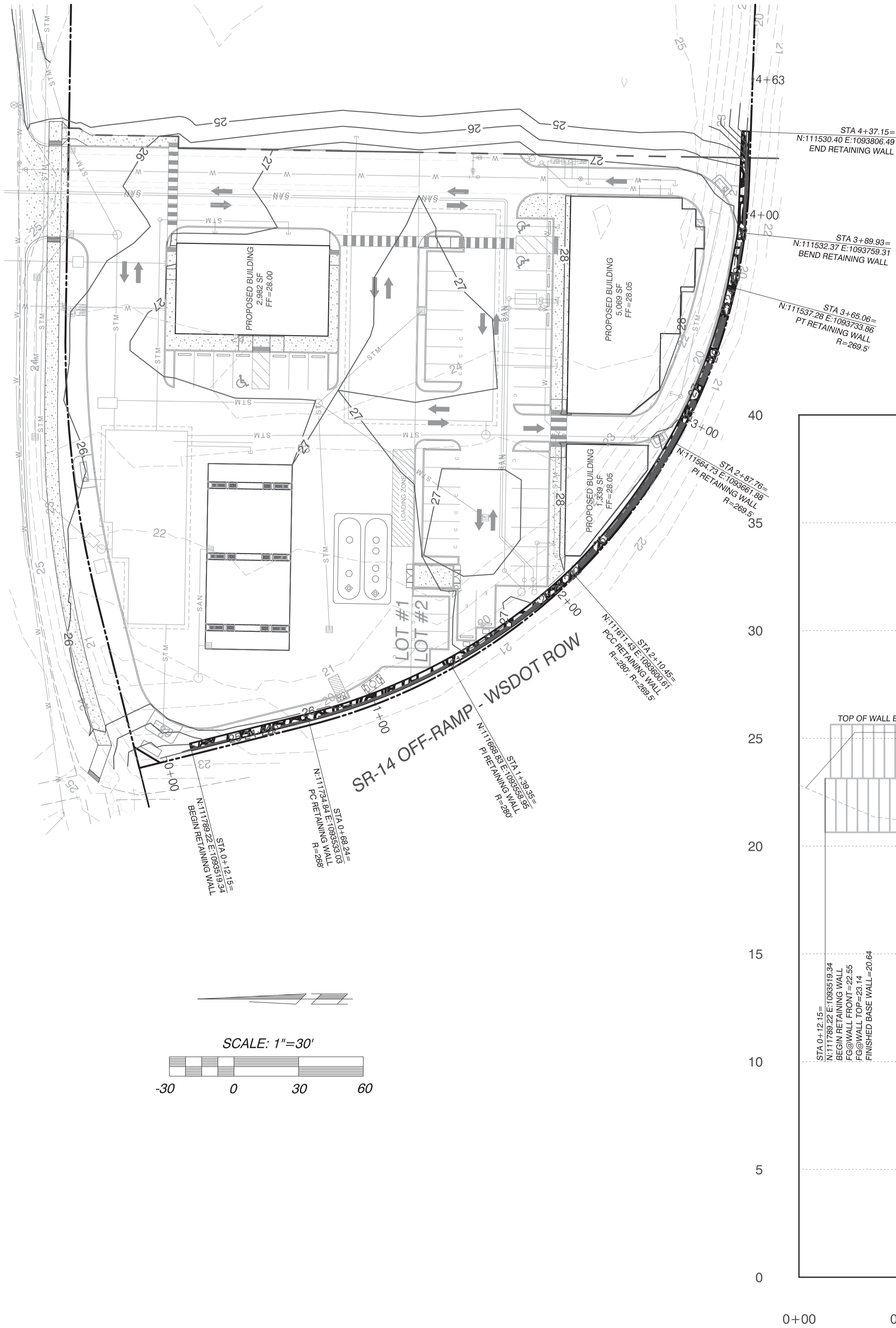
DELTA PLAZA PHASE 1

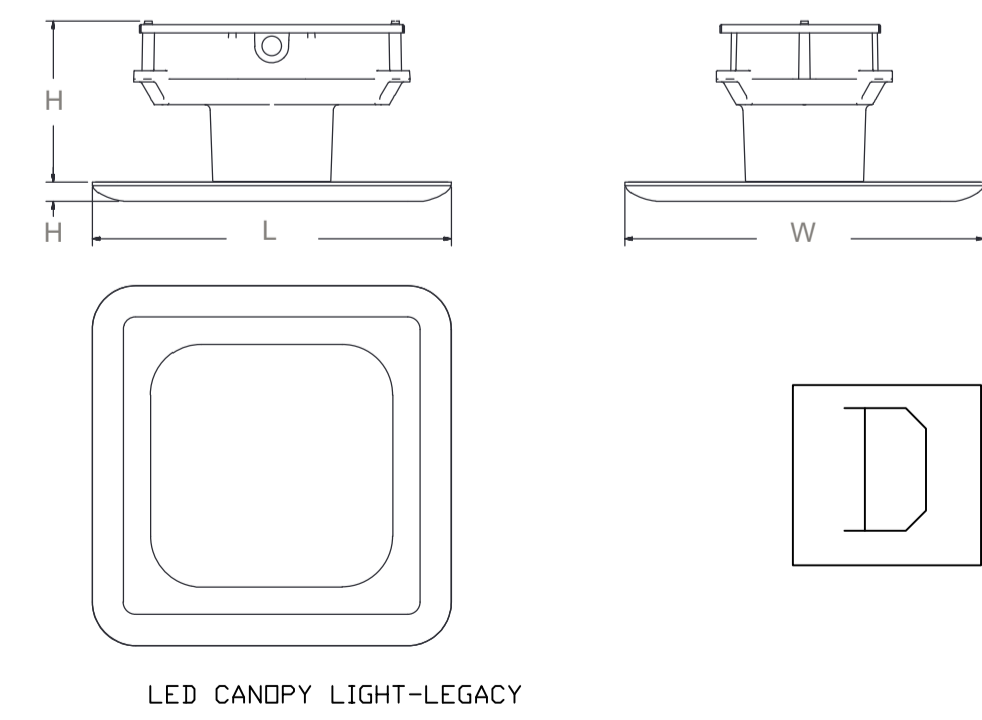
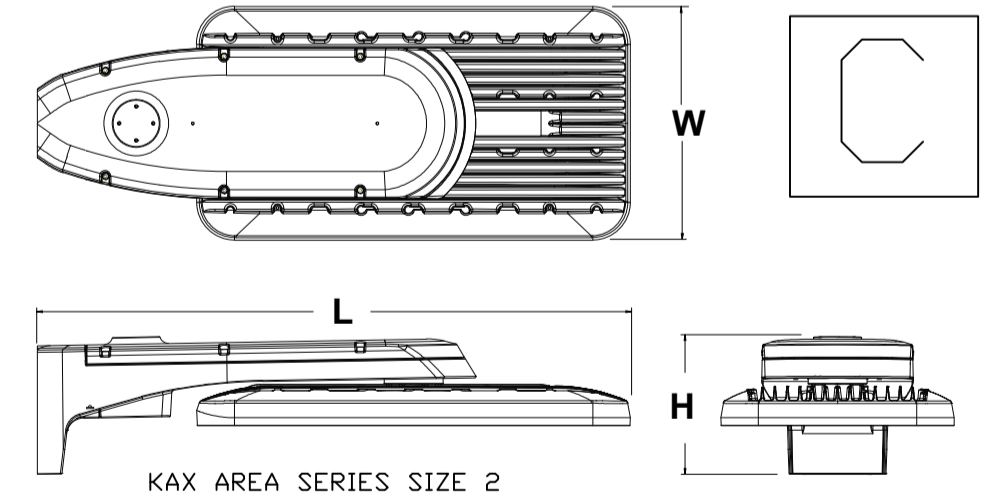
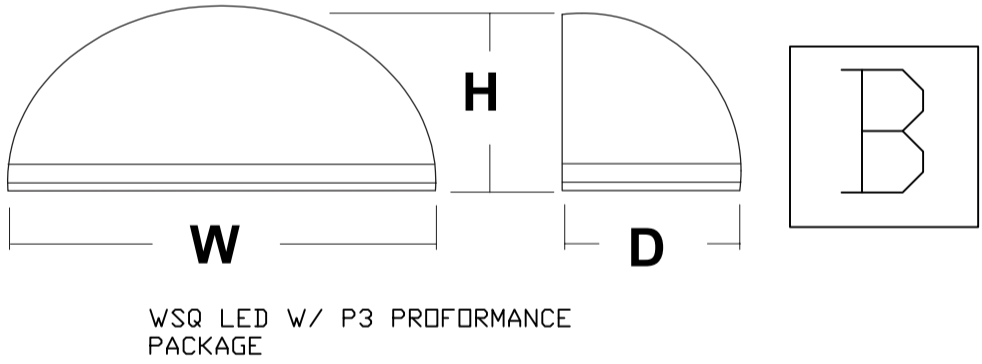
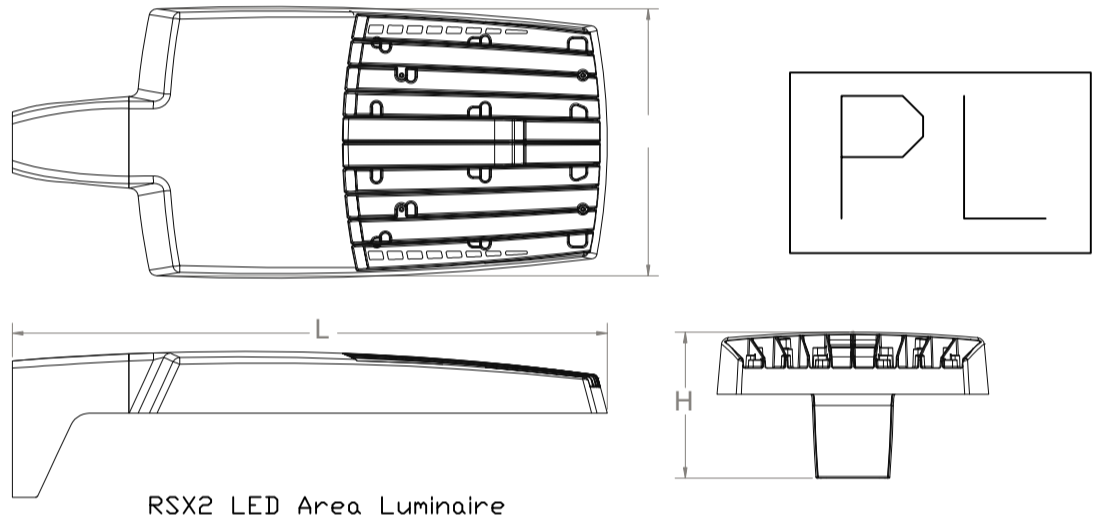
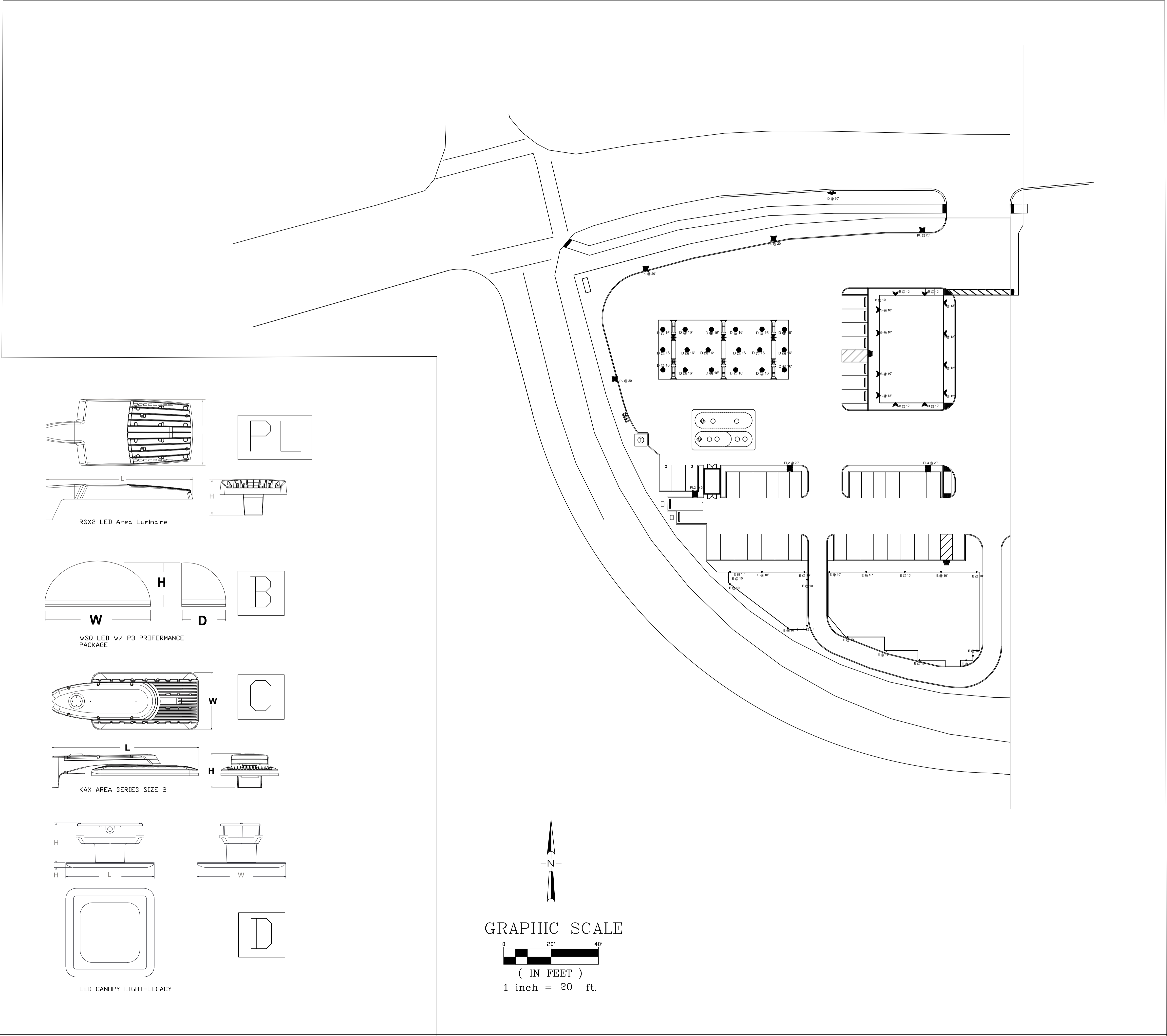
JOB NO.: 9787.01.01

SHEET

C7.0

- NOTES:
- 1) A BUILDING PERMIT IS REQUIRED FOR RETAINING WALL CONSTRUCTION. THE BUILDING PERMIT IS TO BE KEPT ONSITE DURING CONSTRUCTION.
 - 2) ROCK FOUNDATION, BACKFILL, AND WEEP HOLES TO BE INSTALLED PER STRUCTURAL CALCULATION AND DETAILS BY MD STRUCTURAL ENGINEERING. SEE ASSOCIATED BUILDING PERMIT.
 - 3) COORDINATES AND STATIONS SHOWN REPRESENT BOTTOM FRONT OF RETAINING WALL AND ASSUME A 5" WALL BATTER.
 - 4) THE RETAINING WALL WAS DESIGNED BY MD STRUCTURAL ENGINEERING. REFER TO BUILDING PERMIT FOR RETAINING WALL SECTIONS AND ASSOCIATED STRUCTURAL CALCULATIONS.









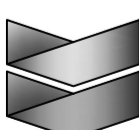



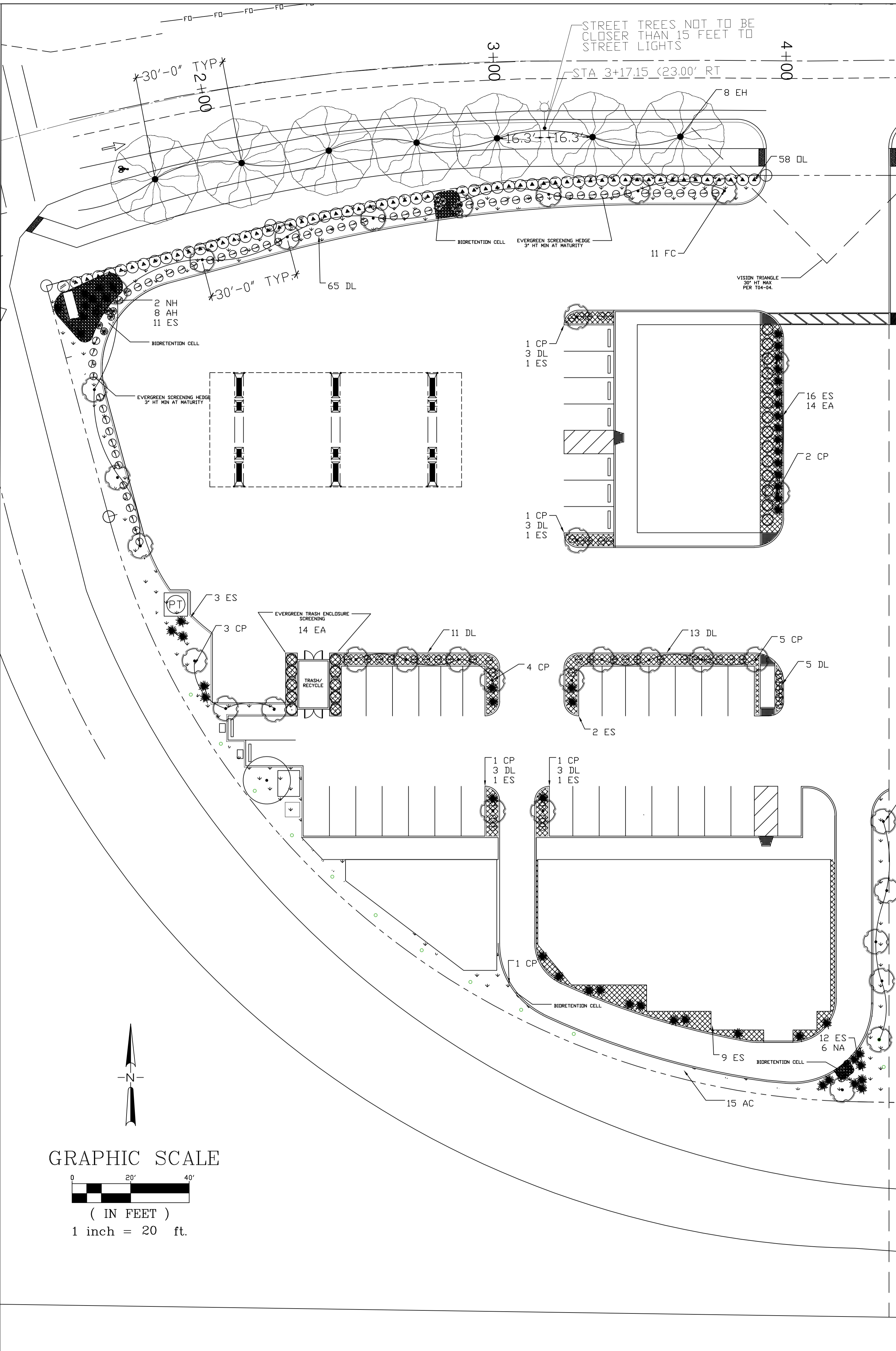
LUMINAIRE SCHEDULE									
SYMBOL	LABEL	QUANTITY	MANUFACTURE	CATALOG #	DESCRIPTION	LAMP	LUMENS	LIGHT LOSS	WATTAGE
	PL	7	LSI	SLM LED 30L SIL FT UNV DIM 40 70CRI BLK	PARKING AERIAL LIGHT		48,000	1	63-401
	B	12	LSI	XWS LED 6L FTW UNV DIM 40 70CRI BLK	BLDG WALL PACK	LED	2,000-6000	1	15-52
	C	3	LITHONIA LIGHTING	RSX2 LED P6 40K R55	RSX AREA FIGURE SIZE 2 P6 LUMEN PACKAGE 4000K CTT TYPE R55 DISTRIBUTION SINGLE HEAD	LED	31898	1	493.26
	D	24	LSI INDUSTRIES INC	SCV LED 20L SC UNV DIM 50WHT	LSI LED CANOPY LIGHT-LEGACY	LED	13672	1	97.9
	E	19	LITHONIA LIGHTING	OLLWU LED PT 40K 120 DDB	OUTDOOR LED WALL CYLINDER	LED	1085	1	13.8

BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THE LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM THE LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURE'S LUMINARIES MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS AND OTHER VARIABLE FIELD CONDITIONS.

This drawing is for the sole purpose of preparing of construction drawings for Chevron branded facilities and, all such copies shall be returned to Chevron upon request. Both the drawing and structural calculations, if included, are generic and not designed for site specific applications. Chevron does not warrant or guaranty the accuracy or applicability of either to the requirements of your local area. Consult a registered architect or professional engineer to determine any site specific design, accessibility, building code, or municipal requirements. Chevron does not provide these services.

	07-2019	PRELIMINARY SUBMITTAL	CJD				
	10-2019	CITY REDLINE	CJD				
							
MARK DATE REVISIONS			INITIAL	MARK	DATE	REVISIONS	INITIAL
 Delta Plaza Chevron					3223 COLUMBIA HOUSE BLVD, VANCOUVER, WA 98661		
					VANCOUVER, WA 98661		
					DELTA PLAZA		FINAL
					AS-BUILT		
					LIGHTING STUDY		
 DELTA MANAGEMENT CO. LLC <small>DELTA/ISSUE VANCOUVER WA 98661</small>					<div>DELTA MANAGEMENT 2033 E RESERVE STREET VANCOUVER, WA 98661 Tel. 360.695.4448 Fax 360.695.1970 www.deltamanagementco.com</div>		
MILESTONES							
PROJECT PHASE				DATE	INITIALS	SHEET	
ISSUED FOR PLANNING				--	--	LP1	
ISSUED FOR PERMIT				--	--		
ISSUED FOR BID				--	--		
ISSUED FOR CONSTRUCTION				--	--		
Do not use drawing for construction unless initialed				SCALE: AS NOTED			



LANDSCAPE CONSTRUCTION NOTES

- CONTRACTOR IS TO CONDUCT A FIELD REVIEW AND IS TO BE FAMILIAR WITH ALL EXISTING AND PROPOSED UTILITIES AND SUBSURFACE FEATURES PRIOR TO START OF WORK. SEE ARCHITECTURAL SITE PLANS AND CIVIL PLANS.
- ALL LANDSCAPE MATERIAL MAY BE REPLACED WITH ANY TREE/SHRUB LISTED ON THE STANDARD DETAILS' MANUAL OF CDV OR THAT IS ACCEPTABLE FOR USE IN VANCOUVER.
- ALL EXISTING VEGETATION AND TREES SHALL BE REMOVED FOR THE NEW DEVELOPMENT AND REPLACED WITH NEW TREES AND VEGETATION.
- ALL PLANTING AREAS, EXCEPT LAWNS AND ANNUAL FLOWER BEDS, SHALL BE TOP DRESSED WITH A 2" (MINIMUM) DEEP LAYER OF 1/2"-1" WESTERN FIR BARK OR EQUAL. ANNUAL FLOWER BEDS SHALL BE MULCHED WITH A 1" LAYER OF NITROLIZED REDWOOD SANDWUST.
- REFER TO ARCHITECTURAL AND CIVIL PLANS FOR DESCRIPTIONS OF ELEMENTS NOT IDENTIFIED ON THIS PLAN.
- OBSERVE THE FOLLOWING MINIMUM SETBACK DISTANCES FOR PLANTING :
 - BETWEEN STREET TREES = 30 FT.
 - DRIVEWAY CUTS AND FIRE HYDRANTS = 7 FT.
 - UTILITY BOXES, MANHOLE AND OTHER UTILITY VAULTS, TELEPHONE AND OTHER UTILITY POLES, GAS AND WATER METER, AND MAINS = 5 FT.
- ALL SURFACE AND SUB-SURFACE SWALES, DRAINAGE STRUCTURES AND PATTERNS SHALL BE MAINTAINED.
- A LANDSCAPE MAINTENANCE CONTRACTOR WILL BE RETAINED TO PERFORM LONGTERM ROUTINE MAINTENANCE DUTIES.
- LOCATIONS AND QUANTITIES OF EXISTING LANDSCAPE MATERIALS ARE APPROXIMATE.
- NEW PLANTER BEDS SURROUNDED BY PAVEMENT OR STRUCTURES SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 16". GRAVEL AND COMPACTED SOIL ARE TO BE REMOVED. SOIL SHALL BE DISCARDED OFF-SITE. UNIFORMLY FILL PLANTERS WITH NATIVE SOIL OR COMPATIBLE TOPSOIL TO WITHIN 1-1/2" OF TOP OF CURB. COMPACT TO 85%. REPLACE AND CONDITION SOIL PER SOILS TEST.
- TREES AND SHRUBS SHALL COMPLY WITH EASEMENT PLANTING REGULATIONS.
- THE CONTRACTOR IS REQUIRED TO PROVIDE THE QUANTITY OF MATERIALS SHOWN ON THE PLAN DRAWING. QUANTITIES IN THE LEGEND ARE MERELY A GUIDE. QUANTITIES SHOWN ON THE DRAWING TAKE PRECEDENCE OVER QUANTITIES LISTED IN THE LEGENDS.
- THE OWNER IS RESPONSIBLE TO KEEP UP MAINTENANCE ON ALL PROPOSED TREE/SHRUB PLANTING.
- PRUNING SCHEDULE: (TREE INSTALLATION STANDARDS FOR CLARK COUNTY RIGHTS-OF-WAY)
 - A) YEAR 1 - ONLY DEAD, BROKEN OR CROSSING BRANCHES SHALL BE PRUNED.
 - B) YEAR 2 - A CLASS 1 PRUNE, PURSUANT TO NATIONAL ARBORIST ASSOCIATION STANDARDS, SHALL BE PERFORMED DURING YEAR 2. THE PURPOSE OF THE PRUNING IS TO ESTABLISH PROPER SCAFFOLD BRANCHING, RAISE THE CROWN FOR ROAD/SIDEWALK CLEARANCE AND REMOVE ANY DEAD, DYING OR CROSSING BRANCHES.
 - C) YEAR 3 - A CLASS 1 PRUNE, PURSUANT TO NATIONAL ARBORIST ASSOCIATION STANDARDS, SHALL BE PERFORMED DURING YEAR 3. THE PURPOSE OF THE PRUNING IS TO ESTABLISH PROPER SCAFFOLD BRANCHING, CONTINUE TO RAISE THE CROWN FOR ROAD/SIDEWALK CLEARANCE AND REMOVE ANY DEAD, DYING OR CROSSING BRANCHES.
- SYMBOL FOR GROUNDCOVER IS SCHEMATIC AND IS NOT SHOWN UNDER SHRUBS AND TREES FOR CLARITY. CONTRACTOR TO INSTALL UNDER SHRUBS AND TREES TO FILL ENTIRE PLANTER BED. QUANTITY IN LEGEND IS A GUIDE.

ACCEPTABLE PLANT SIZES, VARIETIES AND CONDITIONS AT TIME OF PLANTING:

SIZES HEIGHT X SPREAD CALIPER

SHRUBS:
1 GALLON 18" X 12" ---
5 GALLON 36" X 30" ---
TREES:
15 GAL 7-8" X 2'-3" .75"
24" BOX 9-10' X 4'-5' 1.75"
36" BOX 12-14' X 6'-7' 2.75"
48" BOX 16-18' X 8-9' 3.25"

PLANTS SHALL BE HEALTHY WITHOUT PESTS OR DISEASE AND SHALL NOT BE OVERGROWN; SHOW KINKED OR CIRCLING ROOTS; HAVE DAMAGED OR TWISTED TRUNKS; SHOW A PRESENCE OF HEAVILY MATTED OR WOODY PERIPHERAL ROOTS; OR BE SO RECENTLY CANNED THAT THE ROOT SYSTEM IS NOT THOROUGHLY; DEVELOPED THROUGHOUT THE CAN.

TREES USED IN PLANTER FINGERS OF PARKING LOTS OR AS STREET SHADE TREES SHALL HAVE A HIGH BRANCHING BY GROWTH OR PRUNING TO A 4' CLEAR HEIGHT.

THE CONTRACTOR IS TO BE CAREFUL IN ORDERING PLANTS WHICH ARE AVAILABLE IN BOTH GROUND COVER, SHRUB OR STANDARD FORMS AND IS TO PLACE THE PLANT ORDER PER THE LEGEND GROUPING DESIGNATION. HEIGHT FOR THE MATURE PLANT AND OTHER LEGEND NOTES OR VARIETY NAME.

NOT FOR CONSTRUCTION

THESE DRAWINGS ARE UNDER REVIEW AND SUBJECT TO REVISIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FINAL DRAWINGS, (INITIALED IN TITLE BLOCK), BEFORE FINALIZING BIDS OR BEGINNING CONSTRUCTION.

LINEAR ROOT BARRIER SPECIFIED. DO
NOT USE PLASTIC BOX BARRIERS.

DELTA PLAZA SITE INFORMATION

SITE INFORMATION	
PROPOSED SITE AREA:	67,621 SQ. FT. 1.55 ACRES
BUILDING AREA:	17,264 (INCLUDE: 3,354 SF CANOPY
NET AREA:	50,357 SQ. FT.
LANDSCAPE:	9,571 SQ. FT.
TREE COUNT	
TOTAL TREES PROPOSED:	59
STREET TREES:	8
SITE TREES:	51
TREE/LANDSCAPE INDICATOR	
EXISTING TREES TO BE REMOVED:	
(TREE LOCATION AND SIZE SHOWN ON PLAN)	

CITY OF VANCOUVER CALCULATIONS

REQUIREMENT:		PROVIDED:	
MIN LANDSCAPE= 15%		TOTAL LANDSCAPE: 9,571	
		TOTAL SITE: 50,357	
		19% LANDSCAPE PROVIDED	
30 TREE UNITS PER ACRE		1.16 ACRE X 30 = 35 TREE UNITS	
		35 TREE UNITS PROVIDED	

VISION CLEARANCE

ALL SHRUBS WITHIN SIGHT DISTANCE TRIANGLES SHALL BE MAINTAINED SO THAT FOLIAGE HEIGHT ABOVE PAVEMENT DOES NOT EXCEED 2.5 FEET. STREET TREES WITHIN SIGHT DISTANCE TRIANGLES SHALL BE LIMBED UP TO A HEIGHT OF 10 FEET CONSISTENT WITH ANSI A300 STANDARDS TO PROVIDE FOR SIGHT DISTANCE VISIBILITY.

PLANTING LEGEND

SYMBOL	SIZE	QTY.	MATURE HEIGHT	BOTANICAL NAME	WATER USE	*H, L, M HIGH, LOW, MEDIUM	COMMON NAME
TREES							
	15 GAL. 2" CAL. MIN		40'	PRUNUS X YEDOENSIS	L		FLOWERING CHERRY
	15 GAL. 2" CAL. MIN	7	40'	CARPINUS BETULUS FASTIGIATA	L		EUROPEAN HORNBEAM
	15 GAL. 2" CAL. MIN	35	35'	PYRUS CALLERYANA 'CAPITAL'	L		CAPITAL PEAR
	15 GAL. 2" CAL. MIN	14	15'	THUJA OCCID. 'SMARADG'	L		EMERALD GREEN ARBORVITAE
	15 GAL. 2" CAL. MIN	35'		CHAMAECYPARIS NOOTATENSIS	L		ALASKA CEDAR
	-	2	-	EXISTING TREE TO BE REMOVED	-		-
SHRUBS							
	5 GAL.	58	36"	PRUNUS LAURDC 'OTTO LUYKENS'	L		OTTO LUYKENS LAUREL
	5 GAL.	2	6'	HYDRANGEA OAKSA 'NIKKO BLUE'	L		NIKKO BLUE HYDRANGEA
	1 GAL.	54	16"	CAREX 'EVERGOLD'	L		EVERGOLD SEDGE
	5 GAL.	118	6'	PRUNUS LAURDC 'NANA'	L		DWARF ENGLISH LAUREL
	1 GAL.	7	16"	HOSTA 'AUGUST MOON'	L		AUGUST MOON HASTA
	-	-	-	-	-		-
	-	-	-	-	-		-
	-	-	-	EXISTING SHRUBS/GRNDCLR TO REMAIN	-		-
VINES							
	-	0	-	-	-		-
GROUNDCOVERS / MASS PLANTINGS							
	1/2"-1"	1,624 S.F.	12"-18"	1/2"-1" WESTERN FIR BARK	L		-
	SOD	5,458 S.F.	-	TURF	M		-
	3"-6"	382 S.F.	12"-18"	WASHED RIVER COBBLE	L		C
	1 GAL 18" O.C.	805 S.F.	24"	EUONYMUS FORTUNEI (EROSION CONTROL)	L		PURPLE LEAF WINTER CREEPER
SITE FEATURES - TYPICAL							
	0			BOULDERS - PER DETAIL			
	0 L.F.			REDWOOD HEADERBOARD			
	0			MOUNDS			
	0 L.F.			CONCRETE MOWSTRIP			
	0 L.F.			ROOT BARRIER: INSTALL AT TREES PLANTED 4' OR LESS FROM CURBS, BUILDINGS, OR PAVEMENT. HOWARD WIRE CLOTH COMPANY, HAYWARD, CA. (510)887-8787; OR 24" LINEAR PLASTIC PANEL FROM DEEP ROOT OR EQUAL.			
	0			PRECAST CONCRETE STEPPING STONES			
	0						

TOTAL LANDSCAPED AREA: 9,571 S.F.

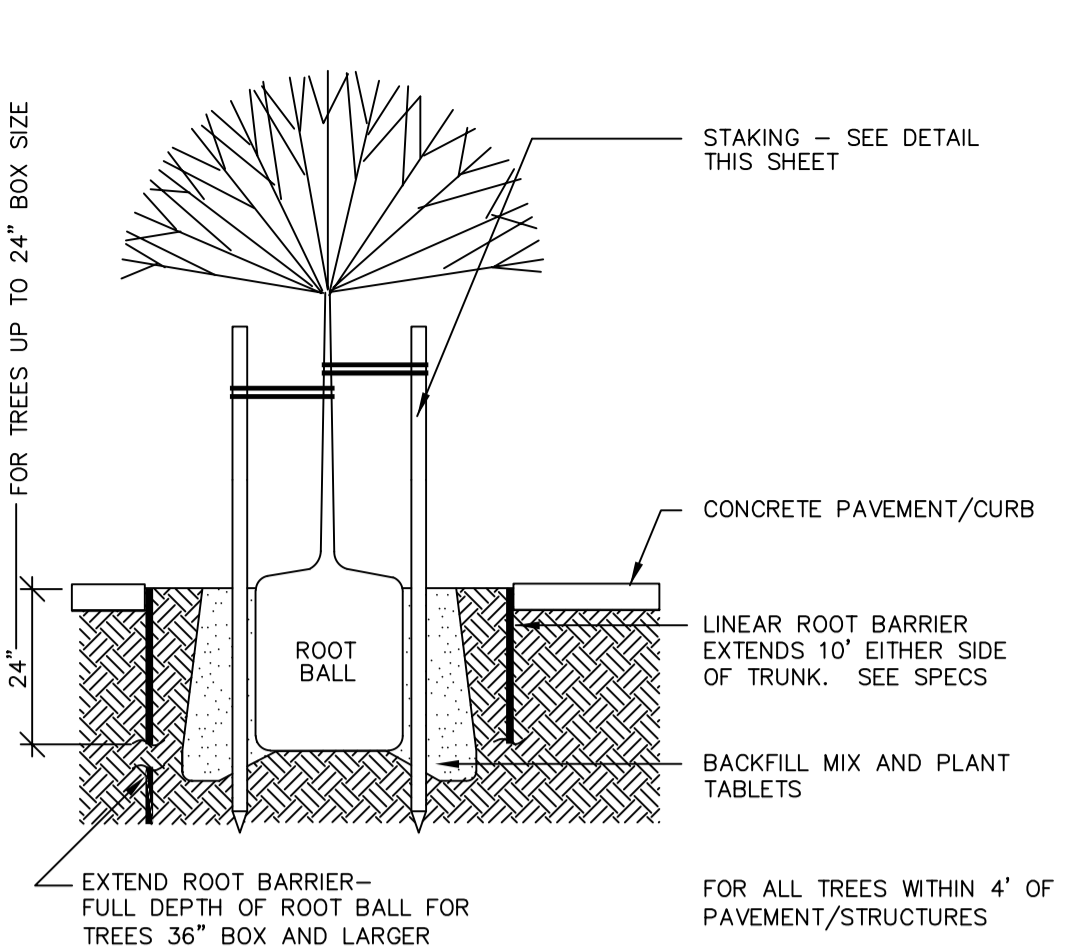
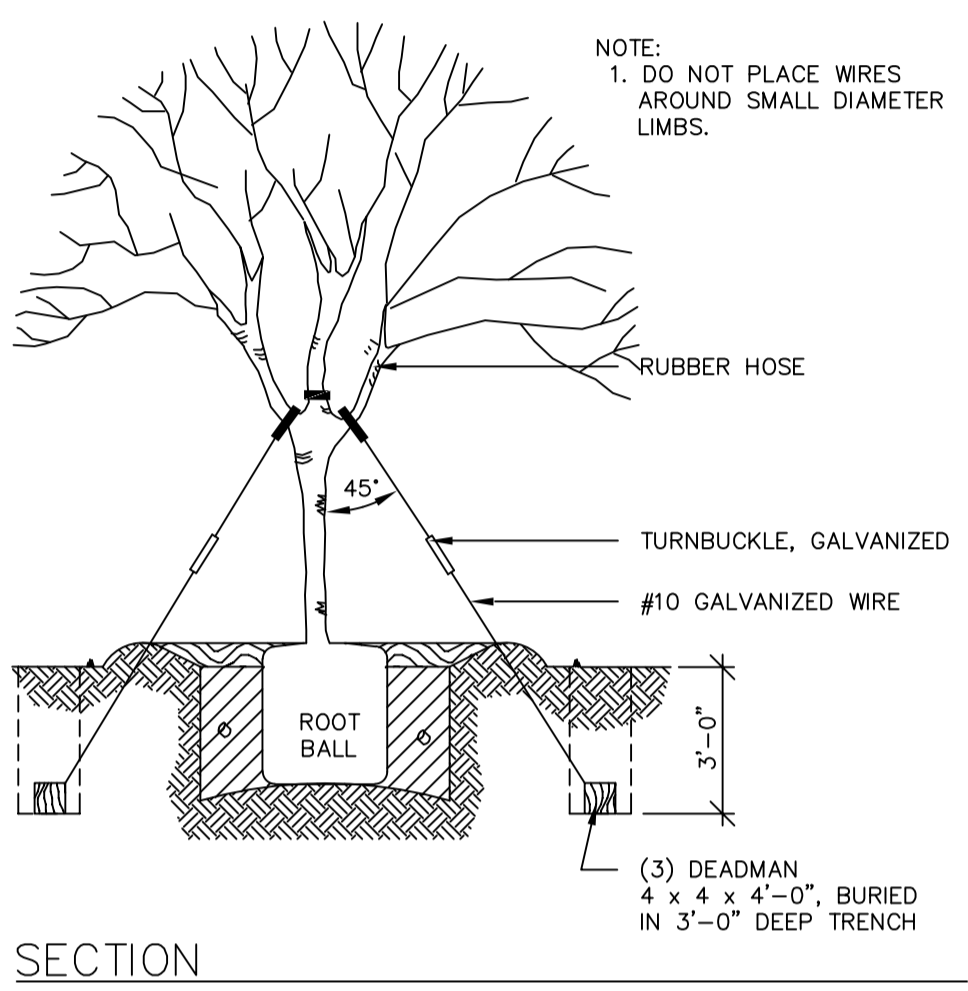
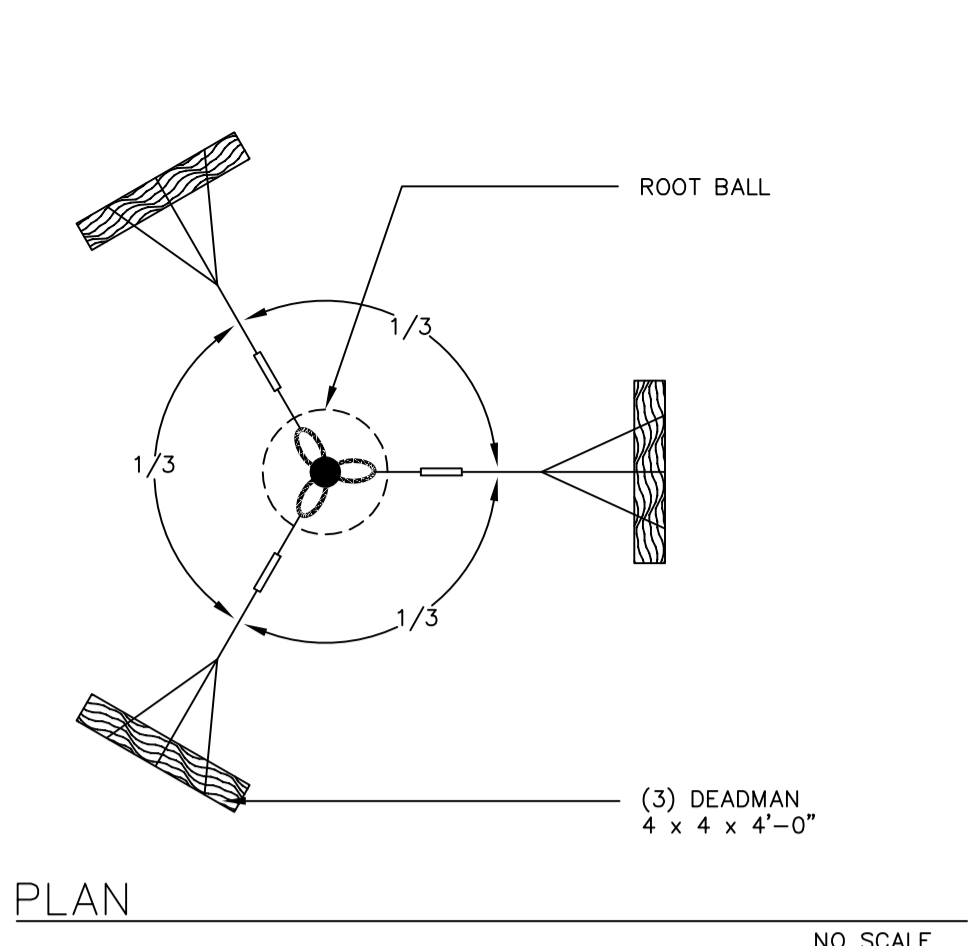
	07-2019	PRELIMINARY SUBMITTAL	CJD				
	10-2019	CITY REDLINE	CJD				
MARK	DATE	REVISIONS	INITIAL	MARK	DATE	REVISIONS	INITIAL

DELTA MANAGEMENT
203 E RESERVE STREET
VANCOUVER, WA 98661
Tel: 360.696.4448 Fax: 360.695.1970
www.deltamanagementco.com

3223 COLUMBIA HOUSE BLVD, VANCOUVER, WA 98661
VANCOUVER, WA 98661
DELTA PLAZA FINAL

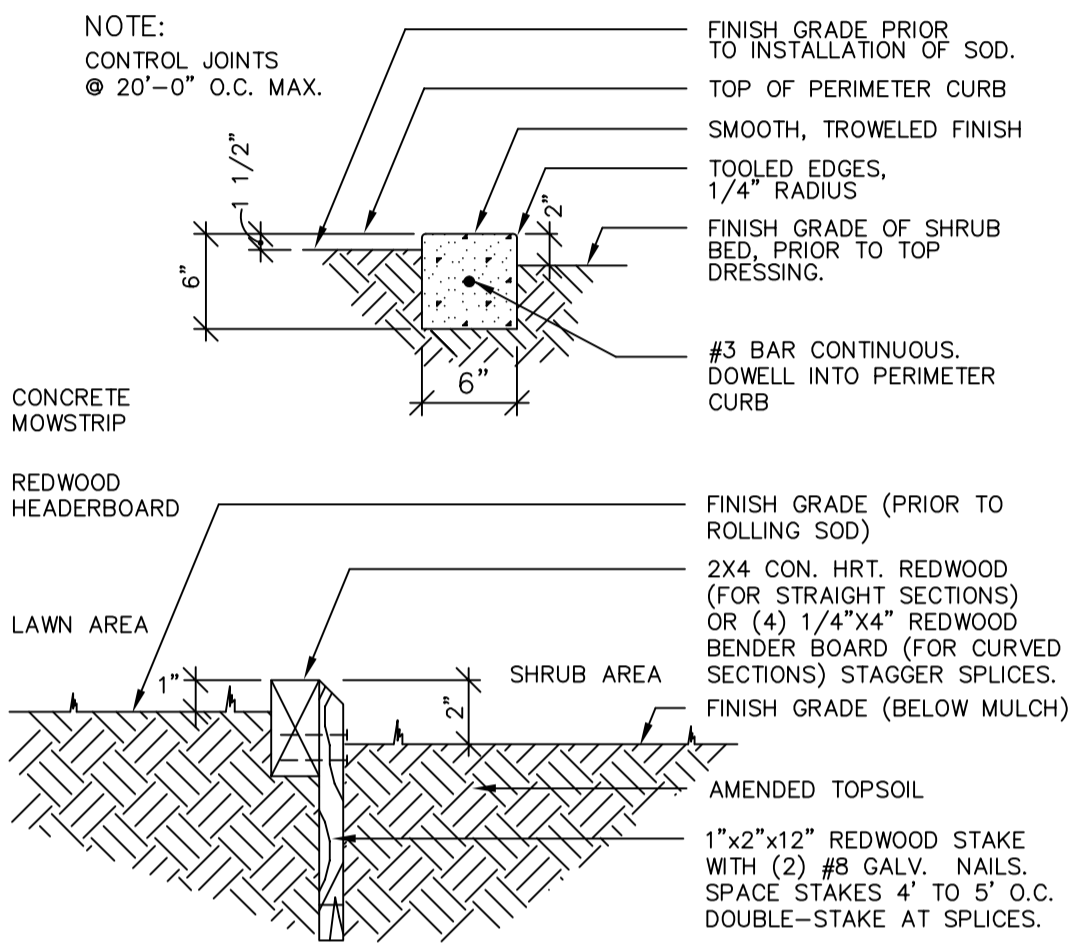
LANDSCAPE PLAN

MILESTONES				
PROJECT PHASE	DATE	INITIALS	SHEET	
ISSUED FOR PLANNING	--	--	LS1	
ISSUED FOR PERMIT	--	--		
ISSUED FOR BID	--	--		
ISSUED FOR CONSTRUCTION	--	--		
Do not use drawing for construction unless initialed				
			SCALE: AS NOTED	



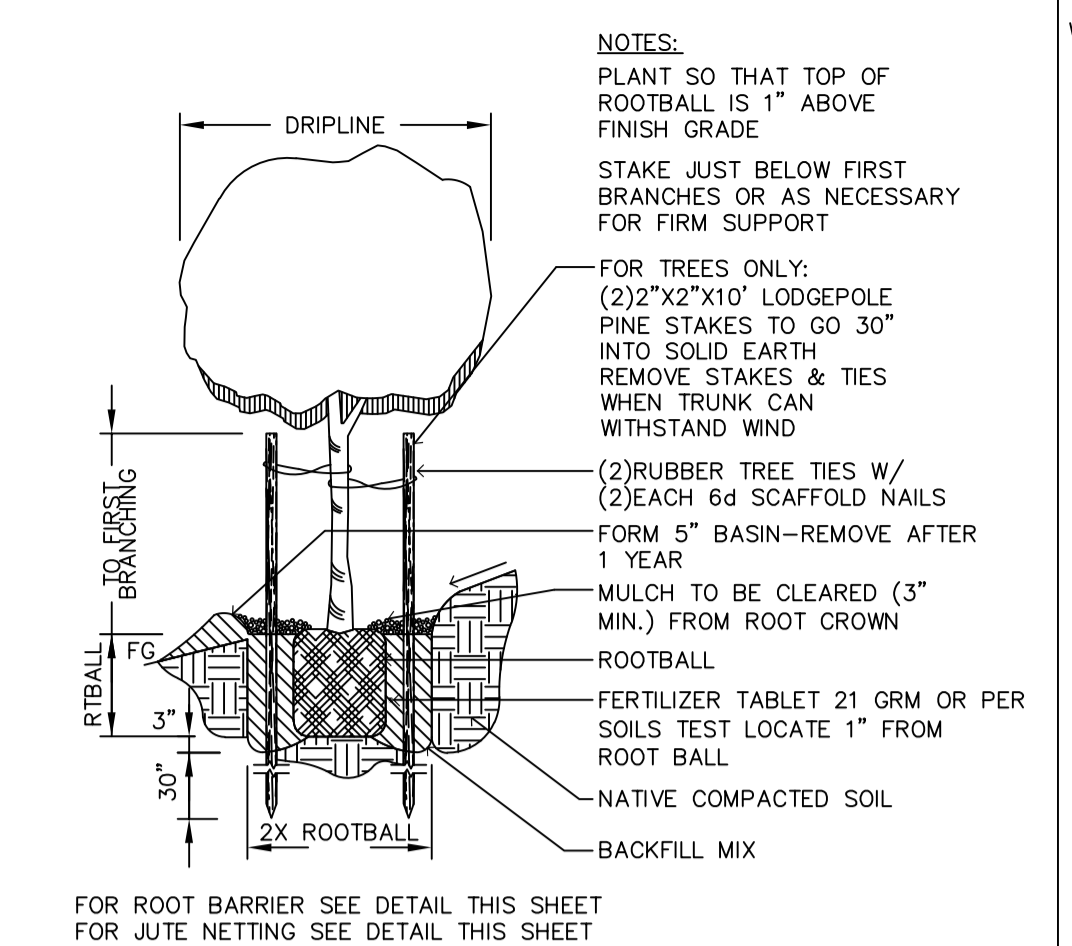
2 ROOT BARRIER

NO SCALE



6 MOWSTRIP/ HEADERBOARD

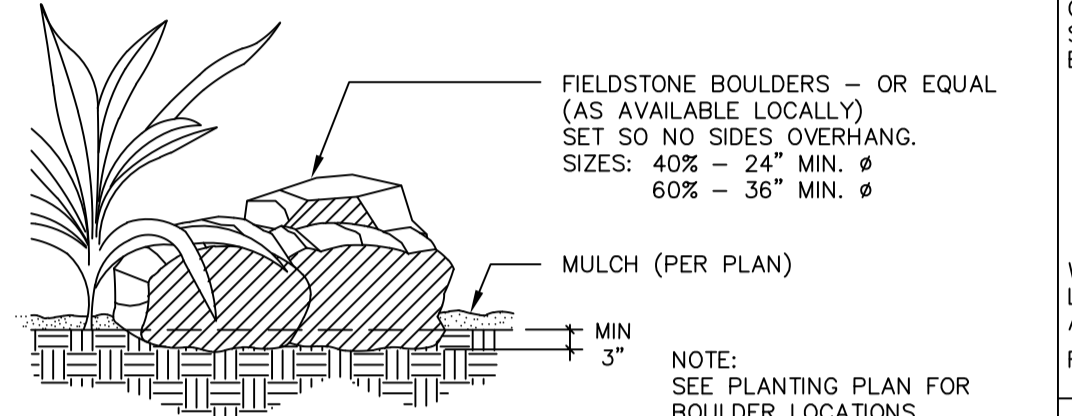
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3 PLANTING ON SLOPE

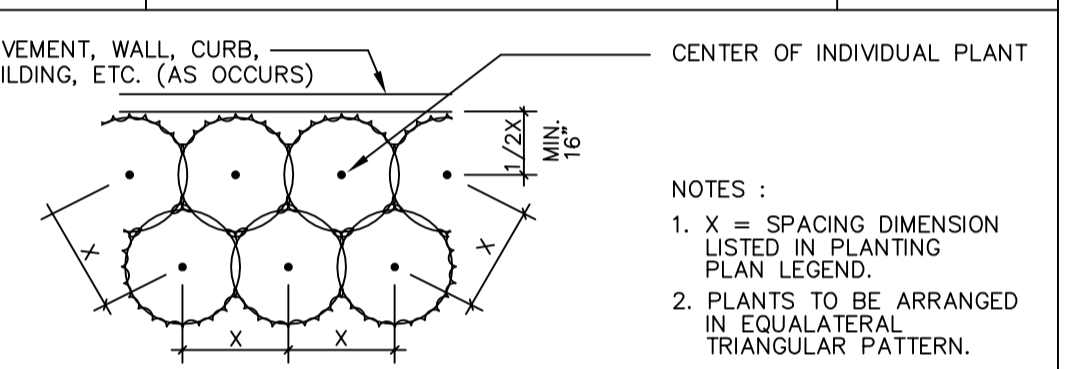
FOR ALL SLOPES 3:1
OR GREATER. AS APPLIES

NO SCALE



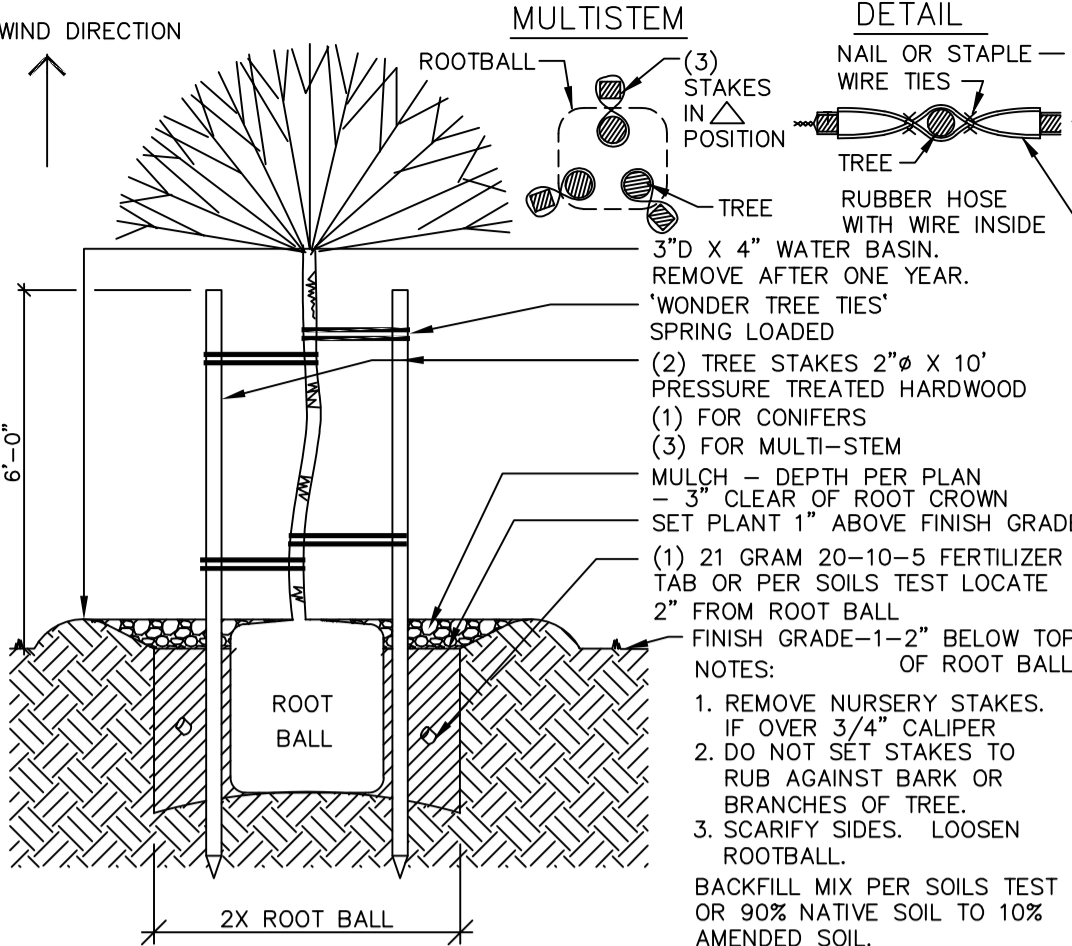
7 BOULDER PLACEMENT

NO SCALE



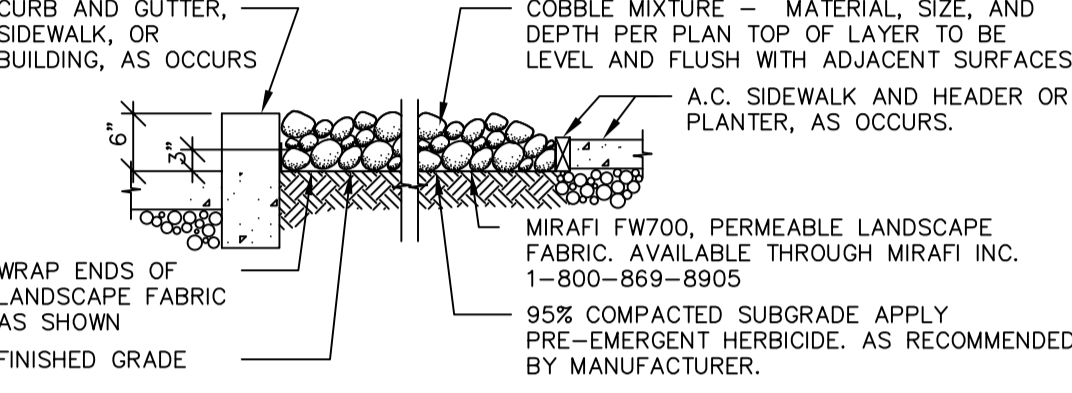
8 GROUND COVER PLANT SPACING

NO SCALE



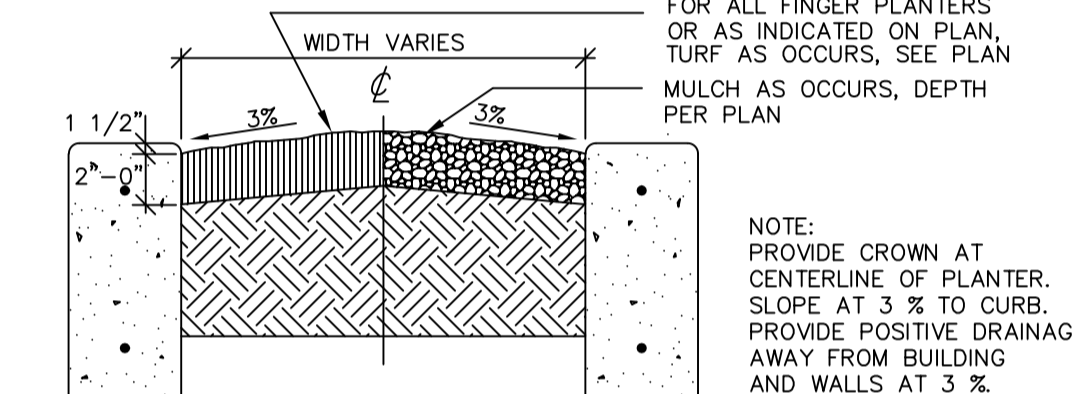
4 TREE PLANTING / STAKING

NO SCALE



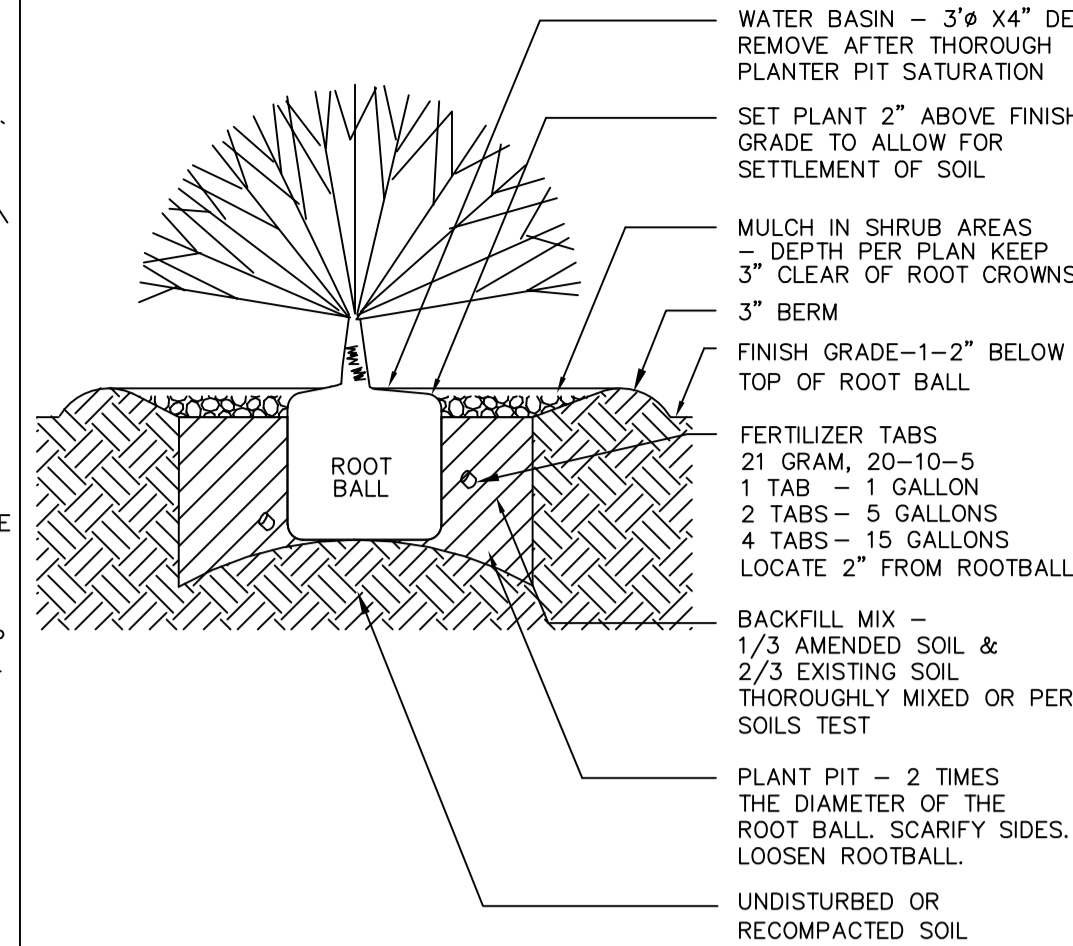
9 COBBLE AREA

NO SCALE



10 FINGER ISLAND PLANTER SECTION

NO SCALE



5 SHRUB/GROUND COVER/VINE PLANTING

NO SCALE

CITY OF VANCOUVER

THESE PLANS HAVE BEEN REVIEWED FOR
COMPLIANCE WITH CITY CODES, ORDINANCES
AND POLICIES AND ARE

APPROVED

THE APPROVAL OF THESE PLANS BY THE CITY OF
VANCOUVER DOES NOT AUTHORIZE ANY
NONCOMPLIANCE WITH LOCAL ORDINANCE,
CODE OR STATE LAW.

THESE PLANS SHALL BE AVAILABLE FOR ALL
REQUESTED INSPECTIONS.

ENG-75171
10/20/20

LEVEL IV TREE PLAN

REQUIREMENT:	PROVIDED:
SITE PLAN 1. EXISTING TREES 2. TREES TO BE RETAINED	TWO EXISTING TREES ON SITE NO TREES WILL BE RETAINED
PLANTING PLAN 1. TREES TO BE PLANTED 2. NARRATIVE 3. TIMELINE 4. COST ESTIMATE	67 TREES TO BE PLANTED SEE "NEW TREES" NOTE, BELOW XX XX
NEW TREES: SITE PREPARATION PER NOTE 1, 4, 7, 10, SHT LS1, AND PER CHEVRON WRITTEN SPECIFICATIONS ON SHT LS2. MAINTENANCE PER CHEVRON WRITTEN SPECIFICATIONS. ALL TREES PLANTED ON SLOPES TO BE PER 'TREE PLANTING ON SLOPE' DETAIL, SHT LS2. ROOT BARRIER PER 'ROOT BARRIER' DETAIL, ON SHT LS2.	

PLANTING SCHEDULE

- BEFORE PLANTING ANY TREE OR VEGETATION, THE OWNER SHALL
VERIFY COMPLIANCE WITH CITY OF VANCOUVER.
- INSTALLATION OF THE SILT FENCE DURING CONSTRUCTION AS
INDICATED ON THE CIVIL PLAN SHALL PROVIDE RETAINING OF
THE DEBRIS FROM TRANSFERRING OFF-SITE.
- PLANT MATERIAL WILL BE INSTALLED TO CURRENT NURSERY
INDUSTRY STANDARDS
- LANDSCAPING SHALL BE INSTALLED WITH COMPLIANCE TO CITY OF
VANCOUVER CODE.
- ON-SITE TREES SHALL BE AT LEAST 2" IN CALIPER AND SHRUBS
AT LEAST 3 GALLON AT THE TIME OF PLANTING.
- STREET TREES SHALL BE AT LEAST 1 1/2" IN CALIPER AND HAVE
A MINIMUM HEIGHT OF 8' AT THE TIME OF PLANTING.
- EVERGREEN TREES SHALL BE FULLY BRANCHED AND A MINIMUM OF
6' OF HEIGHT AT THE TIME OF PLANTING.
- TREES SHALL BE PLANTED AT A DISTANCE SPECIFIED ON CITY OF
VANCOUVER CODE.
- SHRUBS SHALL BE PLANTED AT 3' CONTINUOUS ON SITE.
- PLANT MATERIAL SHALL BE PROPERLY SUPPORTED TO ENSURE
SURVIVAL.
- TREES AND SHRUBS PLANTED WITHIN THE SIGHT DISTANCE
TRIANGLE SHALL BE MAINTAINED TO PROVIDE CLEARANCE
SUITABLE TO COMPLY WITH THE SIGHT CODE.
- COST ESTIMATE OF PURCHASE AND INSTALLATION OF TREES,
SHRUBS AND VEGETATION SHALL BE AT A REASONABLE PRICE AND
WILL BE DETERMINED BY THE OWNER.

▲ IS THE CURRENT DRAWING SET REVISION NUMBER					
▲				▲	
▲				▲	
▲				▲	
MARK	DATE	REVISIONS	INITIAL	MARK	DATE
			NO SITUS ADDRESS		
			VANCOUVER, WA 98661		
			DELTA PLAZA		
			PRELIMINARY		
			LANDSCAPE DETAILS		
DELTA MANAGEMENT CO. LLC					
DELTA MANAGEMENT 2013 E. RESERVE STREET VANCOUVER, WA 98661 Tel. 360.696.4448 Fax 360.695.1970 www.deltamanagementco.com					
MILESTONES					
PROJECT PHASE	DATE	INITIALS			SHEET
ISSUED FOR PLANNING	-	-			SCALE: AS NOTED LS2
ISSUED FOR PERMIT	-	-			
ISSUED FOR BID	-	-			
ISSUED FOR CONSTRUCTION	-	-			
Do not use drawing for construction unless initiated					

NOTE: SITE CONSISTS OF A
SINGLE LOT WITH A TOTAL OF 2
PHASES. PHASE 2 TO BE
COMPLETED AT A LATER DATE

CITY OF VANCOUVER

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APPROVED

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THESE PLANS SHALL BE TOURNABLE FOR LAMINATE REQUESTED INSPECTIONS

ENG-75171
10/20/20

TAX LOT 211
APN 986027351

SE COLUMBIA HOUSE BLVD.

N 89°01'56" W 381.28' R=1460.00' L=184.62

PHASE 2

CANDPY

C-STORE

BLDG 1

BLDG 2

EXIT 1 RAMP

S 88°00'37" E 537.67'

STATE ROUTE 14

TAX LOT 283
APN 31041000

TAX LOT 151
APN 37746000

ADJUSTED TAX LOT 283

75.7E

09.78

20.75

W

10N,10S

12" CULVERT IE 16.78

6" CULVERT IE 17.55

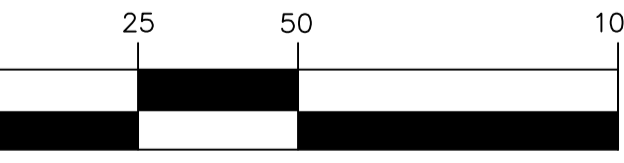
7N,7S

S 01°48'38" W 316.00'

N 150°46" E

115.77'

GRAPHIC SCALE



(IN FEET)

1 inch = 30 ft.

IS THE CURRENT DRAWING SET REVISION NUMBER

07-2019	PRELIMINARY SUBMITTAL	CJD				
10-2019	CITY REDINE	CJD				

MARK	DATE	REVISIONS	INITIAL	MARK	DATE	REVISIONS	INITIAL

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203 E. RESERVE STREET
VANCOUVER, WA 98661
Tel. 360.696.4448 Fax. 360.695.1970
www.deltamanagementco.com

NO SITUS ADDRESS

VANCOUVER, WA 98661

DELTA PLAZA

FINAL

MILESTONES

PROJECT PHASE	DATE	INITIALS
ISSUED FOR PLANNING	-	-
ISSUED FOR PERMIT	-	-
ISSUED FOR BID	-	-
ISSUED FOR CONSTRUCTION	-	-

Do not use drawing for construction unless initiated

SCALE: AS NOTED

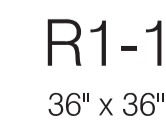
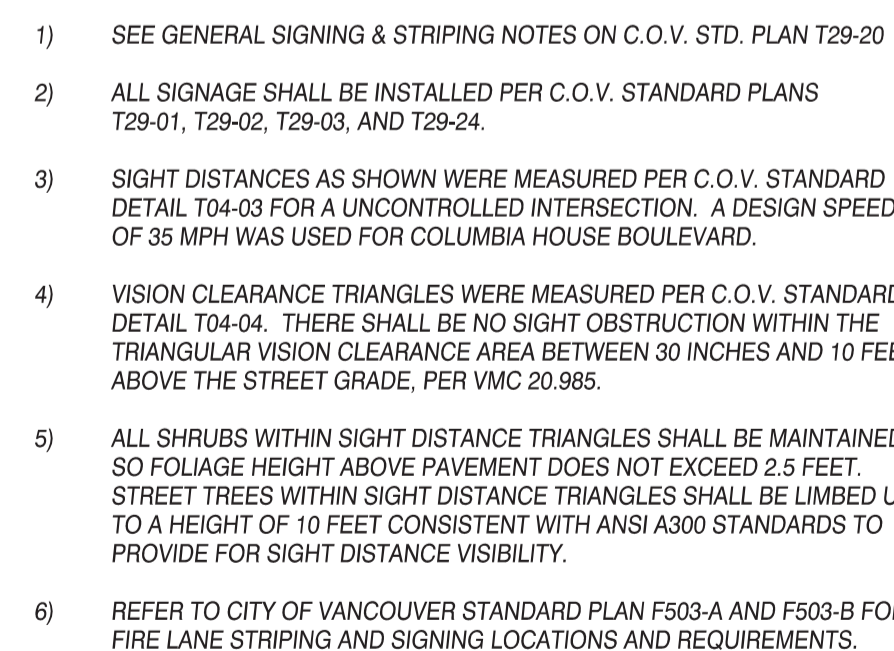
SHEET
MP1

ENG-75171
10/20/20

1

RECORD DRAWING

SS1.0



CITY OF VANCOUVER
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ENG-75171
10/20/20

CLIENT:
DELTA MANAGEMENT COMPANY
203 E. RESERVE ST.
VANCOUVER, WA 98661
PH: (360) 696-4448
CONTACT: KIA KEVYANI
EMAIL: kkevyani@gmail.com

FIRE RESPONSE PLAN FOR:
DELTA PLAZA PHASE 1



Digitally signed by
Peter Jack
Date: 2020.09.18
11:19:15
-07'00'

CHANGES / REVISIONS	
DESCRIPTION:	DATE:

RECORD DRAWING

DESIGNED: JRS
DRAWN: JRS
CHECKED: PAT
DATE: APRIL 2019
SCALE: H: 1"=30'
V:
DELTA PLAZA PHASE 1
JOB NO.: 9787.01.01

SHEET

FR1.0

