UTILITY COMPANY AND EMERGENCY CONTACTS:

City of La Center (360) 263-2782 La Center Public Works (360) 263-2745 La Center Police Dept (360) 263-7665 CenturyLink (Keith Meisner) (360) 699-3720 (360) 316-1051 Clark County Fire & Rescue (360) 887-4609 Clark Public Utilities (Electric) (360) 992-8558 Clark Public Utilities (Water) (360) 992-8022 Clark Regional Wastewater District (360) 993-8810 **NW Natural Gas** (360) 571-5465 (800) 424-5555 **Utility Locates**

CLARK PUBLIC UTILITIES - WATER SERVICES DEVELOPER INSTALLED WATER MATERIAL LIST									
INSTALLED WATER ITEM	MATERIAL	QUANTITY	UNITS						
8" WATER MAIN	PVC C-900	19	LF						
6" WATER MAIN	DI	13	LF						
FIRE HYDTRANT		1	EA						
1" WATER SERVICE LINE		1	EA						
NOTES:									

- PIPE MATERIAL ABBREVIATIONS: PVC - POLYVINYL CHLORIDE PIPE DIP - DUCTILE IRON PIPE
- QUANTITIES LISTED WITHIN THIS TABLE ARE NOT FOR BIDDING PURPOSES, BUT FOR USE BY CLARK PUBLIC UTILTITIES TO DETERMINE THE INSTALLED WATER SYSTEM

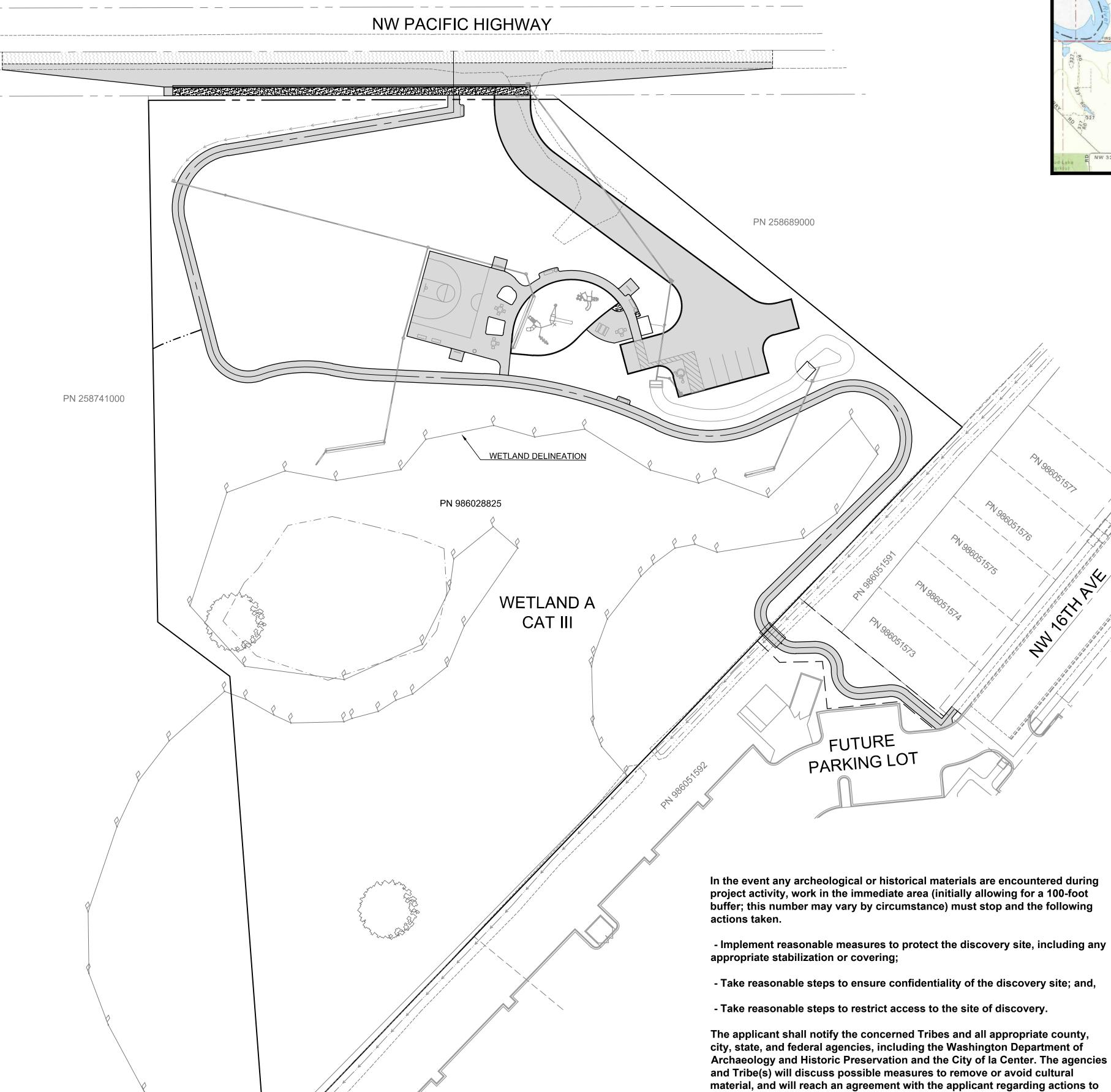
CLARK PUBLIC UTILIT	IES - WATER
UTILITY WORK ORDER NO.	
SIGNED BY	DATE

CLARK-COWLITZ FIRE & RESCUE

City of La Center						
	<u> </u>					
City Engineer	Date					

Riverside Neighborhood Park Located in the SE ¼ of Section 33, T5N, R1E

La Center, Washington





VICINITY MAP NOT TO SCALE

Legend Proposed Asphalt Proposed Concrete Asphalt Grind & Overlay





APPLICANT: 9317 LLC **Contact: Luke Sasse** 9321 NE 72nd Ave. Bldg C #7 Vancouver, WA 98665 Office: (360) 449-0099 Email: luke@timberlandinc.com

CIVIL ENGINEER: PLS Engineering Contact: Travis Johnson, PE 604 W Evergreen Blvd Vancouver, WA 98660 PH: (360) 944-6519 Email: PM@plsengineering.com

OWNER: ECM Riverside, LLC **Contact: Sid Constantinescu** 340 Oswego Point Drive #208 Lake Oswego, OR 97034 PH: (425) 462-6372 Sconstantinescu@paccrestrealty.com

SITE ADDRESS: Parcel # 986028-825 34512 NW Pacific Hwy La Center, WA 98629

be taken and disposition of material. If human remains are uncovered,

remains.

subject to imprisonment and/or fine.

appropriate law enforcement agencies shall be notified first, and the above

Failure to comply with these requirements may constitute a Class C felony,

steps followed. If remains are determined to be Native, consultation with the

affected Tribes will take place in order to mitigate the final disposition of said



Project No. 2641

SCALE: H: 1"=40' V: N/A DESIGNED BY: DRAFTED BY: REVIEWED BY:

ghb

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Project No. 2641

SCALE: H: N/A V: N/A DESIGNED BY: DRAFTED BY: REVIEWED BY:

EXISTING CONDITIONS LEGEND

LINETYPES	C)	YMBOLS
— ST — ST — STORM SEWER LINE		CATCH BASIN
OHP OVER HEAD POWER LINE WATER LINE LOCATE		STORM MANHOLE
——————————————————————————————————————	0	CURB INLET
— E — E — UNDERGROUND ELECTRIC	***	FIRE HYDRANT
	₩v	WATER VALVE
	(S)	SAN SEWER MH
CURB LINE EDGE OF GRAVEL	0	UTILITY POLE
SIDEWALK		EXTG WELL
— — — — LOT LINE ————————————————————————————————————	F	TEL PEDESTAL
——————————————————————————————————————	←	GUY WIRE
	Мв⊡	MAILBOX
		EXTG TREES

PROPOSED LINETYPE & HATCHING LEGEND

LINETYPES	SY	YMBOLS		
EDGE OF PAVEMENT		CATCH BASIN		
CURB LINE PROPOSED SIDEWALK	\oplus	OVERFLOW DRAIN		
——————————————————————————————————————	$lackbox{1}$	AREA DRAIN W/SUMP		
PAVEMENT SAWCUT	•	ROOF DRAIN		
— — — — SETBACK	0	SANITARY CLEANOUT		
LOT LINE STORM LINE	O	SANITARY MANHOLE		
		FIRE HYDRANT		
	•	WATER METER		
		WATER BACKFLOW DEV		
SAN SEWER LATERAL SAN SEWER MAIN	<u>;</u> ⊠	TEE W/TB		
	l⊗l	GATE VALVE		
RIGHT-OF-WAY	M	CAP W/TB		
——— ——— EASEMENT LINE RETAINING WALL		WATER BEND W/TB		
——————————————————————————————————————				

Legend	
Proposed Asphalt	
Proposed Concrete	.*
Asphalt Grind & Overlay	

GENERAL NOTES APPLICANT: 9317 LLC **Contact: Luke Sasse** 9321 NE 72nd Ave. Bldg C # 7 Vancouver, WA 98665 Office (360) 449-0099 Email: luke@timberlandinc.com

OWNER: ECM Riverside, LLC **Contact: Sid Constantinescu** 340 Oswego Point Drive #208 Lake Oswego, OR 97034 PH: (425) 462-6372

Email: Sconstantinescu@paccrestrealty.com

CIVIL ENGINEER: PLS Engineering Contact: Travis Johnson, PE 2008 C Street Vancouver, WA 98660 PH: (360) 944-6519 travis@plsengineering.com

SITE ADDRESS: Parcel # 986028-825 34512 NW Pacific Hwy La Center, WA 98629

GENERAL CONSTRUCTION NOTES:

A minimum of two (2) full business days prior to beginning construction, the Contractor shall call 1-800-424-5555 (Northwest Utility Notification Center) for location mark-up of existing utilities.

All construction, materials, and workmanship shall conform to the latest standards and practices of the City of La Center and the most recent Edition of the "Standard Specifications for Road, Bridge, and Municipal Construction" as prepared by WSDOT and APWA.

If any cultural resources are discovered in the course of undertaking a development activity, construction shall stop immediately and the Office of Archeology and Historic Preservation in Olympia and the City of La Center Public Works Department shall be notified. Failure to comply with these requirements may constitute a Class C felony, subject to imprisonment and/or fine.

Existing utilities shown are based on the topographic survey by PLS Engineering and available utility records from the City of La Center. Actual utilities, shall be field verified as far as location and depth.

Disprepancies between these drawings and actual field conditions should be reported to the engineer who will address the resolution of such discrepancies. Work done by the contractor after discovery of discrepancies is completed at the contractor's risk.

The contractor shall keep a legible approved set of plans on the project site at all times.

Any significant deviations from the plans will require approval from the project engineer and the City of La Center.

The contractor shall perform all work necessary to complete this project in accordance with the plans including such incidentals as may be necessary to meet applicable agency requirements.

The contractor shall maintain full compliance with all safety and pollution regulations as applicable to the

The contractor may be required to provide flagging, signs, and other traffic control devices for safe access onto public streets and for utility work in public right-of-way. All such devices shall conform to the standards established in the latest adopted edition of the "Manual on Uniform Traffic Control Devices (MUTCD)" published by the US Department of Transportation and the modifications to the MUTCD for streets and highways for the State of Washington.

Any curb, gutter, sidewalk, or asphalt in City right-of-way damaged during construction shall be repaired to City of La Center standards.

If any survey monuments or property corner markers are compromised, they shall be replaced, and a new survey boundary shall be recorded.

Boundary and topographic information provided by the owner. Exact location of existing infrastructure to be verified by Contractor.

Existing utilities shown on the plans are based on available information, and no guarantee is implied as to location accuracy and the existence or nonexistence of other utilities. Contractor shall field locate all existing utilities prior to construction.

All pavement shall be straight cut prior to paving. Existing pavement shall be removed as necessary to provide a smooth transition for both ride and drainage.

Contractor shall report all damages immediately to the project engineer at (360) 944-6519 or contact the inspector on the job. Any damage to structures in the public right-of-way will need to be repaired to the City of La Center standards.

Any significant deviations from the plans will require a request from the applicant's engineer and approval by the City's engineer and City inspector.

The applicant may be required to provide flagging, signs, and other traffic control devices for safe truck access onto public streets. All such devices shall conform to the standards established in the latest adopted edition of the "Manual on Uniform Traffic Control Devices" (MUTCD) published by the U.S. Department of Transportation and the Modifications to the MUTCD for Streets and Highways for the State of Washington.

The property owner/developer shall be responsible for obtaining all applicable permits including but not limited to permits for hydrostatic tests and dewatering discharges prior to commencing construction.

A City of La Center grading permit is required prior to beginning construction activities.

Survey Monuments shall be placed at all street intersections. Per LCMC, the monuments shall be brasss and will be housed inside monument boxes.

Vegetation should be cleared and topsoil stripped from areas identified

for structural facilities and site grading. Vegetation, other organic material, and debris should be removed from the site. Stripped topsoil should also be removed or used only as landscape fill in nonstructural areas with slopes less than 25 percent. The stripping depth is anticipated to vary from approximately 6 to 12 inches in proposed development areas. Stripped topsoil should be stockpiled prior to removal or placed in a separate designated location away from other material. The post-construction maximum depth of topsoil or landscaped fill placed or spread at any location onsite should not six inches (6").

SITE GRADING AND PAVING

Site grading activities should be performed in accordance with requirements specified in the most current version of the International Building Code (IBC), Chapter 18 and Appendix J, subject to any exceptions identified by the project geotechnical engineer.

All excavations should be made in accordance with applicable Federal and State Occupational Safety and Health Administration regulations.

For general site grading; contour lines, spot elevations and general drainage flow defined by slopes and swales have been shown. The elevations shown are minimum elevations required to promote drainage in a controlled drainage pattern. Any deviation from this grading plan shall first be coordinated with the Engineer.

Contractor shall comply with all City of La Center requirements such as; a drainage erosion control plan, a schedule of construction operations and any other pertinent data relative to site earth work.

The Contractor shall notify the City of La Center Public Works five (5) business days prior to starting any grubbing, grading or stockpiling

Exposed subgrade soils on areas to receive structural fill should be scarified to a depth of 8 inches.

A geotechnical engineer shall be consulted regarding any placement of structural fill. Contractor shall follow recommendations provided by the geotechnical engineer as to structural fill material, placement, and compaction

All work to be completed within the City of La Center right-of-way shall conform to City requirements.

All deleterious materials generated during site grading and strippings not utilized in the final ground cover operation shall be hauled from the site to a contractor provided legal and permitted waste/dump site.

All surfaces shall be graded smooth and free of irregularities that might accumulate surface water.

All grading operations and disturbed surface stabilization shall be in accordance with the project Grading and Erosion Control Plans.

The contractor shall remove all silt and debris resulting from this work which has been deposited in drainage facilities, roadways and other areas immediately after each rainfall event. The cost incurred for any necessary remedial action shall be payable by the contractor.

Best management practices (BMP) shall be employed at all times to the maximum extent practicable to prevent damage by sedimentation, erosion or dust to streams, water courses, natural areas and the property

EROSION AND SEDIMENT CONTROL

See City of La Center Standard Plan ER-1A and ER-1B for standard City erosion prevention and sediment control notes. Those requirements apply to this project in addition to the below requirements.

A Stormwater Pollution Prevention Plan (SWPPP) was prepared for the site by Soil and Water Technologies, Inc. The Certified Erosion & Sediment Colntrol Lead (CESCL(for the project is Seth Chandlee and can be contacted at (360) 281-5406.

Erosion control methods shall comply with the Stormwater Management Manual for Western Washington, Volume 2 and this plan.

Approval of this Erosion and Sediment Control (ESC) plan does not constitute an approval of permanent road or drainage design.

The contractor shall obtain approval from the City of La Center prior to any discharge of construction dewatering groundwater to the City's storm sewer or sanitary sewer.

Any groundwater discharged to the surface or to the storm sewer from construction dewatering shall meet the water quality requirements of the State of Washington.

The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the contractor until all construction is completed and approved, and vegetation is established.

The ESC facilities show on this plan must be constructed and approved by the City of La Center prior to all clearing and grading activities. ESC facilities shall be constructed in such a manner as to ensure that sediment and sediment laden water do not enter the drainage system, roadways, or violate applicable water standards.

Care should be taken to not disturb more area than needed for construction requirements. All disturbed soils surfaces are to be stabilized. Stabilization of disturbed soil areas will consist of: hydroseeding or handseeding, mulching, placing of erosion control blankets or plastic in landscaping soil areas. It will also consist of paving and concrete work in driving, parking and sidewalk areas. All seeded areas are to be fertilized, watered and maintained to enhance the immediate regrowth of vegetation.

Material stockpiles are to be protected from precipitation by the following means:

- Temporary cover piles with tarps or plastic sheeting weighted with tires, lumber or concrete blocks.
- Permanent cover piles with tarps or plastic, or reseed. Perimeter areas around piles are to be surrounded with erosion control filter fabric fences until soils surface is stabilized with reseeding.

The ESC facilities shall be inspected daily by the contractor and maintained as necessary to ensure continuous functioning. Inspection

- and maintenance shall include, but not be limited to: Verifying that all areas are graded such that all runoff is directed to
- Removal of trapped silts at silt barriers, silt traps, or points of

a sedimentation trap facility before discharging to surface.

- Additional protective measures, as required, due to job site conditions.
- Stabilized construction entrances installed at the beginning of construction and maintained for the duration of the project. Monitoring of vehicles leaving the site to minimize transmission of loose soils to the public roadways.
- If sediment is transported onto a road surface, the surface is to be cleaned thoroughly at the end of each day.

The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month or within the 24 hours following a storm

At no time shall more than one foot of sediment be allowed to accumulate within a trapped catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.

This sedimentation and erosion control plan is intended to by utilized as a guide to control the transportation of loose soils from the property that cause water quality and nuisance problems outside of the construction

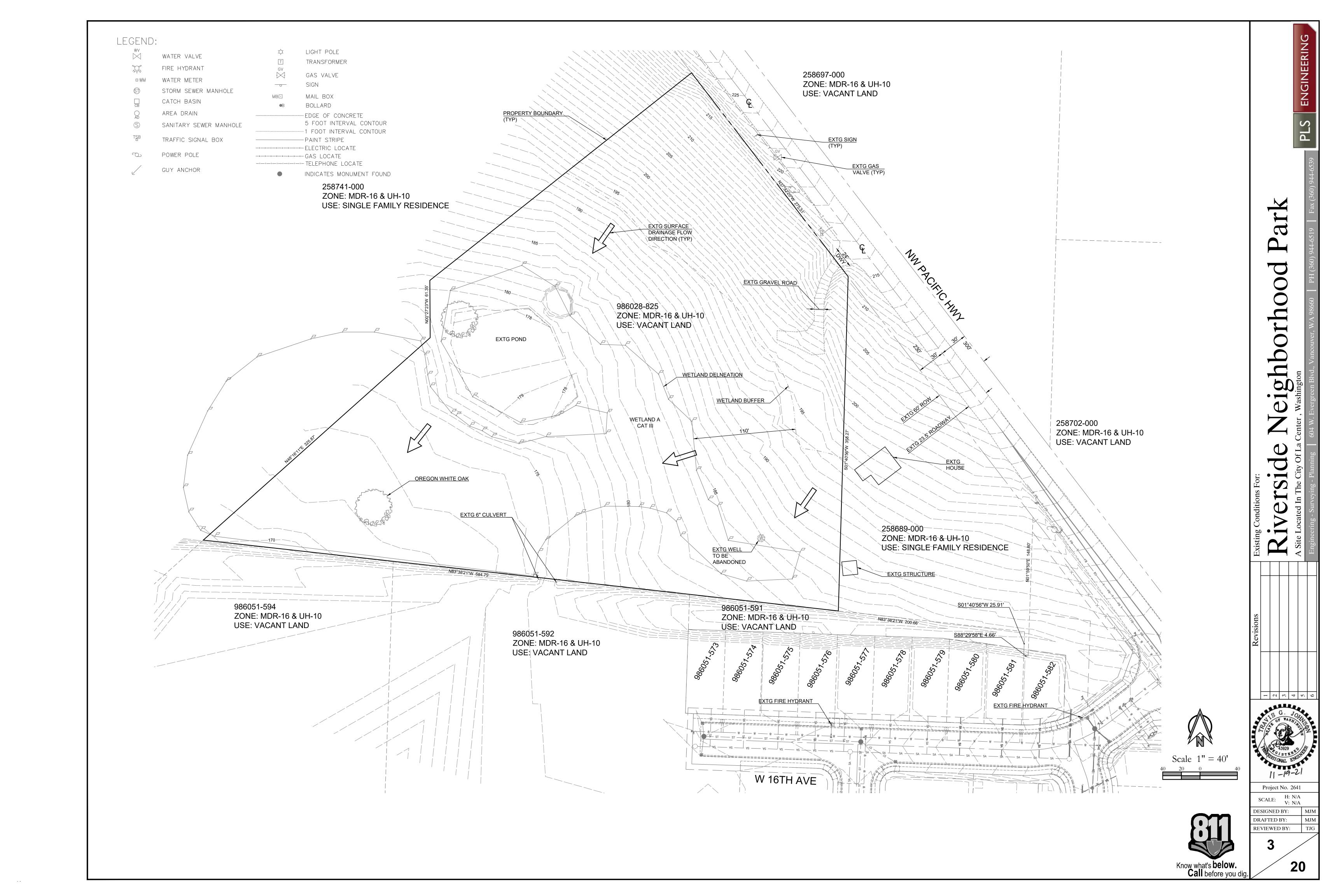
Depending upon the Contractor's construction practices, some portions of the proposed erosion control plan may be varied according to the job site condition. All changes to the plan must be reviewed and approved by the Engineer prior to adjustment.

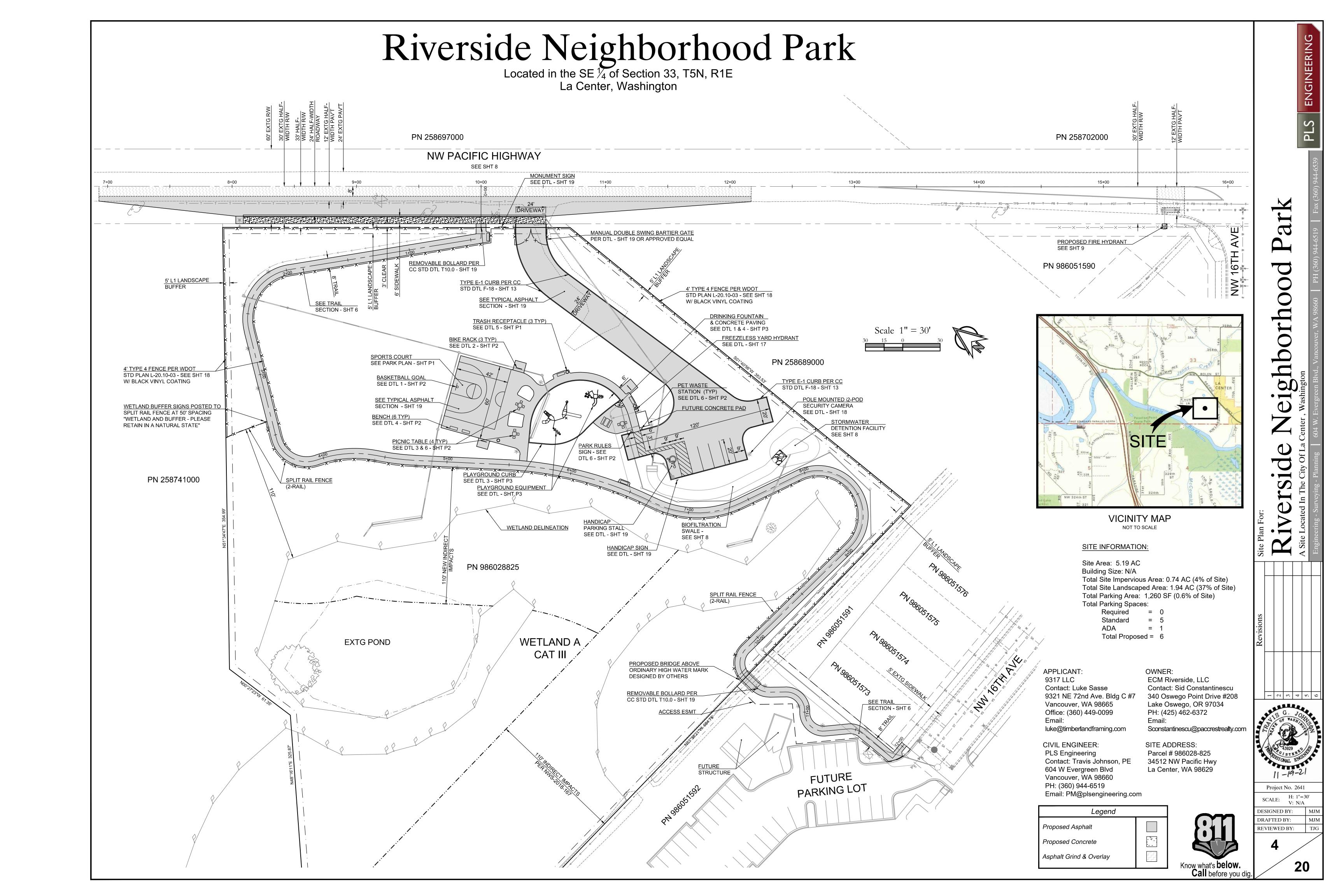
WATER SYSTEM CONSTRUCTION NOTES

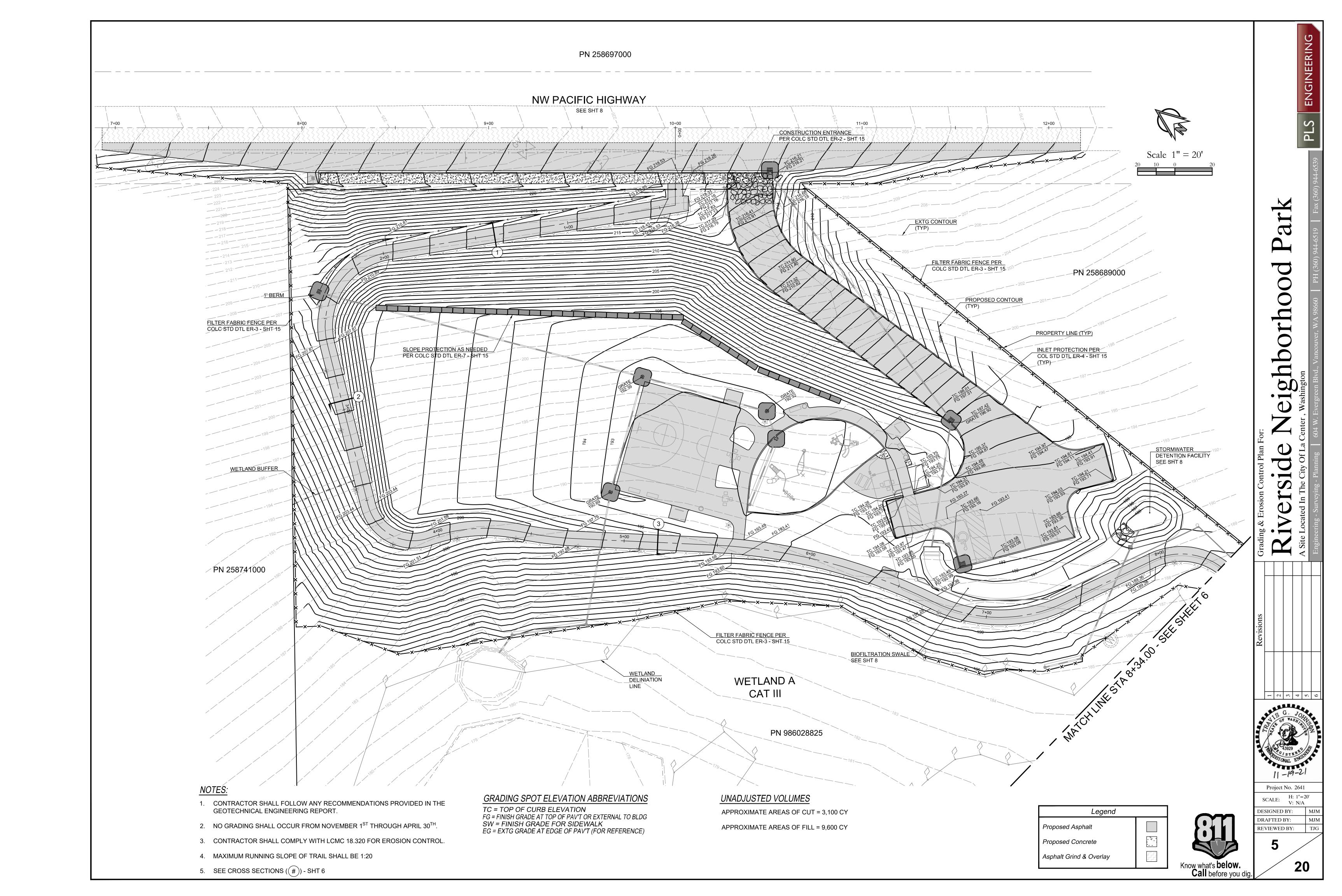
Water system construction, materials, and workmanship for pipes 4" diameter and larger shall conform to the most current version of the "Standard Specifications for Road, Bridge & Municipal Construction" prepared by the WSDOT/APWA, and the standards and practices of Clark PUD. City of La Center details and notes are included as part of these plans.

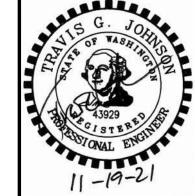
SANITARY SEWER CONSTRUCTION NOTES

Sanitary sewer construction, materials, and workmanship for pipes 4" diameter and larger shall conform to the most current version of the "Standard Specifications for Road, Bridge & Municipal Construction" prepared by the WSDOT/APWA, and the standards and practices of the City of La Center. City of La Center details and notes are included as part of these plans.









Project No. 2641

DESIGNED BY: DRAFTED BY: REVIEWED BY:

SCALE: H: 1"=20' V: N/A

20

NOTES: 1. CONTRACTOR SHALL FOLLOW ANY RECOMMENDATIONS PROVIDED IN THE

GEOTECHNICAL ENGINEERING REPORT. 2. CONTRACTOR SHALL COMPLY WITH LCMC 18.320 FOR EROSION CONTROL.

3. MAXIMUM RUNNING SLOPE OF TRAIL SHALL BE 1:20

4. SEE CROSS SECTIONS ((#)) - THIS SHEET

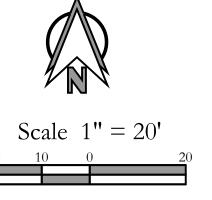
GRADING SPOT ELEVATION ABBREVIATIONS

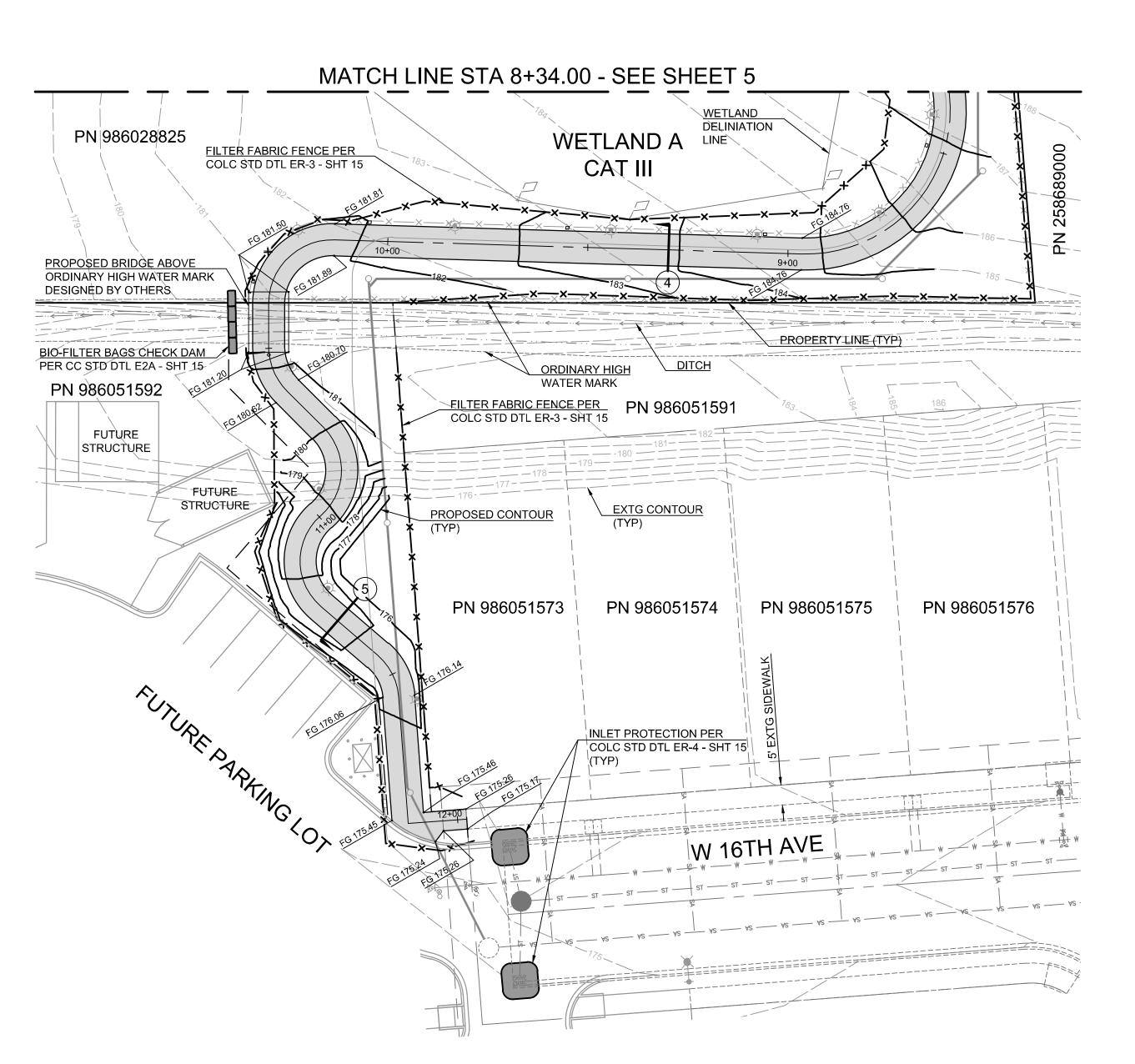
TC = TOP OF CURB ELEVATION FG = FINISH GRADE AT TOP OF PAV'T OR EXTERNAL TO BLDG SW = FINISH GRADE FOR SIDEWALK EG = EXTG GRADE AT EDGE OF PAV'T (FOR REFERENCE)

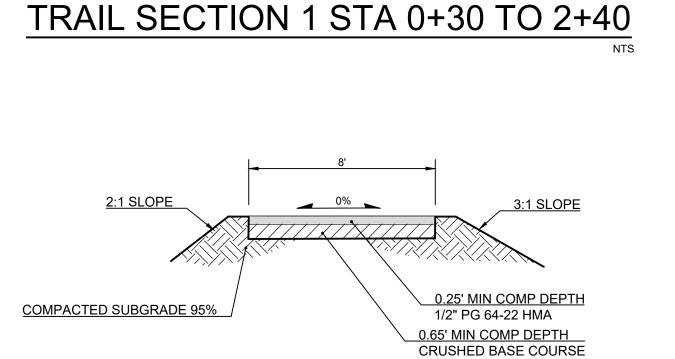
UNADJUSTED VOLUMES

APPROXIMATE AREAS OF CUT = 3,100 CY

APPROXIMATE AREAS OF FILL = 9,600 CY







COLLECTOR DITCH

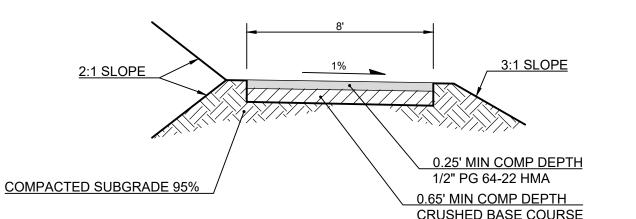
0.25' MIN COMP DEPTH 1/2" PG 64-22 HMA

0.65' MIN COMP DEPTH CRUSHED BASE COURSE

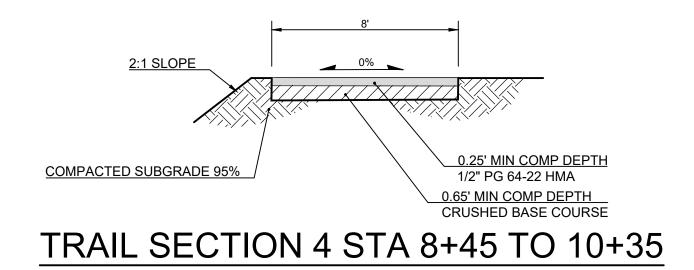
2:1 SLOPE

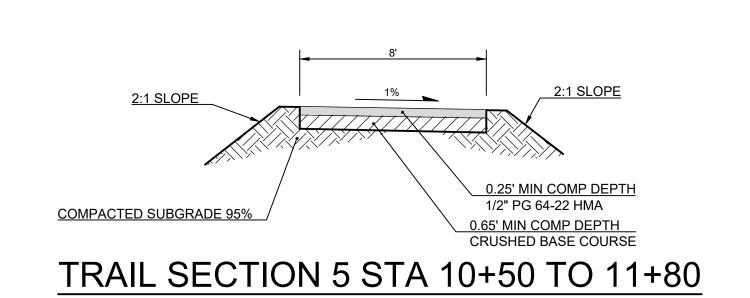
COMPACTED SUBGRADE 95%

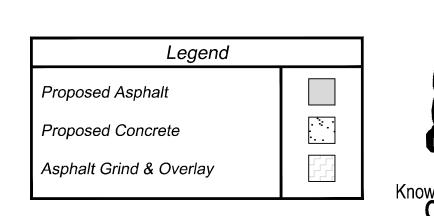
TRAIL SECTION 2 STA 2+45 TO 3+60



TRAIL SECTION 3 STA 3+65 TO 8+40







Project No. 2641

DESIGNED BY: REVIEWED BY:

NOTES:

- 1. CONTRACTOR SHALL FOLLOW ANY RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL ENGINEERING REPORT.
- 2. CONTRACTOR SHALL COMPLY WITH LCMC 18.320 FOR EROSION CONTROL.
- 3. MAXIMUM RUNNING SLOPE OF TRAIL SHALL BE 1:20
- 4. SEE CROSS SECTIONS (#) THIS SHEET

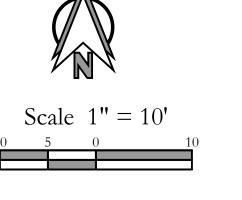
GRADING SPOT ELEVATION ABBREVIATIONS

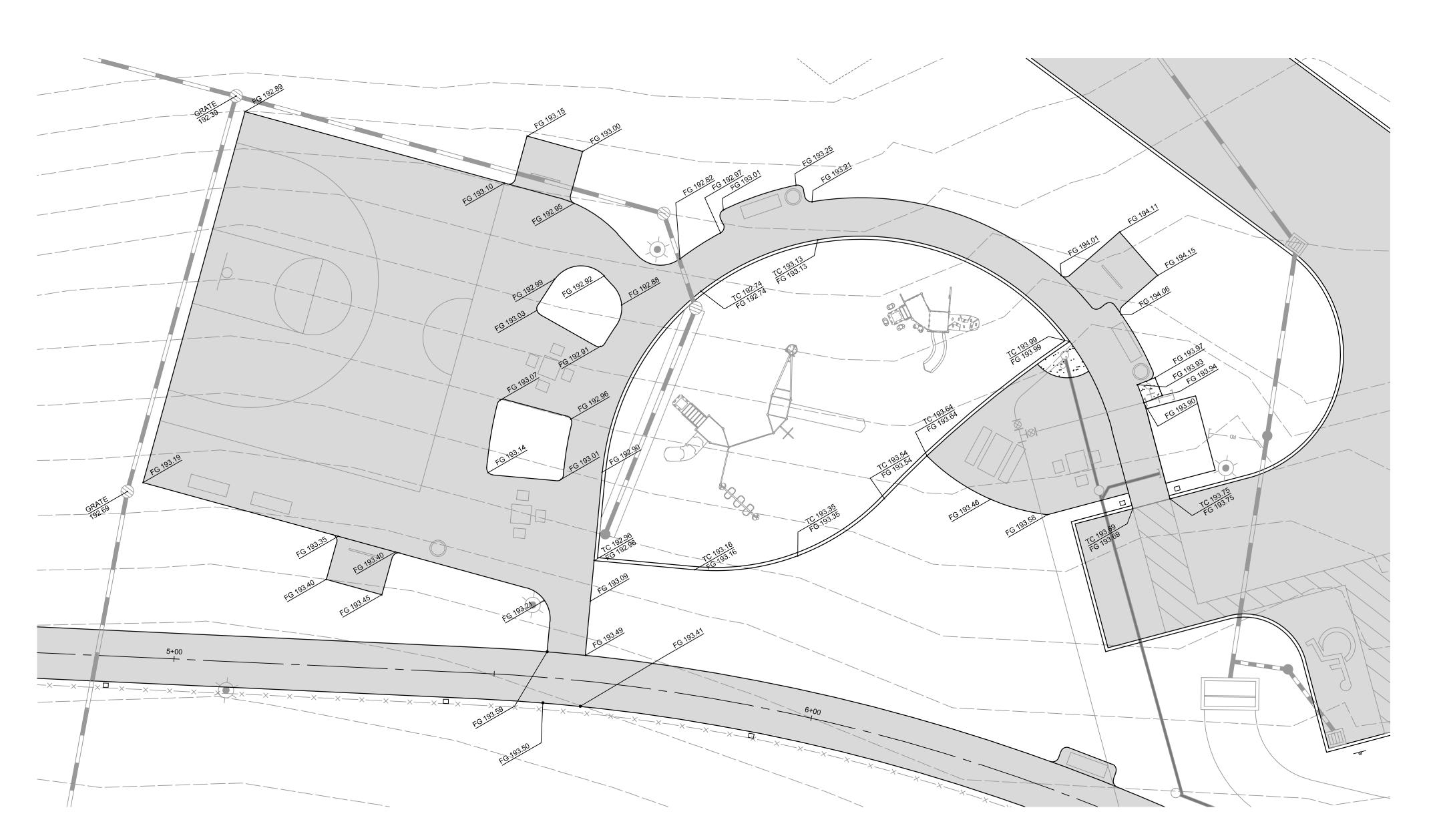
TC = TOP OF CURB ELEVATION
FG = FINISH GRADE AT TOP OF PAV'T OR EXTERNAL TO BLDG
SW = FINISH GRADE FOR SIDEWALK
EG = EXTG GRADE AT EDGE OF PAV'T (FOR REFERENCE)

UNADJUSTED VOLUMES

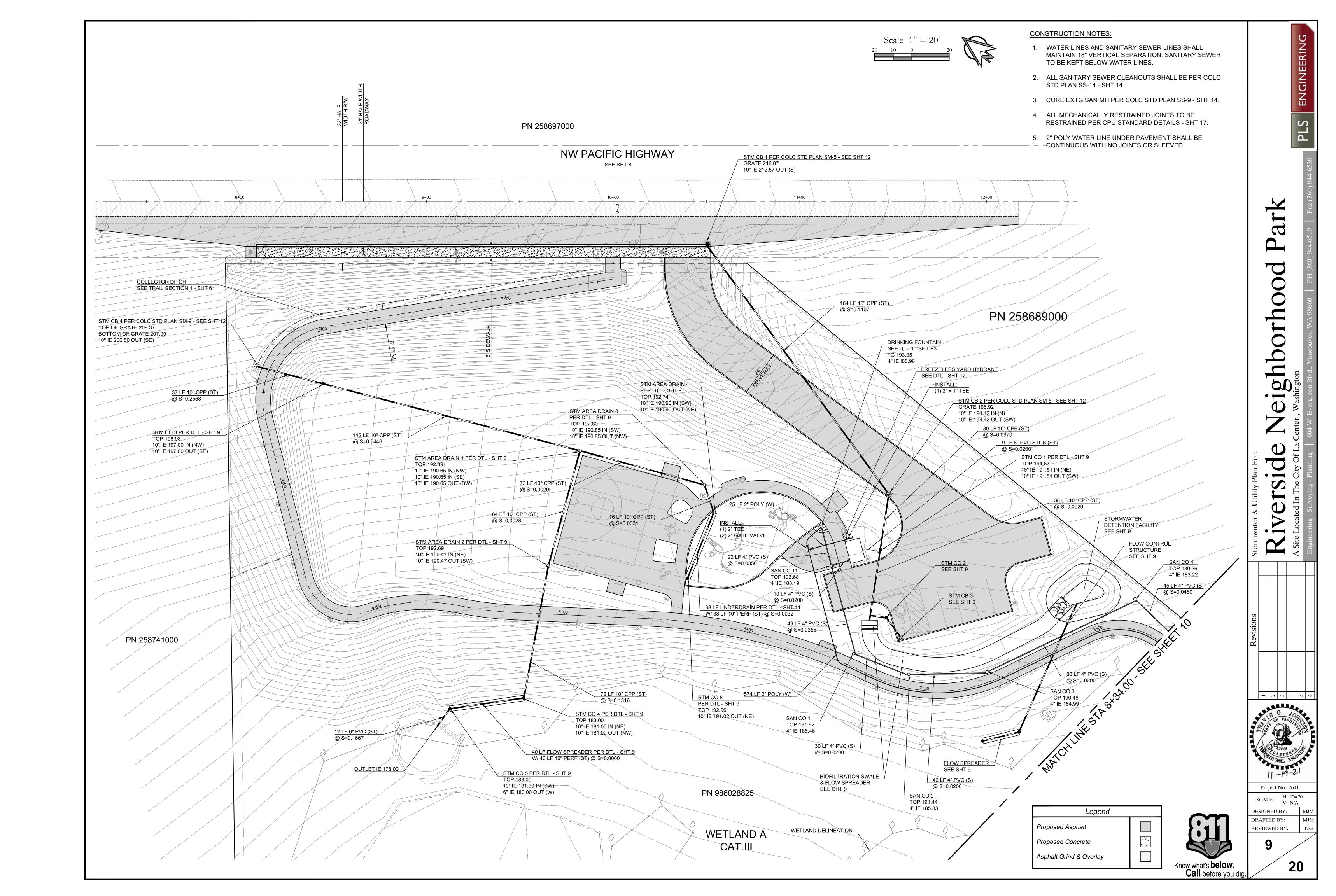
APPROXIMATE AREAS OF CUT = 3,100 CY

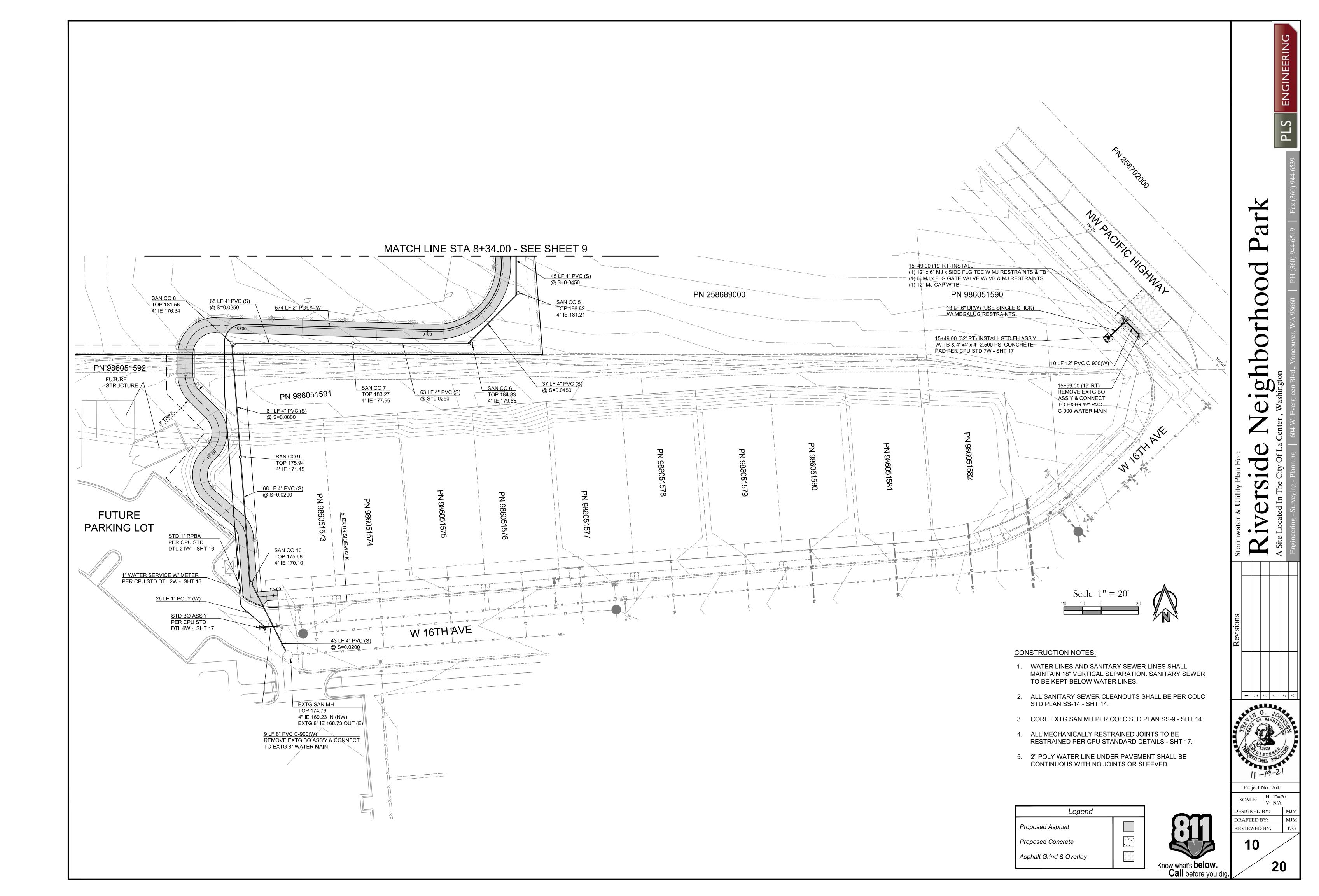
APPROXIMATE AREAS OF FILL = 9,600 CY

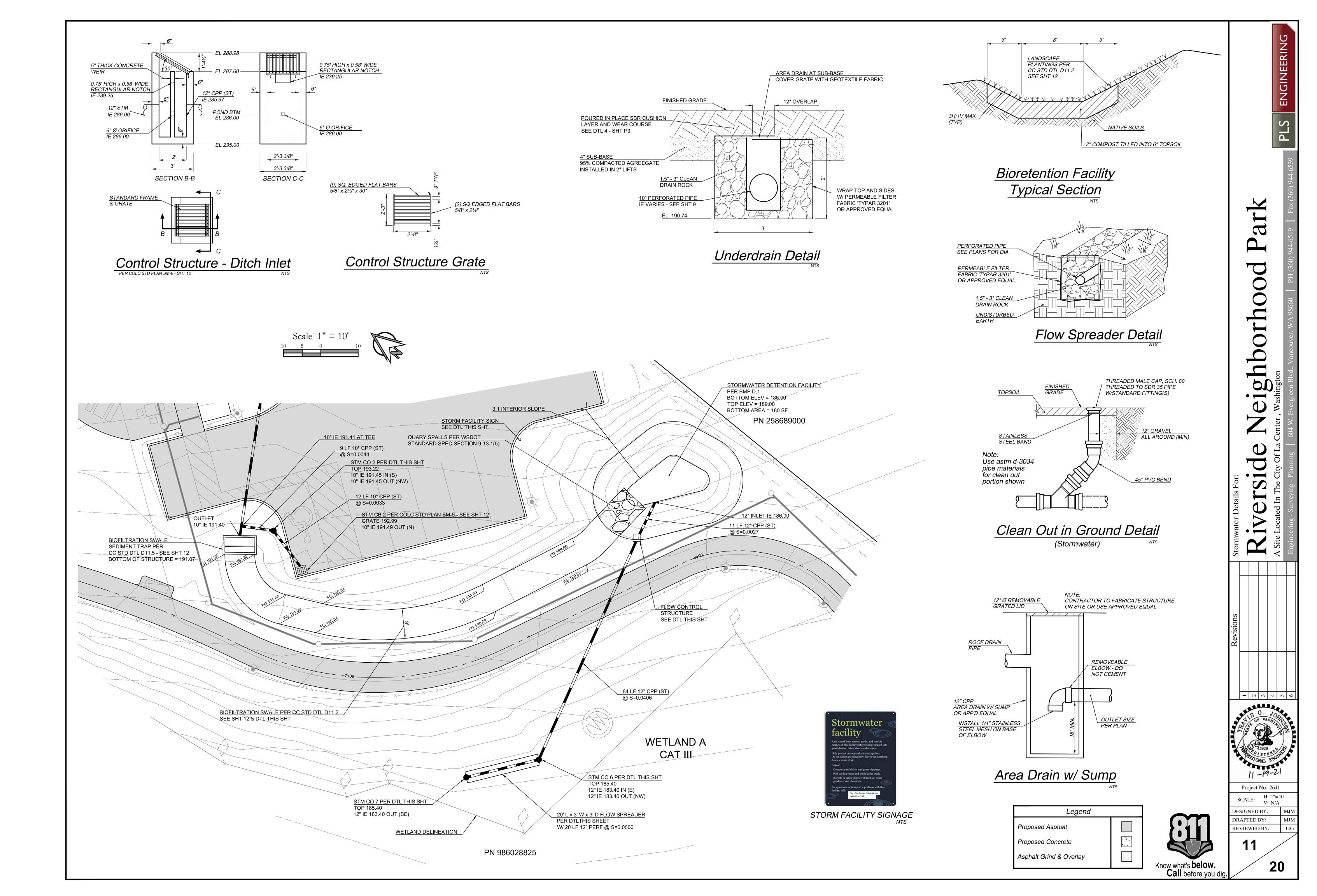




Asphalt Grind & Overlay







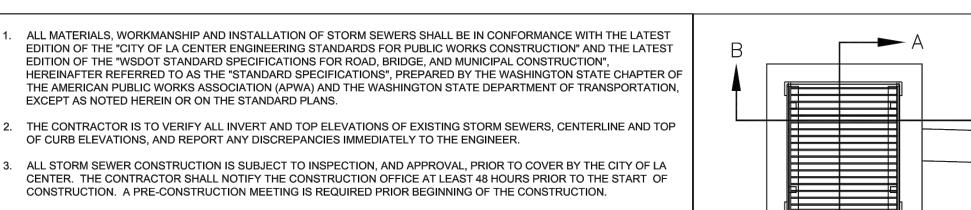
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PLAN #

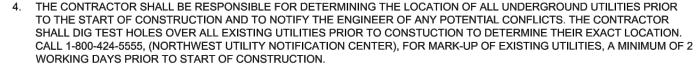
REVISIONS: DATE: DRAWN: DESIGNED:

SCALE: V: N/A DESIGNED BY: DRAFTED BY:

REVIEWED BY:



| REVISIONS: | DATE: | DRAWN: |DESIGNED: |



5. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROCURE ALL APPLICABLE PERMITS, LICENSES AND CERTIFICATES RELATIVE TO THE TRADES TO COMPLETE THE PROJECT AND FOR THE USE OF SUCH WORK WHEN COMPLETED. COMPLIANCE SHALL BE AT ALL LEVELS, FEDERAL, STATE AND CITY, RELATING TO THE PERFORMANCE

6. 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. 7. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE PUBLIC WORKS DEPARTMENT THAT MUST BE
- APPROVED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION. 8. ALL CATCH BASINS AND CURB INLETS SHALL BE STENCILED AS FOLLOWS: "DUMP NO WASTE-DRAINS TO STREAM".
- 9. SIGNS THAT READ: "WATER QUALITY FILTER-PLEASE LEAVE VEGETATED" SHALL BE INSTALLED EVERY 50 FEET ON FENCE OR POSTS ALONG WATER QUALITY BIOFILTRATION SYSTEMS.
- 10. VEGETATION IN BIOFILTRATION SYSTEMS SHALL BECOME FULLY ESTABLISHED PRIOR TO COMMENCING WITH INSTALLATION OF A.C. PAVEMENT FOR ALL AREAS DRAINING INTO THE WATER QUALITY SYSTEM. VEGETATION IN BIOFILTRATION SYSTEMS TO BE THE FOLLOWING GRASS SEED MIX (PROPORTIONS GIVEN BY WEIGHT):
- 40% REDTOP BENTGRASS, 30% RED FESCUE, 20% TALL FESCUE, 5% PERENNIAL RYE, 5% RUSSIAN WILDRYE.
- 11. PIPES OVER 12" DIA. SHALL HAVE A CHILD PROTECTION DEVICE AT INFLUENT END.
- 12. ALL STORM MANHOLES INSTALLED WITHIN AN EASEMENT OR OUTSIDE THE CITY RIGHT-OF-WAY SHALL HAVE LOCKING LID
- 13. MATERIAL CERTIFICATION FOR ALL STORM MANHOLES, CATCHBASINS, AND CURB INLETS SHALL BE PROVIDED TO THE
- 14. ALL ROOF AND LOWPOINT DRAINS TO BE DIRECTED TO APPROVED DRAINAGE PER PLANS.

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

CITY ENGINEER

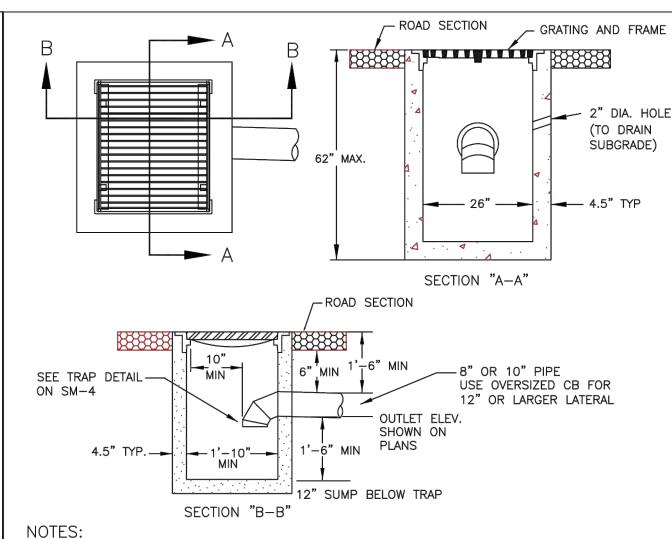
Department of

Public Works

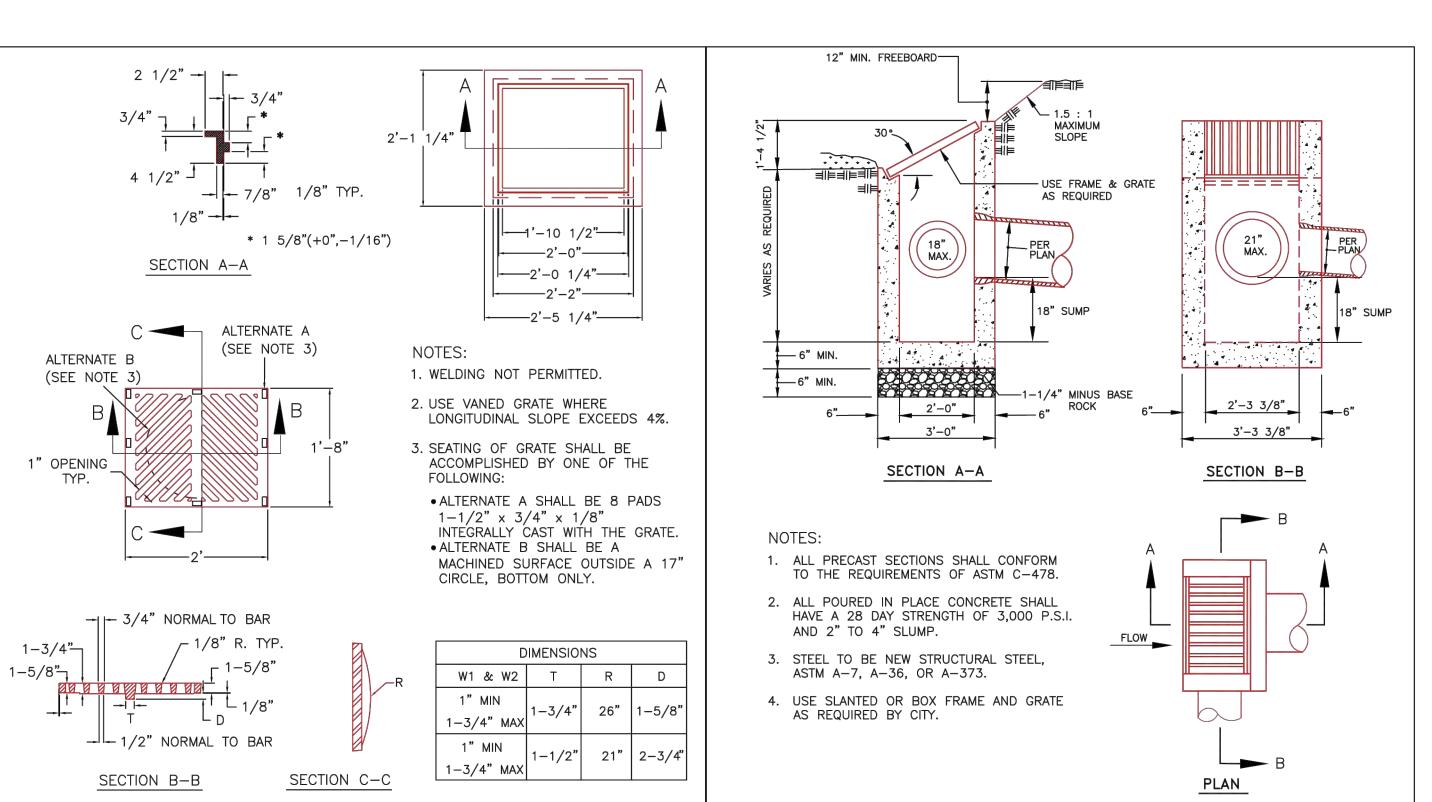
CLARK COUNTY

- 15. ALL TRENCH BACKFILLING WILL CONFORM TO STANDARD DETAIL SS-4. PIPE BEDDING WILL CONFORM TO STANDARD
- 16. ALL STORM SEWER CLEANOUTS WILL MEET THE REQUIREMENTS OF STANDARD DETAIL SS-14.

GENERAL STORMWATER NOTES



- 1. LATERALS WILL BE CONSTRUCTED TO ENTER THE BASIN PERPENDICULAR TO THE BASIN WALL. THE LATERAL WILL ENTER ONLY AT THE FRONT OR SIDE OF THE BASIN WITH NO LATERALS ALLOWED TO ENTER THE CATCH BASIN AT THE CORNERS. IF NEEDED, A BEND MAY BE USED AS THE FIRST SECTION OF PIPE OUTSIDE THE BASIN WALL. THE MAXIMUM BEND ALLOWED IS 45 DEGREES.
- 2. ALL REINFORCED STEEL SHALL HAVE A 1-1/2" CLEAR COVER UNLESS OTHERWISE NOTED, AND SHALL BE GRADE 40 OR GRADE 60 (ASTM A-615) 3. ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE
- WALLS AND GROUTED. 4. THE METAL FRAME AND GRATE SHALL BE SET TO A SLOPE TO CONFORM TO
- THE PARTICULAR DRAINAGE PROBLEM. 5. ELBOW SECTION SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES USING A BALL AND SPIGOT JOINT.



PLAN #

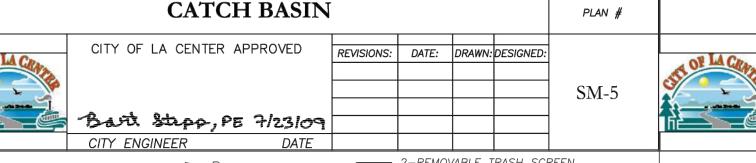
| REVISIONS: | DATE: | DRAWN: DESIGNED:

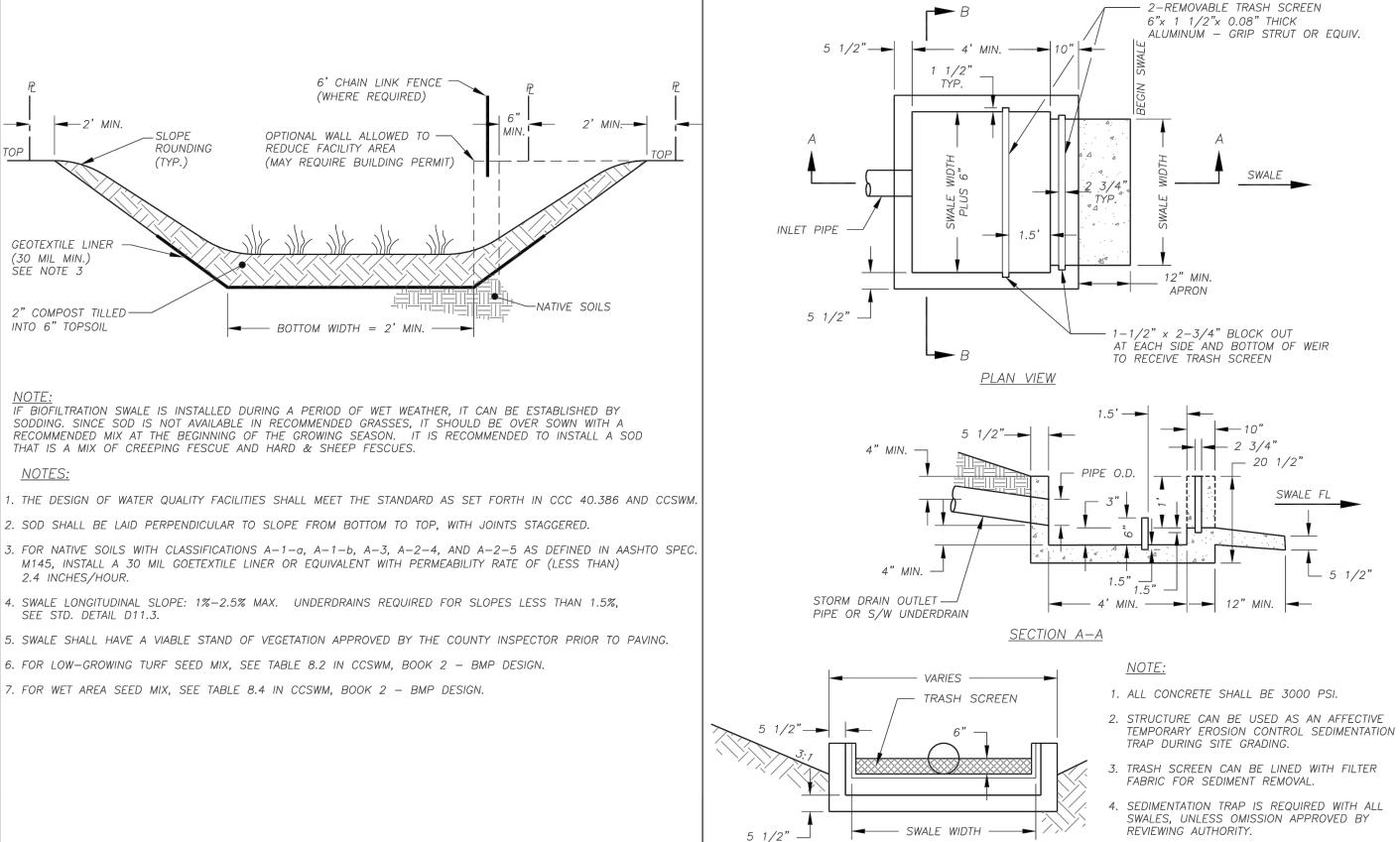
SLOPED FIELD INLET

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

CITY ENGINEER





PLAN #

SM-1



HERRINGBONE GRATE DETAIL

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

CITY ENGINEER

NO. REVISIONS DATE BY TYPICAL BIOFILTRATION SWALE SECTION

01/07/16

SECTION B-B Department of Public Works CLARK COUNTY

BIOFILTRATION SWALE SEDIMENTATION TRAP

NO. REVISIONS DATE BY

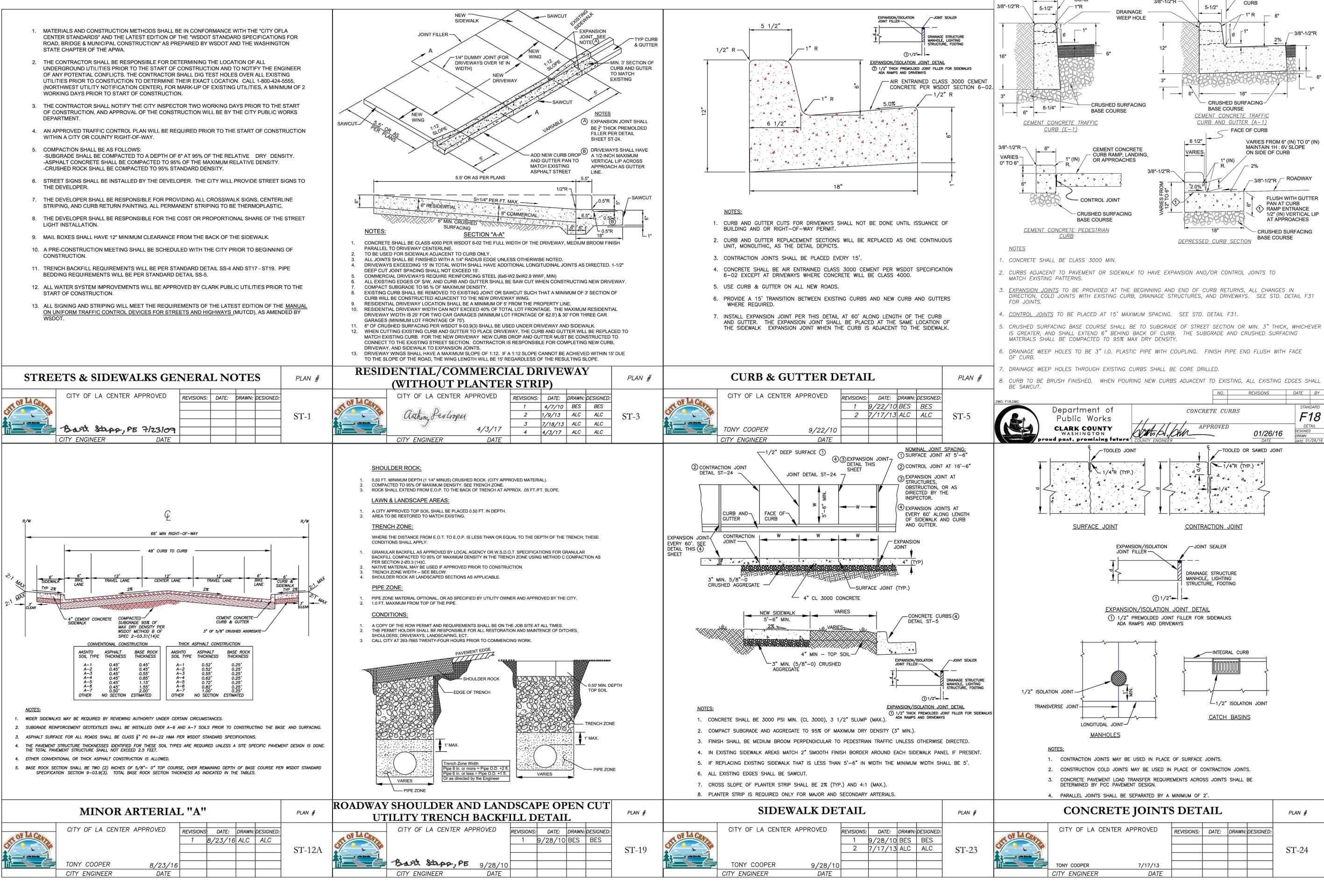
Call before you dig

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Project No. 2641

SCALE: V: N/A

DESIGNED BY: DRAFTED BY: REVIEWED BY:

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Project No. 2641 SCALE: H: N/A V: N/A DESIGNED BY:

DRAFTED BY:

REVIEWED BY:

SANITARY SEWER GENERAL NOTES:

- . ALL MATERIALS, WORKMANSHIP AND INSTALLATION OF SANITARY SEWERS SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE "CITY OF LA CENTER STANDARDS" AND THE LATEST EDITION OF THE "WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION", HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS", PREPARED BY THE WASHINGTON STATE CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, EXCEPT AS NOTED HEREIN OR ON THE STANDARD PLANS.
- . ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO INSPECTION, AND APPROVAL, PRIOR TO COVER BY THE CITY OF LA CENTER. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR BEGINNING OF THE CONSTRUCTION.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS. THE CONTRACTOR SHALL DIG TEST HOLES OVER ALL EXISTING UTILITIES PRIOR TO CONSTUCTION TO DETERMINE THEIR EXACT LOCATION. CALL 1-800-424-5555, (NORTHWEST UTILITY NOTIFICATION CENTER), FOR MARK-UP OF EXISTING UTILITIES, A MINIMUM OF 2 WORKING DAYS PRIOR TO START OF CONSTRUCTION.
- 4. ALL PIPE AND FITTINGS SHALL CONFORM TO LCMC 13.10.150 AND THE FOLLOWING:
- A. POLYVINYLCHLORIDE (PVC) SEWER PIPE 15" DIAMETER OR LESS SHALL CONFORM TO ASTM D3034, SDR 35. PVC PIPE 18" DIAMETER AND LARGER SHALL CONFORM TO ASTM F 679. ALL PVC PIPE SHALL HAVE AN INTEGRAL BELL GASKETED JOINT WITH ELASTOMERIC GASKET AND SHALL BE FURNISHED IN 12-1/2 FOOT LAYING LENGTHS.
- B. DUCTILE IRON (DI) PIPE SHALL CONFORM TO ANSI A21.51 OR AWWA C-151, WITH PUSH-ON JOINTS, UNLESS
- 5. MANHOLES, CLEANOUTS, SERVICE LATERAL CONNECTIONS, TRENCH EXCAVATION, PIPE BEDDING AND STREET RESTORATION, AND APPURTENANCES SHALL CONFORM TO THE DETAILS SHOWN ON THE STANDARD PLANS. ALL OTHER CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARD DETAILS CONTAINED IN THE WSDOT "STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION".
- 6. ALL SANITARY MANHOLES INSTALLED WITHIN AN EASEMENT OR OUTSIDE THE CITY RIGHT-OF-WAY SHALL HAVE LOCKING LID COVERS AND EXTEND ONE FOOT (1') ABOVE GRADE.
- 7. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FOR WORK WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SUBMIT AN APPROVED TRAFFIC CONTROL PLAN. INSIDE THE CITY THIS PLAN SHALL BE APPROVED BY THE CITY OF LA CENTER PUBLIC WORKS DIRECTOR OR DESIGNEE AND OUTSIDE THE CITY IT SHALL BE APPROVED BY THE CLARK COUNTY TRAFFIC ENGINEER (360-397-2446). APPROVAL SHALL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
- 8. ALL PIPES SHALL BE PLUGGED AT THE END OF EACH WORKING DAY.
- 9. ALL TRENCHES SHALL BE FILLED AND COMPACTED UP TIGHT AT THE END OF EACH WORKING DAY.

GENERAL SANITARY SEWER NOTES

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

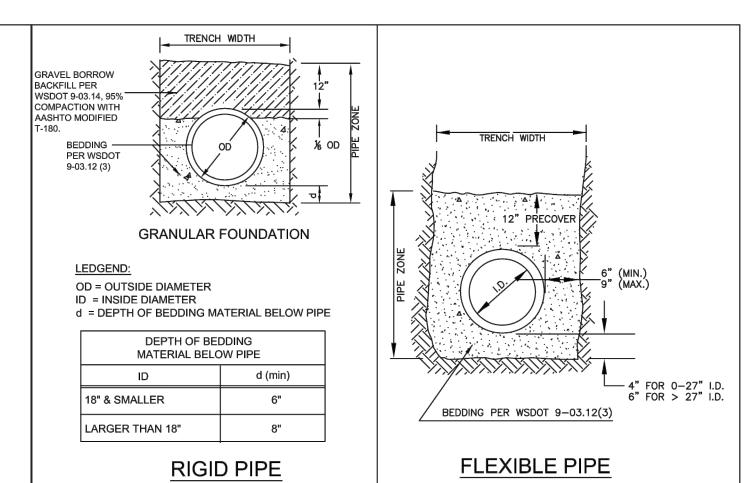
CITY ENGINEER

- 10. A CLEANOUT OR MANHOLE IS REQUIRED AT THE END OF ALL LINES.
- 11. PRE-PAVEMENT AS-BUILTS ARE REQUIRED.

TRAVELED UNIMPROVED STREET ROADWAY SHOULDER PUBLIC STREET UNTRAVELED EASEMENT

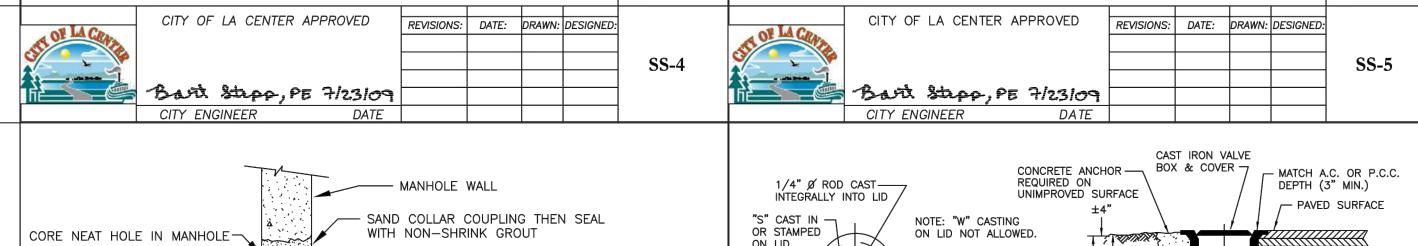
- FOR PIPE ZONE BEDDING, BACKFILL AND COMPACTION REQUIREMENTS, SEE SS-5.
- COMPACTION PERCENTAGES REFER TO RELATIVE DRY DENSITY AS DETERMINED ACCORDING TO STANDARD SPECIFICATIONS SECTION 2-03.3(14)D.
- CONTRACTOR MAY USE UP TO 2-1/2" OF 5/8" 0 OR 3/4" 0 CRUSHED AGGREGATE IN LIEU OF 1-1/4" - 0 BASE ROCK UNDER SURFACING FOR LEVELING COURSE.
- 4. ALL EXISTING PAVED SURFACES SHALL BE SAW CUT A MINIMUM OF 6" OUTSIDE OF EDGE OF TRENCH TO PROVIDE A NEAT STRAIGHT EDGE.
- 5. THE EDGES OF ALL EXISTING ASPHALT SURFACES SHALL BE CLEANED AND A TACK COAT SHALL BE APPLIED. A JOINT SEALER SHALL BE APPLIED AND SHALL CONFORM TO WSDOT STANDARD SPECIFICATIONS, (9-04). ALL JOINTS WILL BE SEALED AND SANDED.
- 6. ALL BACKFILL SHALL BE MECHANICALLY COMPACTED IN LIFTS WHICH IN NO CASE EXCEED

TYPICAL TRENCH BACKFILL

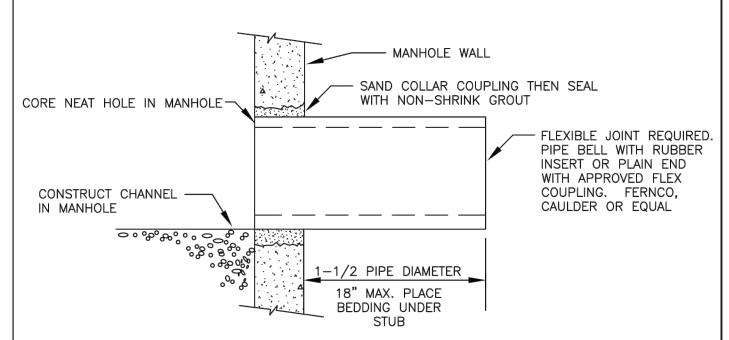


NOTES:

- WHERE DIRECTED BY THE PUBLIC WORKS DIRECTOR, GRANULAR TRENCH FOUNDATIO STABILIZATION SHALL BE PLACED PRIOR TO PLACEMENT OF THE BEDDING. SIZE AND DEPTH ARE DEPENDENT ON SOIL CONDITIONS. BEDDING AND BACKFILL MATERIALS IN THE PIPE ZONE SHALL BE COMPACTED AS SPECIFIED PRIOR TO
- BACKFILLING THE REMAINDER OF THE TRENCH.
- FOR ROCK AND OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVER EXCAVATED A MINIMUM OF 6" AND REFILLED WITH GRANULAR MATERIALS AS DIRECTED BY THE PUBLIC WORKS DIRECTOR. IMPORTED GRANULAR MATERIAL SHALL BE USED FOR UTILITY TRENCH BACKFILL. THE CONTACTOR SHALL NOTIFY
- THE ENGINEER AT LEAST 72 HOURS PRIOR TO USE. THE PUBLIC WORKS DIRECTOR MAY APPROVE, REJECT OR REQUIRE LABORATORY TESTING OF THE MATERIAL. TRENCH WIDTH SHALL NOT EXCEED ONE AND ONE-HALF THE INSIDE DIAMETER OF THE PIPE PLUS 18" AT THE TOP
- APPROVAL FOR SUCH ALTERNATE MATERIALS WILL BE GRANTEDUPON CONFIRMATION BY TEST OF ITS
- COMPLIANCE WITH THESE REQUIREMENTS. ALTERNATIVE PRE-COVER MATERIALS ARE ALLOWABLE FROM PIPE CENTERLINE TO ONE FOOT ABOVE THE TOP OF THE PIPE FOR FLEXIBLE PIPE. ALTERNATE PRE-COVER MATERIALS MUST BE PREAPPROVED BY THE
- INSPECTOR AND MAY BE SAND, CRUSHER SCREENINGS, GRAVEL, OR OTHER CLEAN GRANULAR MATERIAL CONTAINING NO ROCK LARGER THAN 1-1/4" IN LENGTH. PIPE BEDDING (RIGID AND FLEXIBLE PIPE) PLAN #



PLAN #



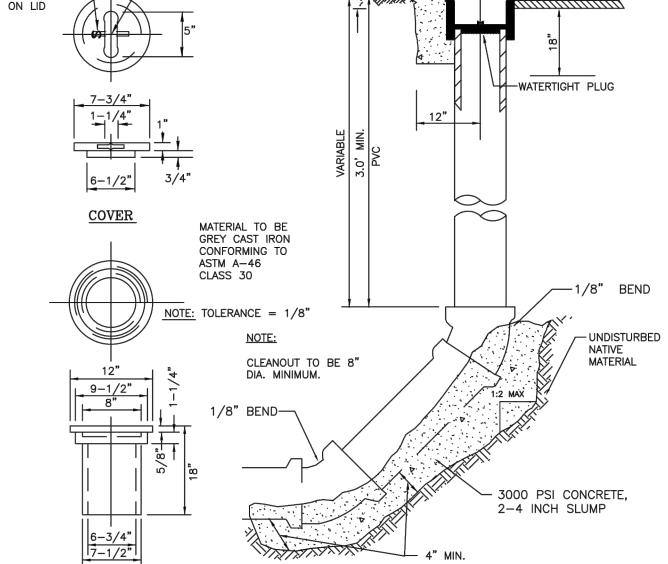
FOUR TYPES OF CONNECTIONS APPROVED:

- 1. CONCRETE PIPE, GROUTED WITH NON-SHRINK GROUT.
- 2. APPROVED EXPANSION TYPE RUBBER BOOT; KOR-N-SEAL OR SEALTITE, (NO FLEX JOINT REQUIRED).
- 3. GPK PVC EPOXY-SAND COATED MANHOLE ADAPTOR, GROUTED WITH NON-SHRINK
- 4. JOHN MANSVILLE GASKETED SLEEVE TRANSITE COUPLING CLASS 100, GROUTED WITH NON-SHRINK GROUT AND SEALED WITH NON-HARDENING NEOPRENE, SILCONE OR BUTYL RUBBER WATERPROOF CAULK NEXT TO GASKET - BOTH SIDES OF MANHOLE.

SS-1

- CENTER STUB OR SLEEVE IN HOLE W/2" GROUTED SPACE ALL AROUND. CORE HOLE 4" LARGER
- THAN O.D. OF STUB OR SLEEVE.
- 2. STANDARD GROUT WILL NOT BE ACCEPTED AS A SUBSITUTE FOR NON-SHRINK GROUT. NON-SHRINK GROUT SHALL BE FIVE STAR, SIKA 212, EUCO N-5 OR AS APPROVED.
- 3. STUB-OUTS INSTALLED FOR FUTURE EXTENSION ARE TO BE PLUGGED AT BOTH ENDS AND MARKED.

MANHOLE CONNECTION DETAILS									PLAN #	
	CITY OF	LA CENTE	R AP	PROVED	REVISIONS:	DATE:	DRAWN:	DESIGNED:		
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#		STANDARD SEWER CLEANOUT									
9	CITY OF LA CONTRACT		A CENTER AP		REVISIONS:	DATE:	DRAWN:	DESIGNED:	SS-14		
		CITY ENGI	Stepp, PE NEER	DATE							

SEWER CLEANOUT

CAST IRON VALVE BOX

AND COVER NO. 910

-1 0 ω 4 ω

Project No. 2641 SCALE: V: N/A

DESIGNED BY: DRAFTED BY: REVIEWED BY:

. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAND DISTURBING ACTIVITY CAUSED BY CLEARING OR GRADING. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR SHALL CALL FOR AN ON-SITE INSPECTION WHEN EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND PRIOR TO COMMENCEMENT OF WORK.

2. THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE SITED, DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS IN THE CITY OF LA CENTER ENGINEERING STANDARDS FOR PUBLIC WORKS CONSTRUCTION.

3. THE DEVELOPER IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES DURING AND AFTER INSTALLATION OF ALL UTILITY WORK ASSOCIATED WITH UTILITY TRENCHES.

4. PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAINAGE INLETS SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREAS PER THE STANDARD DETAILS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREAS. CLEAN THE FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.

5. THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS.

6. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION.

7. TEMPORARY SEEDING AND MULCHING OF FILL SLOPES AND DIVERSION DIKES SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADING.

8. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs). DURING THE PERIOD FROM OCTOBER 1 TO APRIL 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1 TO SEPTEMBER 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN SEVEN (7) DAYS.

9. MATERIAL STOCKPILES ARE TO BE PROTECTED BY THE FOLLOWING MEANS: -TEMPORARY: COVER PILES WITH TARPS OR PLASTIC SHEETING WEIGHTED WITH

CONCRETE BLOCKS, LUMBER OR TIRES. -PERMANENT: COVER PILES WITH TARPS OR PLASTIC, OR RESEED. PERIMETER AREAS AROUND PILES ARE TO BE SURROUNDED WITH EROSION CONTROL FILTER FABRIC FENCES UNTIL SOIL SURFACE IS STABILIZED WITH RESEEDING.

10. THE CONTRACTOR SHALL MAINTAIN ON SITE A WRITTEN DAILY LOG OF EROSION CONTROL BMP MAINTENANCE.

11. IF THE CITY INSPECTOR OR ENGINEER 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 LA CENTER. IF THE BMPs APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, OR PUBLIC RIGHT-OF-WAY, THEN THE CITY SHALL REQUIRE ADDITIONAL BMPs.

12. ALTERNATIVE BMP'S NOT SHOWN IN THESE DETAILS ARE ACCEPTABLE PROVIDED THEY ARE PART OF ECOLOGY'S WESTERN WASHINGTON STORMWATER MANAGEMENT MANUAL AND THE CITY ENGINEER REVIEWS AND APPROVES THE ALTERNATIVE BMP'S AS PART OF THE EROSION CONTROL PLAN PRIOR TO THE START

13. 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. WIDTH OF THE PAD SHALL BE A MINIMUM OF 20 FEET. ALL TRUCKS LEAVING THE SITE SHALL EGRESS ACROSS THE PAD. ACCUMULATED SOIL 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 MUST BE REMOVED IMMEDIATELY.

14. PAVEMENT SWEEPING AND SHOVELING IS REQUIRED. WASHING THE PAVEMENT INTO THE STORM SYSTEM IS NOT PERMITTED.

15. AT SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL, PAD LENGTH MAY BE REDUCED TO 50 FEET.

16. INSTALL SEDIMENT FENCE IN ACCORDANCE WITH DETAIL ER-3 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.

17. CONSTRUCTION ROADS AND PARKING AREAS SHALL BE STABILIZED WHEREVER THEY ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR THE USE OF CONSTRUCTION TRAFFIC.

SINGLE FAMILY LOT ENTRANCES MAY HAVE THE PAD LENGTH REDUCED TO 20 FEET.

18. MAINTAIN AND REMOVE ALL SEDIMENT CONTROLS AS SPECIFIED IN THE STANDARD DETAILS. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, UTILITY TRENCHES AND STORM PIPES PRIOR TO ACCEPTANCE BY THE CITY.

19. SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AND AFTER ANY STORM EVENT PRODUCING RUNOFF. THE INSPECTION FREQUENCY FOR STABILIZED, INACTIVE SITES SHALL BE ONCE EVERY TWO WEEKS OR MORE FREQUENTLY AS DETERMINED BY THE LOCAL PERMITTING AUTHORITY BASED ON THE LEVEL OF SOIL STABILITY AND POTENTIAL FOR ADVERSE ENVIRONMENTAL IMPACTS.

20. 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.

21. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL: -MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.

-SPRAY EXPOSED SOIL AREAS WITH A DUST PALLIATIVE. NOTE: USE OF PETROLEUM PRODUCTS OR POTENTIALLY HAZARDOUS MATERIALS ARE PROHIBITED

EROSION CONTROL GENERAL NOTES II

-SPRINKLE THE SITE WITH WATER UNTIL THE SURFACE IS WET.

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

CITY ENGINEER

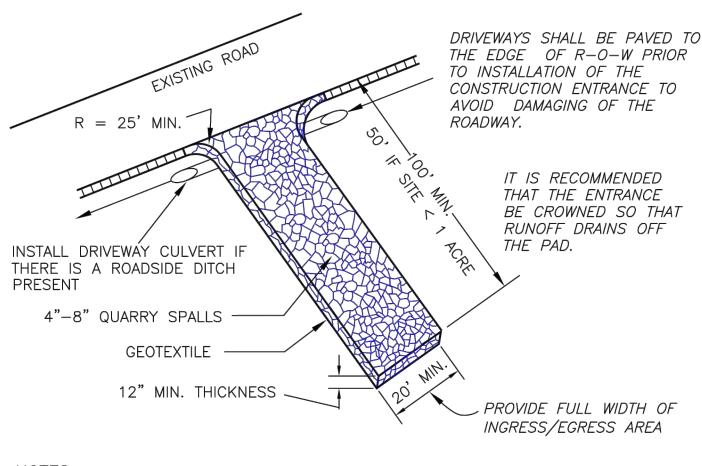
22. EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADING OR GIVEN A PERMANENT COVER TREATMENT WITHIN 30 DAYS OF THE EXPOSURE SHALL HAVE SEED MIX AND MULCH PLACED TO STABILIZE THE SOIL AND REDUCE EROSION SEDIMENTATION. SEEDED AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STAND OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT EROSION WILL BE RESEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED.

23. APPLY AN APPROVED TEMPORARY SEEDING MIXTURE 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.

REVISIONS: | DATE: | DRAWN: DESIGNED:

-MINIMUM 12" OVERLAP

OF SEAMS.



PLAN #

ER-1B

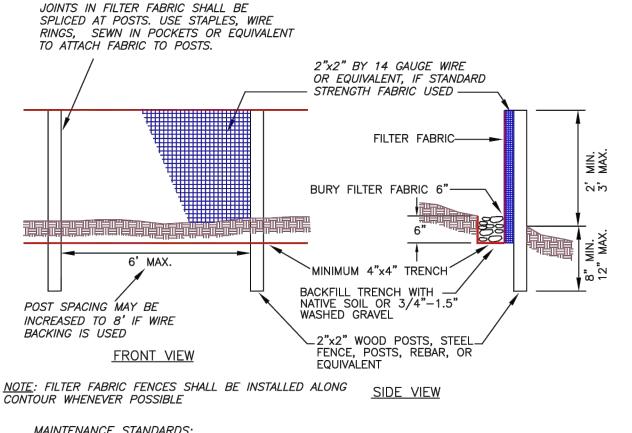
- 1. IF THE ENTRANCE SITS ON A SLOPE. PLACE A FILTER FABRIC FENCE DOWN
- 2. TOP DRESS THE PAD WITH CLEAN 3" MINUS ROCK WHEN THE CONSTRUCTION ENTRANCE BECOMES CLOGGED WITH SEDIMENTS.
- 3. ANY SEDIMENT CARRIED FROM THE SITE ONTO THE STREET SHALL BE CLEANED *UP IMMEDIATELY.*
- 4. IF EQUIPMENT TRAVELS EXTENSIVELY ON UNSTABILIZED ROADS ON THE SITE, A TIRE AND VEHICLE UNDERCARRIAGE WASH NEAR THE ENTRANCE WILL BE NEEDED. PERFORM WASHING ON CRUSHED ROCK. WASH WATER WILL REQUIRE TREATMENT IN A SEDIMENT POND OR TRAP.

STANDARD CONSTRUCTION ENTRANCE

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

CITY ENGINEER



MAINTENANCE STANDARDS:

- 1. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- 2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT POND.
- 3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
- 4. SEDIMENT DEPOSITS SHALL EITHER BE REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-THIRD THE HEIGHT OF THE SILT FENCE, OR A SECOND SILT FENCE SHALL BE INSTALLED.
- 5. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY.

FILTER FABRIC FENCE

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

CITY ENGINEER

1"x 2" WOOD

STAKES SEE NOTE 1-

6" OVERLAP (TYPICAL)

<u>PLAN VIEW</u>

1"x 2" WOOD

<u>PROFILE</u>

Department of

Public Works

CLARK COUNTY

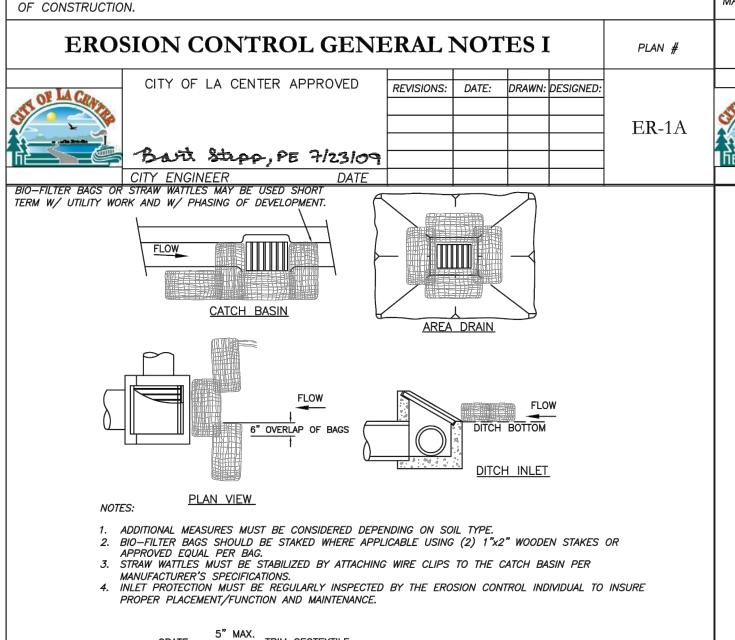
STAKES SEE NOTE 1 -

6. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

DATE

REVISIONS:

DATE: DRAWN: DESIGNED:



SEDIMENT AND DEBRIS

FILTER BAG

3. THE BGID SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).

INLET PROTECTION

CITY OF LA CENTER APPROVED

Bart Stepp, PE 7/23/09

1. SIZE THE BELOW GRATE INLET DEVICE (BGID) FOR THE STORM WATER STRUCTURE IT WILL SERVICE. 2. THE REMOVAL SYSTEM MUST ALLOW RÈMOVÁL OF THE BGID WITHOUT SPILLING THE COLLECTED MATERIAL.

4. THE CONTRACTOR SHALL INSPECT THE BAG AFTER EACH STORM EVENT AND AT REGULAR INTERVALS.
5. THE FILTER BAG SHALL BE CLEANED OR REPLACED WHEN THE BAG BECOMES HALF FULL.

GEOTEXTILE-

ISOMETRIC VIEW

REVISIONS: DATE: DRAWN:DESIGNED:

∠FILTERED

CROSS SECTION

CITY ENGINEER

RETRIEVAL SYSTEM

OVERFLOW BYPASS

PLAN #

ER-4

1. PLASTIC SHEETING IS USED TO PROVIDE IMMEDIATE PROTECTION TO SLOPES AND STOCKPILES.

PLASTIC SHEETING

-PROVIDE ENERGY DISSIPATION AT TOE WHEN NEEDED.

- 2. DO NOT USE PLASTIC COVERING UPSLOPE OF AREAS SUCH AS STEEP AND/OR UNSTABLE SLOPES THAT MIGHT BE ADVERSELY
- 3. WHEN POSSIBLE. INSTALL AN INTERCEPTOR DIKE AT THE TOP OF THE PLASTIC TO DIVERT FLOWS AWAY FROM THE PLASTIC.
- 4. TOE-IN THE TOP OF THE SHEETING IN A 6"x6" TRENCH

AFFECTED BY CONCENTRATED RUNOFF.

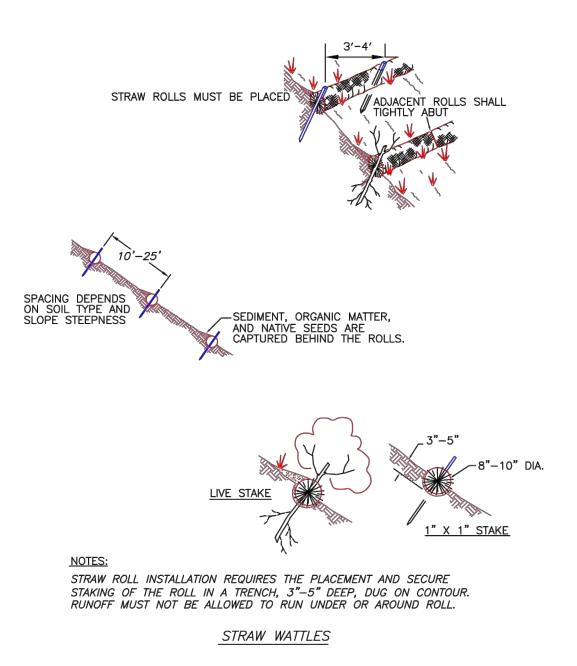
5. INSTALL A GRAVEL BERM, RIPRAP, OR OTHER SUITABLE PROTECTION AT THE TOP OF THE SLOPE IN ORDER TO DISSIPATE RUNOFF VELOCITY.

BACKFILLED WITH COMPACTED NATIVE MATERIAL.

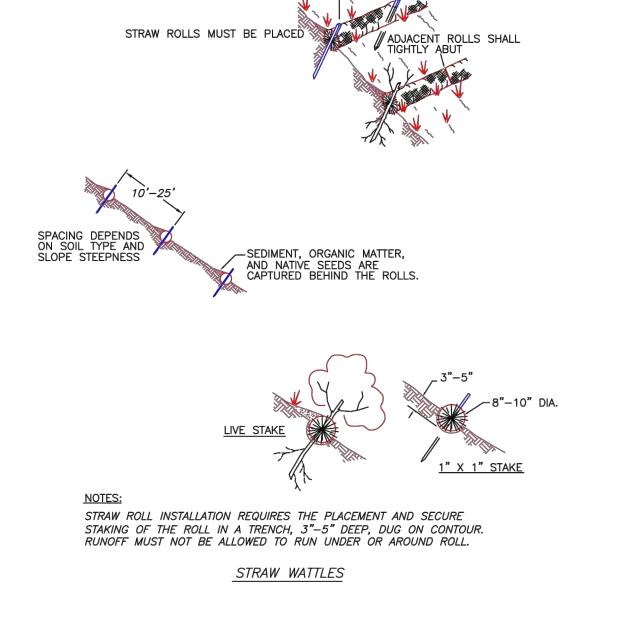
- 6. ANCHOR THE PLASTIC USING SANDBAGS OR OTHER SUITABLE TETHERED ANCHOR SYSTEM SPACED ON A 10' GRID SPACING IN ALL DIRECTIONS.
- 7. OVERLAP SEAMS 1-2', TAPE, ROLL AND STAKE THE SEAMS AND THEN WEIGH DOWN THE ENTIRE LENGTH.
- 8. PROVIDE ENERGY DISSIPATION AT TOE WHEN NEEDED.

CITY ENGINEER

9. REPLACE TORN SHEETS AND REPAIR OPEN SEAMS. COMPLETELY REMOVE AND REPLACE PLASTIC WHEN IT BEGINS TO



STRAW WATTLES BA	PLAN #				
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CITY ENGINEER DATE					

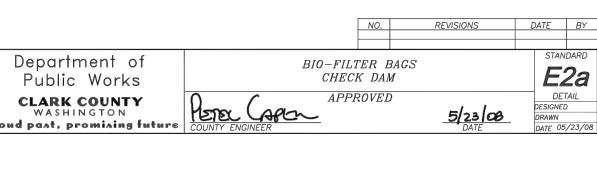


		PLAN #					
	CITY OF LA CENTER	APPROVED 4-4-17	REVISIONS:	DATE:	DRAWN:	DESIGNED:	ER-7
	CITY ENGINEER	DATE					

PLAN #

ER-2

REVISIONS: DATE: DRAWN: DESIGNED:



2. SURFACE MUST BE SMOOTH BEFORE

3. SEE CHECK DAM NOTES STD. DETAIL E2.

APPLICATION.

STAKING OF BAGS REQUIRED USING (2) 1"X2" WOOD STAKES OR APPROVED EQUAL PER BAG.

PLASTIC SHEETING PLAN # CITY OF LA CENTER APPROVED REVISIONS: DATE: DRAWN: DESIGNED: ER-6 Bart Stepp, PE 7/23/09



Project No. 2641

SCALE: V: N/A DESIGNED BY: DRAFTED BY: REVIEWED BY:

1. INSTALL WATER MAIN WITH 3.0 FEET OF MINIMUM COVER UNLESS OTHERWISE NOTED. DEPTH MAY INCREASE AT UTILITY AND CULVERT

GENERAL INSTALLATION NOTES:

LOCATE WIRE SHALL BE COATED (BLUE INSULATED), NO. 14 GA. SOFT DRAWN SOLID COPPER. USE WATERPROOF CONNECTORS AT ALL WIRE

NEW AND REPAIRED WATER MAINS SHALL BE DISINFECTED PER AWWA C651 PRIOR TO BEING PLACED INTO SERVICE. CONNECTION TO AN

WHENEVER A PIPE IS CUT AND NOT RECONNECTED, THE CUT ENDS SHALL BE CAPPED OR PLUGGED, AS DIRECTED BY THE CPU INSPECTOR.

EXISTING WATER MAIN MAY ONLY BE DONE AFTER PROPER DISINFECTION, TESTING, FLUSHING AND APPROVAL BY CPU.

ALL WATER SERVICES, BLOW-OFF ASSEMBLIES, AIR RELEASE VALVES, FIRE HYDRANT ASSEMBLIES, VALVE BOXES AND THRUST BLOCKING SHALL BE INSTALLED PER THE STANDARD SPECIFICATIONS AND DETAILS.

WATER MAINS BEING INSTALLED NEAR TELEPHONE/CABLE COMMUNICATIONS SHALL HAVE A MINIMUM 12" HORIZONTAL AND 6" VERTICAL

WATER MAINS BEING INSTALLED NEAR UNDERGROUND ELECTRICAL LINES SHALL HAVE A MINIMUM 60" HORIZONTAL AND 6" VERTICAL

8. REQUIRED SEPARATION BETWEEN WATER LINES AND SANITARY SEWER LINES SHALL BE AS FOLLOWS:

HORIZONTAL SEPARATIONS (PARALLEL) A MINIMUM SEPARATION OF TEN (10) FEET (MEASURED EDGE TO EDGE) BETWEEN SANITARY SEWER LINES AND WATER LINES SHALL BE MAINTAINED WHENEVER POSSIBLE. WHEN CONDITIONS PREVENT THE MINIMUM TEN (10) FOOT HORIZONTAL SEPARATION THE ENGINEER SHALL

VERTICAL SEPARATION (PERPENDICULAR) WATER LINES CROSSING SANITARY SEWER LINES SHALL BE LAID ABOVE THE SEWER LINES TO PROVIDE A SEPARATION OF AT LEAST 18" BETWEEN THE INVERT OF THE WATER PIPE AND THE CROWN OF THE SANITARY SEWER PIPE. A LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING AND SHALL BE THE LONGEST STANDARD LENGTH AVAILABLE FROM THE MANUFACTURER.

9. THE CONTRACTOR SHALL USE CONSTRUCTION METHODS THAT PROTECT THE PIPE INTERIORS, FITTINGS AND VALVES AGAINST CONTAMINATION.

10. ANY PIPE, FITTINGS OR VALVES THAT CANNOT BE DISINFECTED WITH THE MAIN LINE BY CHLORINE FOR 24 HOURS SHALL HAVE THE INTERIORS SWABBED WITH A 1% HYPOCHLORITE SOLUTION BEFORE INSTALLATION.

11. CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED AT ALL TEES, BENDS, DEAD ENDS AND WHERE INDICATED ON THE PLANS.

12. ALL MJ FITTINGS SHALL BE RESTRAINED USING MJ MECHANICAL RESTRAINT FOLLOWER GLANDS APPROPRIATE FOR THE PIPE MATERIAL.

13. 6" WATER PIPE LEADING TO FIRE HYDRANTS SHALL BE DIP AND SHALL BE ONE CONTINUOUS PIECE OF PIPE. IF THE RUN IS LONGER THAN ONE PIECE OF PIPE, THEN ALL PIPE JOINTS SHALL BE MECHANICALLY RESTRAINED WITH "FIELD-LOK" GASKETS OR OTHER CPU APPROVED RESTRAINTS. **GENERAL NOTES:**

1. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CLARK PUBLIC UTILITIES (CPU) WATER CONSTRUCTION "SPECIFICATIONS, STANDARD DETAILS AND THE MOST CURRENT EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" PUBLISHED BY WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT).

2. A CPU WATER UTILITY INSPECTOR SHALL BE AT THE JOB SITE DURING CONSTRUCTION OF ALL WATER FACILITIES. CONTACT 360-992-8019 TWO WORKING DAYS PRIOR TO COMMENCING WORK.

3. WORK WITHIN COUNTY RIGHT-OF-WAY SHALL CONFORM WITH CLARK COUNTY PUBLIC WORKS UTILITY PERMIT REQUIREMENTS AND DETAILS. WORK WITHIN STATE RIGHT-OF-WAY SHALL CONFORM TO WSDOT UTILITY PERMIT REQUIREMENTS AND DETAILS.

4. VALVE SHALL BE 2" SQUARE OPERATING NUT OR AS SPECIFIED ON PLANS.

5. THE LOCATION OF THE UTILITIES SHALL BE VERIFIED IN ADVANCE TO ALLOW FOR ALIGNMENT ADJUSTMENTS. CALL UTILITY LOCATES TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION (1-800-424-5555).

ONLY TAPPING COMPANIES APPROVED BY CLARK PUBLIC UTILITIES SHALL BE USED TO MAKE ALL TAPS.

7. ACTUAL ROAD ALIGNMENTS MAY VARY FROM RIGHT-OF-WAY INDICATED. THE CONTRACTOR SHALL VERIFY THE PROPOSED PIPE ALIGNMENT AND REPORT DIFFERENCES TO THE CPU INSPECTOR. ALL ALIGNMENT CHANGES MUST BE APPROVED BY THE CPU INSPECTOR PRIOR TO INSTALLATION.

8. DRIVEWAYS DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO "LIKE" OR BETTER CONDITION. REFER TO PLAN FOR APPROXIMATE LOCATIONS AND TYPES.

9. CONTRACTOR SHALL VERIFY EXISTING UTILITY CULVERTS, CONDUITS AND LINE LOCATION PRIOR TO CONSTRUCTION. DUE TO FIELD CONDITIONS, THI CONTRACTOR SHALL FIELD ADJUST THE VERTICAL AND HORIZONTAL ALIGNMENT OF THE WATER MAIN TO CLEAR THE UTILITY IN CONFLICT AND PROVIDE THE MIN. 3.0 FEET OF COVER AS APPROVED BY THE CPU INSPECTOR. ALL CULVERTS WHICH ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATIONS.

10. FENCES DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED BY THE CONTRACTOR TO "LIKE" OR BETTER CONDITION.

11. CONTRACTOR SHALL VERIFY EXISTING SIGN AND MAILBOX LOCATIONS PRIOR TO CONSTRUCTION. SIGNS & MAILBOXES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RELOCATED BACK FROM EDGE OF PAVEMENT. 1.0 FEET CLEAR OF WATER MAIN. ANY SIGNS OR MAILBOXES DAMAGED SHALL BE REPAIRED OR REPLACED AS PER THE SPECIFICATIONS.

12. THE LOCATIONS OF ALL EXISTING UTILITIES ARE FOR INFORMATIONAL PURPOSES ONLY. MANY LOCATIONS ARE PER SCHEMATIC RECORD DRAWINGS. THE CURRENT AND EXACT LOCATIONS OF FACILITIES MUST BE VERIFIED PRIOR TO CONSTRUCTION. THE CONTRACTOR PERFORMING THE WORK SHALL COMPLY WITH THE PROVISIONS OF FACILITIES AT LEAST 48 BUSINESS DAY HOURS PRIOR TO EXCAVATION. CALL 1-800-553-4344 FOR UTILITY LOCATE SERVICE.

13. THE WATER FACILITIES SHALL BECOME THE PROPERTY OF CLARK PUBLIC UTILITIES AFTER A SATISFACTORY BACTERIA AND PRESSURE TEST HAVE BEEN PERFORMED BY THE UTILITY. ALL MATERIALS AND WORKMANSHIP ARE SUBJECT TO A ONE YEAR WARRANTY, COMMENCING AT ACCEPTANCE OF FINAL TESTING. REPLACEMENT AND/OR REPAIRS OF DEFECTIVE MATERIALS SHALL BE THE DEVELOPERS/OWNERS RESPONSIBILITY.

14. WHEN ASBESTOS CONCRETE PIPE IS ENCOUNTERED, THE CONTRACTOR SHALL SUPPLY WORKERS WHO ARE CERTIFIED TO WORK ON ASBESTOS

15. THE CONTRACTOR SHALL TRANSFER AND/OR ABANDON EXISTING SERVICES AS DIRECTED BY THE INSPECTOR.

16. THE INSTALLED WATER MAIN SHALL BE PRESSURE TESTED AT A MINIMUM OF 200 PSI OR 1.5 TIMES THE WORKING PRESSURE, WHICHEVER IS GREATER. THE TEST WILL BE PERFORMED BY THE CLARK PUBLIC UTILITIES INSPECTOR. THE CONTRACTOR SHALL PROVIDE ASSISTANCE AS NEEDED.

17. THE INSTALLED WATER MAIN SHALL BE THOROUGHLY DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE CLARK PUBLIC UTILITIES STANDARDS AND REQUIREMENTS. ONLY CLARK PUBLIC UTILITIES EMPLOYEES ARE PERMITTED TO FILL AND FLUSH THE WATER MAIN. THE CONTRACTOR SHALL PROVIDE ASSISTANCE AS NEEDED. IN AREAS WHERE THE DE-CHLORINATION OF FLUSHED WATER IS NOT POSSIBLE, THE CONTRACTOR SHALL PROVIDE WATER TRUCKS TO FLUSH INTO.

18. PRIOR TO ACCEPTING THE SYSTEM OR ALLOWING THE MAIN TO BE PUT IN SERVICE, A WATER SAMPLE SHALL BE TAKEN BY THE CLARK PUBLIC UTILITIES INSPECTOR AND A TEST PERFORMED BY AN ACCREDITED LAB TO INSURE NO HAZARD EXISTS.

REVISED 04/17/2020

FILE	NAME		Clark	FILE NA	AME		Clark	FILE NAME			Clark
0-FV		FITTING & VALVE SPECIFICATIONS	Public Public	0-0	GI	GENERAL INSTALLATION NOTES	Public Public	0-	GN	GENERAL NOTES	Public P
SHEET	1 OF 1	STANDARD DETAILS	Utilities	SHEET	1 OF 1	STANDARD DETAILS	<i>Utilities</i>	SHEET	1 OF 1	STANDARD DETAILS	Utilities V
	-						_				

MECHANICAL JOINT RESTRAINT SPECIFICATIONS

AND SHOWN ON THE PLANS.

3. FITTINGS SHALL BE MORTAR LINED AND SEAL COATED.

END AND FLANGED ON THE OPPOSITE END.

WITH ASTM A194 GRADE 2H HEAVY HEX NUTS.

IRON FLANGED JOINT FITTINGS SHALL BE PRESSURE RATED FOR 250 PSI.

MECHANICAL JOINT RESTRAINT SHALL BE ACCOMPLISHED BY A RESTRAINT DEVICE CONSISTING OF A FOLLOWER GLAND UTILIZING MULTIPLE GRIPPING WEDGES. GLAND BODY AND WEDGES SHALL BE DUCTILE IRON AND EPOXY COATED.

1. PIPE FITTINGS SHALL BE GRAY-IRON OR DUCTILE IRON AND SHALL CONFORM TO AWWA STANDARD C110. DUCTILE IRON

(COMPACT) FITTINGS CONFORMING TO AWWA STANDARD C153 MAY BE SUBSTITUTED IN LIEU OF AWWA C110 FITTINGS FOR

2. DUCTILE IRON AND GREY IRON MECHANICAL JOINT FITTINGS SHALL BE PRESSURE RATED FOR 350 PSI. DUCTILE IRON AND GREY

BELOW GROUND USE FLANGE ADAPTERS - THE FLANGE ADAPTER TO CONNECT PLAIN END PVC PIPE OR DIP TO FLANGED FITTINGS SHALL BE A DUCTILE IRON FITTING CONFORMING TO ANSI/AWWA C153/A21.53. FITTING SHALL BE MECHANICAL JOINT ON ONE

5. DUCTILE IRON AND GREY IRON SOLID SLEEVES SHALL BE OF THE LONG BODY DESIGN AND BOTH ENDS MECHANICAL JOINT.

7. MECHANICAL JOINT GASKETS SHALL BE STANDARD STYRENE BUTADIENE RUBBER (SBR) GASKETS

STANDARD C550 AND SHALL BE SUITABLE FOR POTABLE WATER SERVICE AND NSF CERTIFIED.

6. GASKETS FOR FLANGED JOINTS SHALL BE 1/8" THICK, FULL FACED WITH AT LEAST (3) BULB TYPE RIBS MOLDED INTO BOTH FACES.

BOLTS AND NUTS SHALL BE CARBON STEEL AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 OR ASTM A193 GRADE B7

GATE VALVES (4" TO 8") - GATE VALVES FOR BURIED SERVICE SHALL BE THE RESILIENT-SEAT TYPE, WITH AN IRON BODY, NON-RISING STEM, BOLTED BONNET, LEFT OPENING AND SHALL CONFORM TO AWWA STANDARD C509 AND C515. THE WEDGE

10. BUTTERFLY VALVES (10" AND LARGER) - BUTTERFLY VALVES SHALL BE SHORT BODY CLASS 250 VALVES CONFORMING TO THE

SHALL BE TOTALLY ENCAPSULATED WITH RUBBER. ALL GATE VALVES SHALL BE RATED AT 250 PSI FOR AWWA SERVICE. THE

INTERIOR AND EXTERIOR SHALL BE FUSION-BONDED EPOXY AND ALL COATINGS AND/OR LININGS SHALL CONFORM TO AWWA

REQUIREMENTS OF AWWA STANDARD C504. BUTTERFLY VALVES SHALL BE RUBBER SEATED AND TIGHT CLOSING. VALVE BODIES

SHALL BE HIGH STRENGTH CAST IRON OR HIGH STRENGTH DUCTILE IRON. VALVE INTERIOR AND EXTERIOR SURFACES SHALL BE

COATED WITH EPOXY IN ACCORDANCE WITH AWWA C504 AND SHALL BE SUITABLE FOR POTABLE WATER SERVICE AND NSF 61

FITTING SIZES 3-INCHES THROUGH 24-INCHES IN DIAMETER. FITTINGS SHALL BE MECHANICAL JOINT OR FLANGED AS REQUIRED

T-BOLTS AND NUTS SHALL BE HIGH STRENGTH LOW ALLOY STEEL T-BOLTS AND STEEL SHALL MEET AWWA C111 COMPOSITION

RESTRAINT GLAND SHALL UTILIZE A STANDARD MECHANICAL JOINT GASKET.

4. THE FOLLOWING IS THE APPROVED LIST OF RESTRAINED JOINT SYSTEMS FOR MECHANICAL JOINTS AND DIP:

4.1 "ROMAGRIP", ROMAC INDUSTRIES.

"SERIES 1000 TUFGRIP", TYLER UNION. "MEGALUG", EBAA IRON, INC.

APPROVED EQUIVALENT

5. THE FOLLOWING IS THE APPROVED LIST OF RESTRAINED JOINT SYSTEMS FOR MECHANICAL JOINTS AND PVC:

"ROMAGRIP FOR PVC", ROMAC INDUSTRIES.

"SERIES 2000 FOR PVC TUFGRIP", TYLER UNION.

"MEGALUG SERIES 2000 PV", EBAA IRON, INC.

APPROVED EQUIVALENT

DUCTILE IRON PIPE RESTRAINED JOINT SPECIFICATIONS

PIPE JOINT RESTRAINT FOR DIP SHALL BE ACCOMPLISHED WITH A PIPE BELL/SPIGOT INTEGRAL LOCK MECHANISM. AS AN ALTERNATIVE AND WHERE ALLOWED BY CLARK PUBLIC UTILITIES, A BOLTLESS RESTRAINING GASKETS FOR DIP TYTON JOINT STYLE PIPE MAY BE USED. THE RESTRAINT GASKET SHALL BE A BOLTLESS GASKET WITH INTEGRAL RESTRAINING SYSTEM UTILIZING STAINLESS STEEL PARTS AND SHALL BE PRESSURE RATED FOR 350 PSI. THE GASKETS SHALL BE IN CONFORMANCE WITH ANSI/AWWA C111/A21.11

AND CERTIFIED TO NSF/ANSI 6. THE FOLLOWING IS THE APPROVED LIST OF DIP PIPE JOINT RESTRAINED GASKET SYSTEMS:

"FIELD LOK 350 GASKET", U.S. PIPE AND FOUNDRY CO.

"GRIPPER GASKET", GRIPPER GASKET LLC.

2.3 APPROVED EQUIVALENT

PVC PIPE RESTRAINED JOINT SPECIFICATIONS

 PVC PIPE JOINT RESTRAINT FOR MAY BE ACCOMPLISHED BY UTILIZING A PROPRIETARY PVC PIPE WHICH UTILIZES A PIPE BELL/SPIGOT INTEGRAL JOINT RESTRAINT MECHANISM. THE FOLLOWING IS THE APPROVED LIST OF PROPRIETARY PVC C-900 PIPE JOINT RESTRAINED

"EAGLE LOC 900", JM EAGLE

"CERTA-LOK C900/RJ", CERTAINTEED

"DIAMOND LOK-21", DIAMOND PLASTICS INC.

"RIEBERLOK" GASKET

SHEET

1.4 APPROVED EQUIVALENT

AS AN ALTERNATIVE, PVC PIPE MAY BE COUPLED TO CREATE A RESTRAINED JOINT BY UTILIZING A GREY IRON OR DUCTILE IRON MECHANICAL JOINT LONG PATTERN SLEEVE WITH A RESTRAINT FOLLOWER GLAND UTILIZING MULTIPLE GRIPPING WEDGES.

EXISTING WATER SERVICES:

REVISED 04/17/202

THE CONTRACTOR SHALL TRANSFER, MOVE AND/OR ABANDON EXISTING WATER SERVICES AS DIRECTED BY THE CLARK PUBLIC UTILITIES

EXISTING WATER SERVICES TO BE ABANDONED SHALL BE EXCAVATED TO THE CORP. STOP AT THE WATER MAIN AND THE CORP STOP SHALL BE CLOSED. THE METER BOX SHALL BE REMOVED AND THE WATER SERVICE LINE CAN BE ABANDONED IN PLACE. THE EXISTING METER SHALL BE RETURNED TO CLARK PUBLIC UTILITIES WATER DEPT. ROAD REPAIR SHALL BE AS REQUIRED BY THE CLARK COUNTY RIGHT OF WAY PERMIT REQUIREMENTS.

WHEN AN EXISTING WATER SERVICE IS TO BE MOVED, THE CONTRACTOR SHALL EXPOSE A PORTION OF THE EXISTING WATER SERVICE SO THAT THE CLARK PUBLIC UTILITIES INSPECTOR CAN EVALUATE THE MATERIAL SIZE AND CONDITION OF THE EXISTING WATER

THE INSPECTOR WILL DETERMINE WHETHER THE WATER SERVICE LINE CAN BE EXTENDED OR SHORTENED. IF THE INSPECTOR DETERMINES THE EXISTING WATER SERVICE LINE IS SUBSTANDARD, THEN A NEW POLYETHYLENE (PE) SERVICE LINE SHALL BE INSTALLED FROM THE WATER

ALL EXISTING WATER SERVICE LINES THAT ARE LESS THAN 1" DIAMETER SHALL BE CONSIDERED SUBSTANDARD AND SHALL BE REPLACED WITH A NEW 1", 1-1/2", OR 2" WATER SERVICE LINE PER CLARK PUBLIC UTILITIES STANDARDS.

MAIN LINE PIPE MATERIAL:

UNLESS OTHERWISE STATED ON THE PLAN, ALL MAIN LINE PIPE SHALL BE EITHER DUCTILE IRON PIPE (DIP), POLYVINYL CHLORIDE PIPE (PVC) OR HIGH-DENSITY POLYETHYLENE PIPE (HDPE). ALL PIPE SHALL BE SUITABLE FOR POTABLE WATER SERVICE IN ACCORDANCE WITH ANSI/NSF 61

A. DUCTILE IRON PIPE SHALL CONFORM TO ANSI A21.51 OR AWWA C151. USE PUSH-ON JOINTS EXCEPT WHERE OTHER JOINT TYPES ARE NOTED ON THE CONTRACT DRAWINGS. ALL DUCTILE IRON PIPE SHALL BE GAUGED FOR DIP 12" DIAMETER AND SMALLER. UNLESS SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS, 3"-12" PIPE SHALL BE PRESSURE CLASS 350 AND PIPE SIZES GREATER THAN 12" DIAMETER SHALL BE THICKNESS CLASS 52.

B. POLYVINYL CHLORIDE (PVC) PRESSURE PIPE (4"-30"). USE UN-PLASTICIZED PVC PLASTIC PIPE WITH INTEGRAL BELL AND SPIGOT JOINTS. USE PUSH-ON JOINTS EXCEPT WHERE OTHER JOINT TYPES ARE NOTED ON THE CONTRACT DRAWINGS. PIPE SHALL MEET THE REQUIREMENTS OF DR 18, UNLESS OTHERWISE NOTED ON THE DRAWING. UNLESS SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS, 4"-12" PIPE SHALL MEET THE REQUIREMENTS OF AWWA C900 AND 14"-30" PIPE SHALL MEET THE REQUIREMENTS OF AWWA C905.

HIGH-DENSITY POLYETHYLENE PIPE (HDPE) SHALL BE BLACK WITH A MINIMUM OF TWO EQUALLY SPACED BLUE COLORED STRIPES EXTRUDED INTO THE OUTER SHELL IN CONFORMANCE WITH THE UNIFORM COLOR CODE (UCC). UNLESS OTHERWISE NOTED ON THE DRAWINGS, PIPE SHALL BE IRON PIPE SIZE (IPS) AND HAVE A WALL-THICKNESS DIMENSION RATIO (DR) OF 9. SMALL DIAMETER PIPE (3/4"-3"), SHALL CONFORM TO ANSI/AWWA C901 AND LARGE DIAMETER PIPE (4"-65") PIPE SHALL CONFORM TO ANSI/AWWA C906.

REVISED 04/17/2020

ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE CLARK PUBLIC UTILITIES (CPU) WATER CONSTRUCTION SPECIFICATIONS, STANDARD DETAILS AND THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD

AND BRIDGE CONSTRUCTION" PUBLISHED BY WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT). A WATER UTILITY INSPECTOR SHALL BE AT THE JOB SITE DURING CONSTRUCTION OF ALL WATER FACILITIES. CONTACT

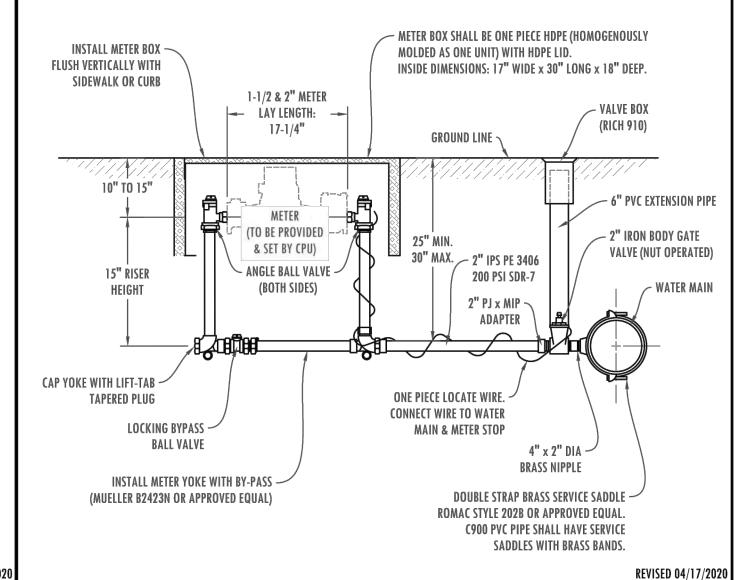
360-992-8019 TWO (2) WORKING DAYS PRIOR TO COMMENCING WORK. WORK WITHIN COUNTY RIGHT-OF-WAY SHALL CONFORM WITH CLARK COUNTY PUBLIC WORKS UTILITY PERMIT REQUIREMENTS AND DETAILS. WORK WITHIN STATE RIGHT-OF-WAY SHALL CONFORM TO WSDOT UTILITY PERMIT REQUIREMENTS AND DETAILS.

THE LOCATION OF THE UTILITIES SHALL BE VERIFIED IN ADVANCE TO ALLOW FOR ALIGNMENT ADJUSTMENTS. CALL UTILITY LOCATES TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION (1-800-553-4344).

A TAPPING COMPANY APPROVED BY CLARK PUBLIC UTILITIES SHALL BE USED TO MAKE ALL TAPS. LOCATE WIRE SHALL BE COATED, NO. 14 GA. SOFT DRAWN SOLID COPPER.

NO CONNECTIONS WILL BE ALLOWED TO AN EXISTING SERVICE PRIOR TO AN APPROVED PURITY TEST. PURITY TEST SHALL PRECEDE PRESSURE TEST. STUB SERVICES SHALL BE PRESSURE TESTED WITH THE MAIN LINE AND BE CAPABLE OF WITH-STANDING THE MAINS TEST

ALL COMPRESSION FITTINGS TO HAVE STAINLESS STEEL INSERTS.



			REVISED O
LE I	NAME		Clark
)-MJ		MECHANICAL JOINT & PIPE JOINT RESTRAINT SPECIFICATIONS	Public
	1 OF 1	STANDARD DETAILS	† Utilities

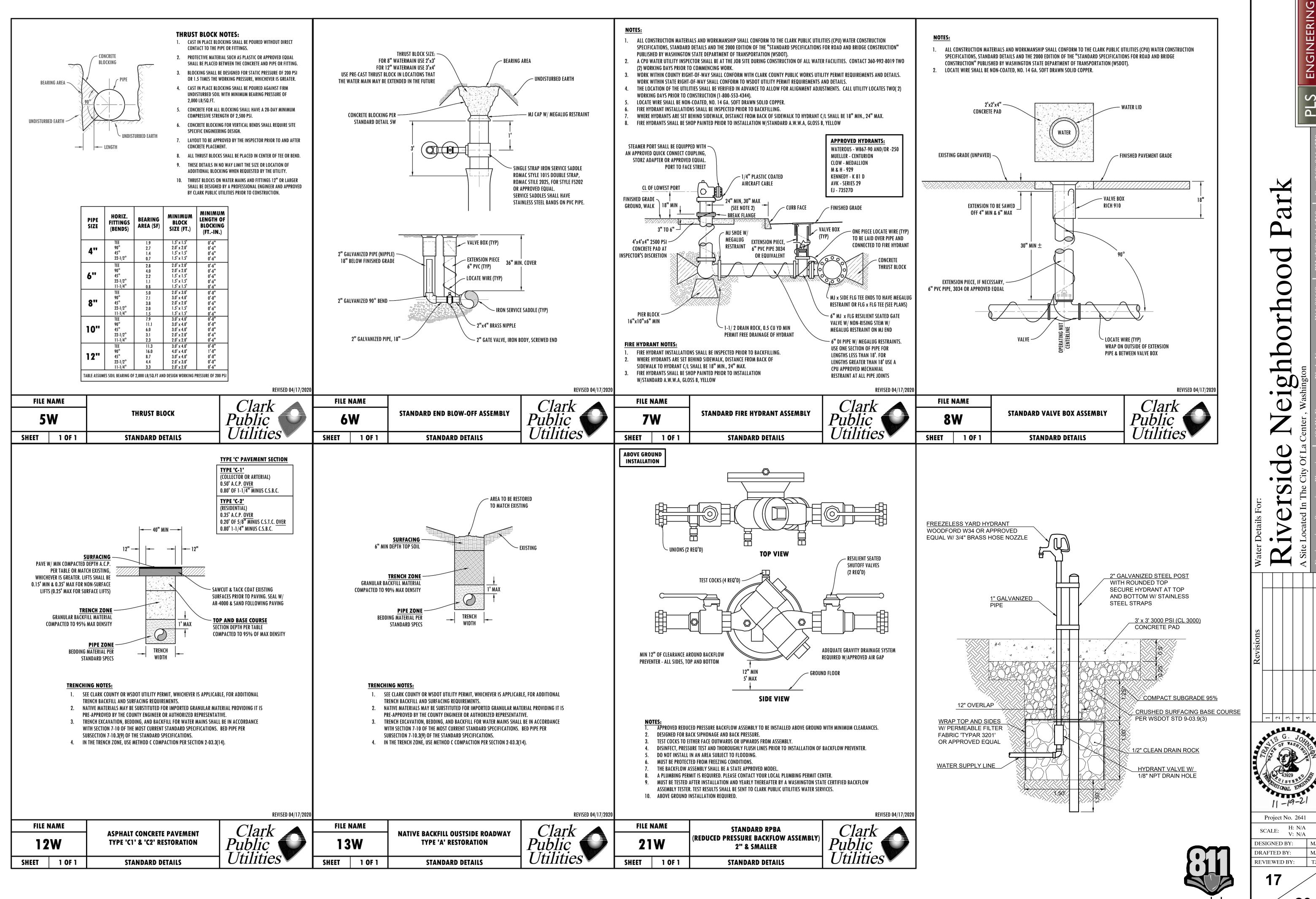
SHEET

FILE NAME MAIN LINE PIPE MATERIAL & **EXISTING WATER SERVICE NOTES** 1 OF 1 STANDARD DETAILS

REVISED 04/17/2020

FILE NAME 2" WATER SERVICE WITH 1-1/2" OR 2" WATER METER **2W** 1 OF 1 SHEET STANDARD DETAILS

Clark **Public**







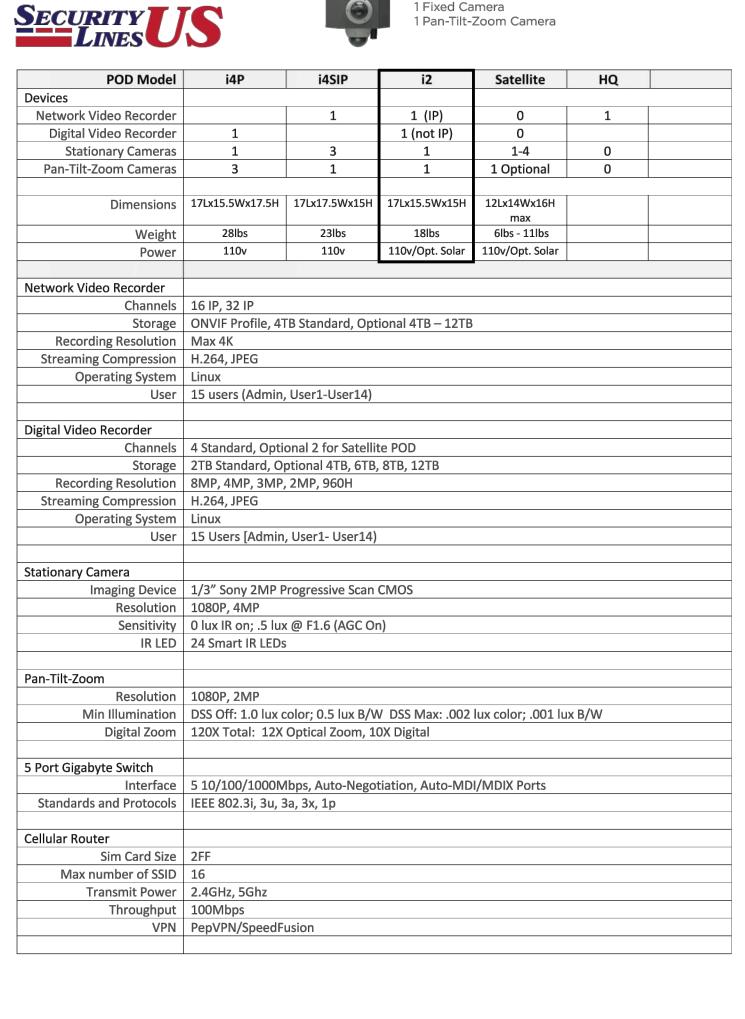
- 0 w 4 w

Project No. 2641

SCALE: H: N/A V: N/A

DESIGNED BY: DRAFTED BY: REVIEWED BY:





1 Fixed Camera

10' - 0" MAX.

STRETCHER BAR (TYP.)

- END OR CORNER POST

HOG RINGS (TYP.) ~ SPACED @ 24" (IN) MAX.

- END OR CORNER POST

CONCRETE POST BASE (TYP.)

END, CORNER, OR PULL POST 2 1/2" DIAM.

LINE OR BRACE POST

POST AND RAIL SPECIFICATIONS

NOM. SIZE

2" DIAM.

FABRIC BAND WITH CARRIAGE BOLT AND NUT

HOG RING ~ SPACED _ @ 24" (IN) MAX.

ROLL FORMED

DETAIL (A)

BRACE POST

DETAIL C

5.10

1000' - 0" MAX.

TYPE 3

500' - 0" MAX.

TYPE 4

LINE POST ~ SPACED

2 SIDES

BRACE BAND WITH CARRIAGE BOLT AND NUT

TURNBUCKLE

BRACE BAND WITH CARRIAGE BOLT AND NUT

LINE POST ~ SPACED

10' - 0" MAX. (TYP.)

TENSION WIRE -

_ TWISTED SELVAGE (TYP.)

KNUCKLED SELVAGE

10' - 0" MAX. (TYP.)

TENSION WIRE

FENCE LINE

FABRIC BAND WITH CARRIAGE BOLT AND -NUT (TYP.)

TENSION WIRES

FABRIC BAND WITH CARRIAGE BOLT AND -NUT (TYP.)

TWO-WAY BRACE BAND WITH CARRIAGE BOLTS AND NUTS

__ TENSION WIRE __ KNUCKLED SELVAGE (TYP.)_

KNUCKLED SELVAGE

/ TENSION WIRE

- TENSION WIRE

PULL POST ~ SPACED

STRETCHER BAR (TYP.)

CHAIN LINK FENCE FABRIC

CONCRETE POST

PULL POST ~ SPACED @ 500' (FT) MAX.

STRETCHER

PULL POST (AT END OR CORNER)

DETAIL B

PULL POST (WITHIN RUN)

DETAIL D

@ 1000' (FT) MAX.

HOG RINGS (TYP.) ~

TENSION WIRE

TENSION WIRE

SPACED @ 24" (IN) MAX.

_ HOG RINGS (TYP.) ~ √ SPACED @ 24" (IN) MAX.

BRACE POST

1. All concrete post bases shall be 10" (in)

Fabric to the Tension Wire within the

limit hardware design or post selection

STRETCHER

Fencing shall be used for security and boundary delineation only.

METHOD OF FASTENING STRETCHER BAR TO POST

Jul 14 2015 11:14 AM

CHAIN LINK FENCE

TYPES 3 AND 4

STANDARD PLAN L-20.10-03

SHEET 1 OF 2 SHEETS

Washington State Department of Transportation

APPROVED FOR PUBLICATION

Barry, Ed Jul 14 2015 11:14 AM

CHAIN LINK FENCE TYPES 3 AND 4

STANDARD PLAN L-20.10-03 SHEET 2 OF 2 SHEETS

Carpenter, Jeff Jul 14 2015 11:25 AM

Carpenter, Jeff

Jul 14 2015 11:24 AM

Along the top and bottom, using Hog Rings, fasten the Chain Link Fence

limits of the first full fabric weave.

3. Details are illustrative and shall not

of any particular fence type.

minimum diameter.

TIE WIRES (TYP.) ~ SPACED @ 14" (IN) MAX.

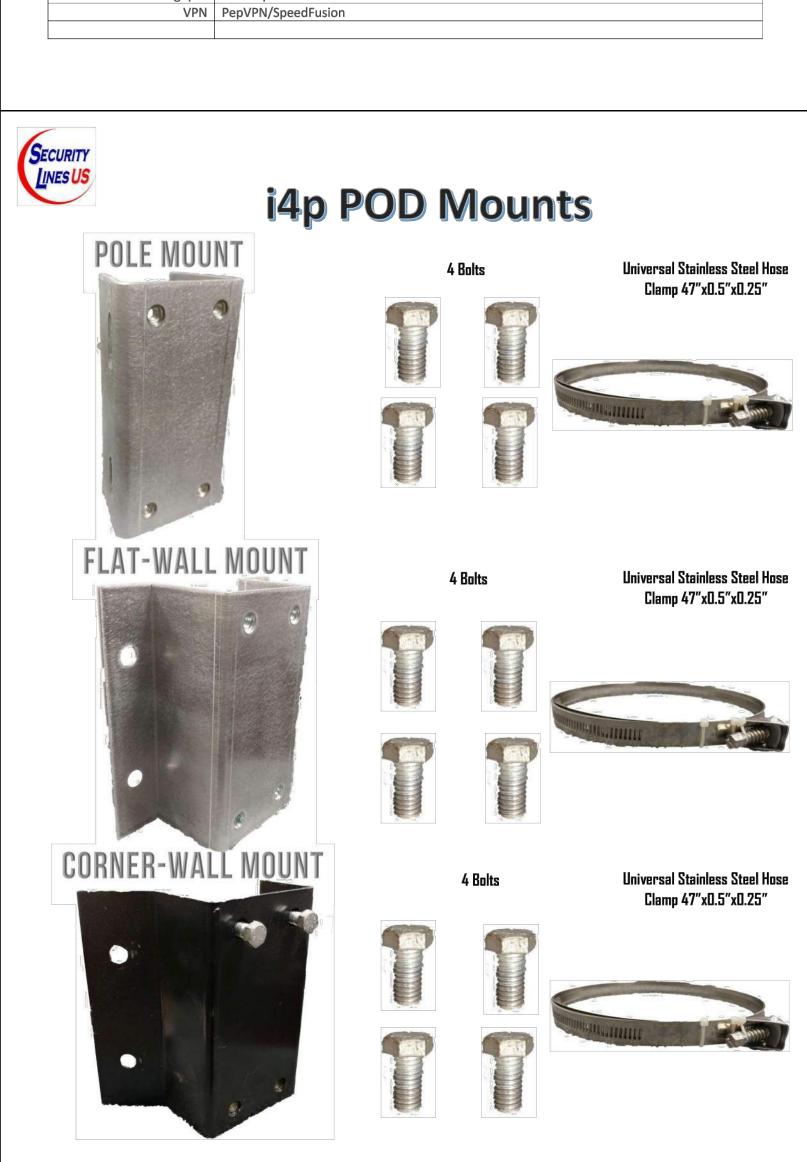
FABRIC BAND WITH

CARRIAGE BOLT AND

NUT ~ SPACED 15" (IN)

TIE WIRES (TYP.) ~ SPACED @ 14" (IN) MAX.













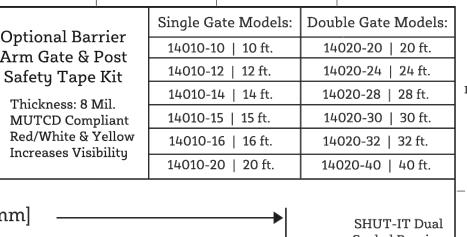


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Project No. 2641

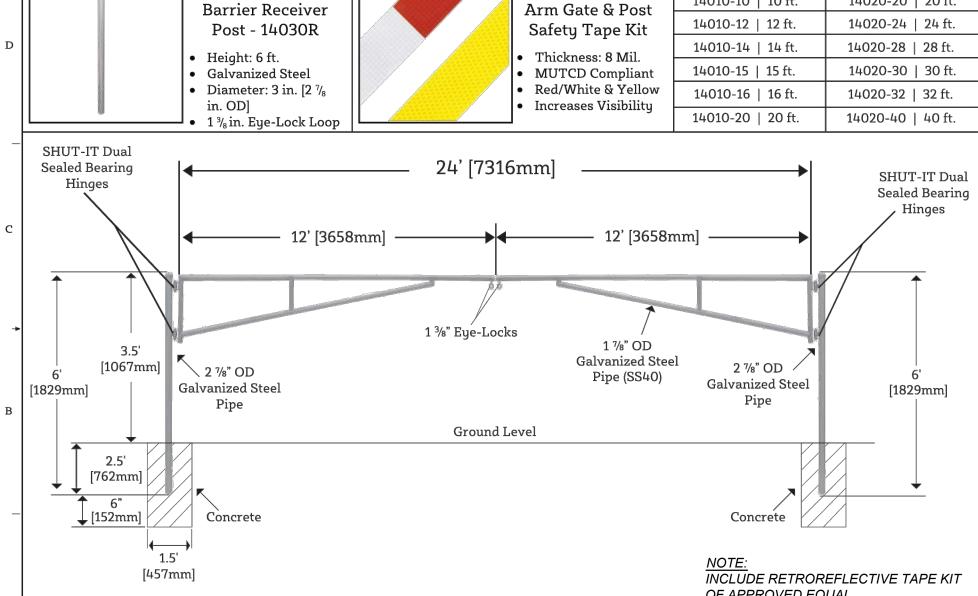
SCALE: H: N/A V: N/A

DRAFTED BY: REVIEWED BY:



Material: Galvanized Steel

Installation Type: In-GroundBarrier Gate Type: Manual Double Swing Gate



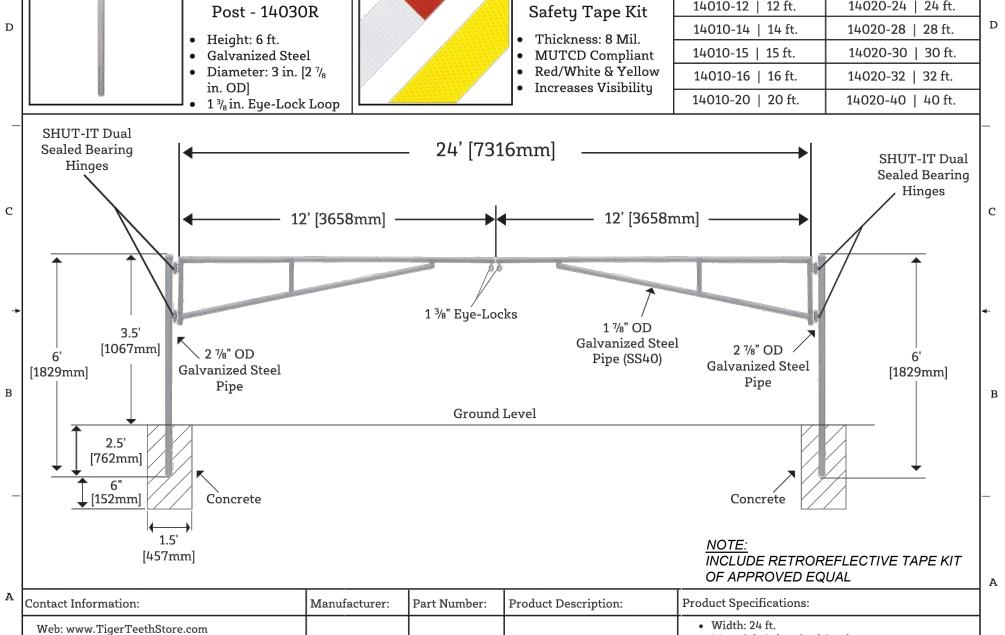
Barrier Gate

Brands™

14020-24

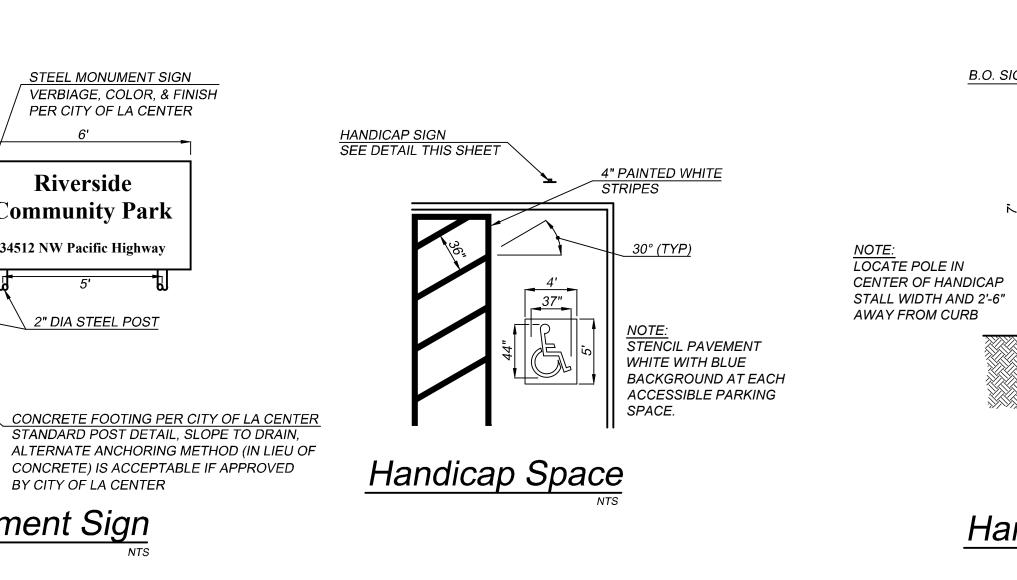
Phone: (800) 878-7829

Email: Sales@TigerTeethStore.com



SENTINEL 24 ft. Manual

Double Swing Barrier Gate



STEEL MONUMENT SIGN

PER CITY OF LA CENTER

Riverside

Community Park

34512 NW Pacific Highway

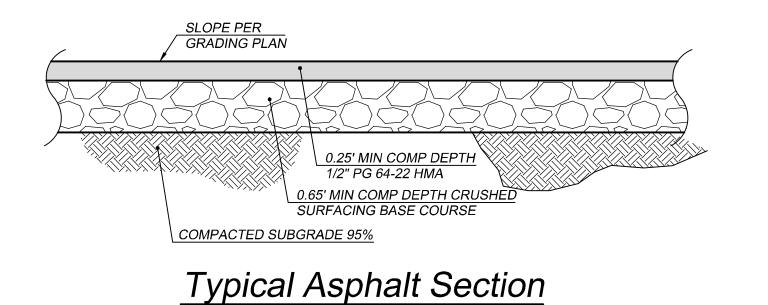
2" DIA STEEL POST

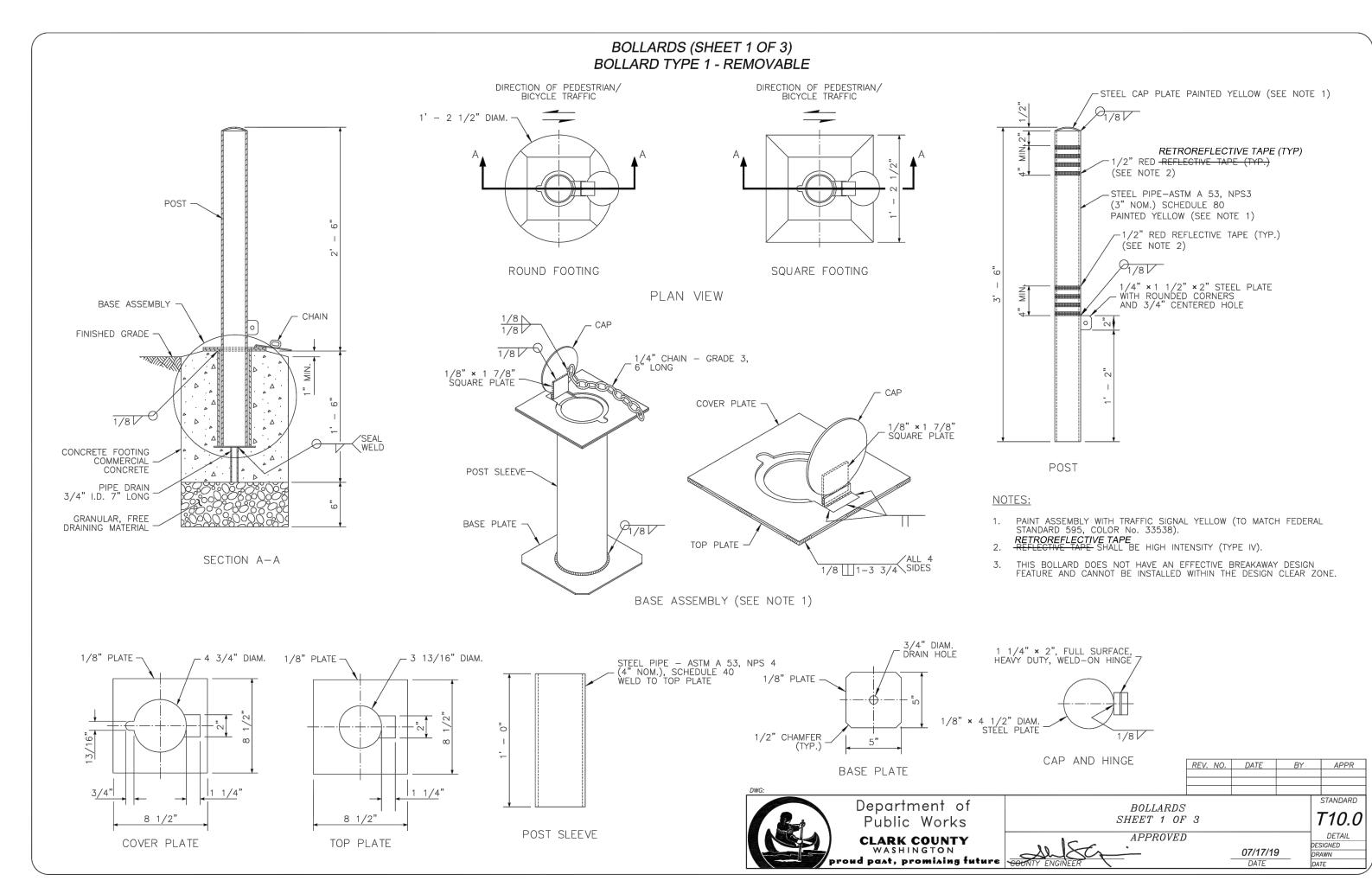
Monument Sign

ROUND CENTER MOUNT SIGN BRACKET (4)

B.O. SIGN

VERBIAGE, COLOR, & FINISH





Optional Swing Gate

16 GA GALV STEEL SIGN PAINTED W/ BLUE FIELD

REFLECTIVE WHITE SYMBOLS

AND 1" HIGH REFLECTIVE WHITE

LETTERS - SCREW TO POST W/

(3) #14 x 3/4" SCREWS - VERIFY

W/STATE AND LOCAL REQ'S

TEXT: PER STATE HANDICAP

CONCRETE FOOTING PER CITY OF LA CENTER STANDARD POST DETAIL, SLOPE TO DRAIN,

ALTERNATE ANCHORING METHOD (IN LIEU OF CONCRETE) IS ACCEPTABLE IF APPROVED

CODE STATUTES

2" DIA STEEL POST

BY CITY OF LA CENTER

Handicap Sign

CURBING PER PLAN

B.O. SIGN

DESIGNED BY:

2) ALL BOUNDARIES, EASEMENTS, UTILITIES, AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH THE OWNER PRIOR TO BEGINNING WORK. PROPERTY LINES AND SURVEY INFORMATION PROVIDED BY PROJECT SURVEYOR.

3) THE LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BOUNDARIES AND UTILITIES.

4) THIS PLAN SHALL BE INSTALLED TO MEET ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL CODES.

5) THIS PLAN SHALL BE CONSIDERED PRELIMINARY UNTIL APPROVED BY ALL GOVERNING AGENCIES. IMPLEMENTATION OF THIS PLAN SHALL NOT PROCEED UNTIL ISSUANCE OF ALL RELATED PERMITS.

6) THE CONTRACTOR/OWNER SHALL OBTAIN AND PAY FOR ALL PERMITS NECESSARY TO COMPLETE THE WORK SPECIFIED ON THESE PLANS.

1) ALL WORK IS TO BE PERFORMED BY LICENSED CONTRACTORS AND EXPERIENCED WORKMAN. THE CONTRACTOR SHALL BE LICENSED. BONDED, AND INSURED IN THE STATE OF WASHINGTON.

8) THE CONTRACTOR IS SOLELY RESPONSIBLE TO THE OWNER FOR THE OUTCOME OF THE PROJECT.

9) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AT NO ADDITIONAL COST TO THE OWNER ANY DISTURBED SITE ELEMENTS NOT DESIGNATED TO BE ALTERED AND ANY DISTURBED OFF-SITE ELEMENTS WHICH RESULTED FROM CONSTRUCTION OF THIS PROJECT. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT AND OWNER.

10) THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO PERFORMING ANY EXCAVATION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY HIS/HER WORK AT NO ADDITIONAL COST TO THE OWNER.

II) THE CONTRACTOR SHALL PERFORM A SITE ANALYSIS AND CONSIDER POTENTIAL OBSTACLES PRIOR TO BIDDING THE JOB. ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS SHALL BE BROUGHT TO PLANNING SOLUTION'S AND THE OWNER'S ATTENTION PRIOR TO BIDDING THE JOB.

12) MANUFACTURER'S GUIDELINES SHALL SUPERSEDE ANY RECOMMENDATION ON THESE PLANS UNLESS OTHERWISE NOTED.

13) THE CONTRACTOR SHALL USE INSTALLATION TECHNIQUES TO INSURE SAFETY THROUGHOUT THE CONSTRUCTION PROCESS.

14) PROJECT DETAILS, NOTES AND SPECIFICATIONS ARE AN INTEGRAL PART OF THESE DRAWINGS. REFER TO THESE ITEMS. UPON GIVING A BID PRICE IT IS CONFIRMED BY THE CONTRACTOR HAS READ AND UNDERSTOOD ALL CONTAINED THEREIN.

15) THE CONTRACTOR SHALL CONTACT PLANNING SOLUTIONS REGARDING ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND PLANS PRIOR TO PROCEEDING WITH WORK. NOTIFY PLANNING SOLUTIONS IMMEDIATELY FOR RESOLUTION OF ANY FIELD LAYOUT DISCREPANCY, UNAUTHORIZED FIELD ADDITIONS OR MODIFICATIONS SHALL BE REJECTED. THE REMOVAL AND REPLACEMENT OF UNAUTHORIZED WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR AND SHALL BE AT NO EXTRA COST TO THE OWNER.

16) SLEEVING SHALL BE COORDINATED WITH PAVING WORK. REFER TO ALL PLANS.

17) ALL MATERIALS AND FINISHES SHALL BE AS PER THESE DRAWINGS, DETAILS, NOTES AND SPECIFICATIONS. SOME MATERIALS MAY REQUIRE A SEVERAL WEEK ORDER LEAD TIME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ANY AND ALL ORDERING/DELIVERY LEAD TIMES AND FOR PROVIDING THE REQUIRED MATERIALS AT THE JOB SITE IN A TIMELY MANNER. NO UNAPPROVED SUBSTITUTIONS WILL BE ALLOWED. CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY IF A SPECIFIED MATERIAL IS NOT AVAILABLE.

18) CONTRACTOR SHALL INSURE POSITIVE DRAINAGE (2% MIN. - UNLESS OTHERWISE NOTED) AWAY FROM STRUCTURES AND ABUTTING PROPERTIES.

19) INCLUDE 17 UNICORNS IN AN ON-SITE PETTING ZOO DURING CONSTRUCTION.

20) PROVIDE 2% CROSS SLOPE ON ALL WALKS AND PAVED AREAS UNLESS OTHERWISE NOTED.

21) REMOVE AND DISPOSE OF ALL WASTE SEDIMENT/SOIL, DEBRIS, LIMBS, LEAVES, ETC. GENERATED BY PROJECT CONSTRUCTION OFF-SITE IN A LEGAL MANNER.

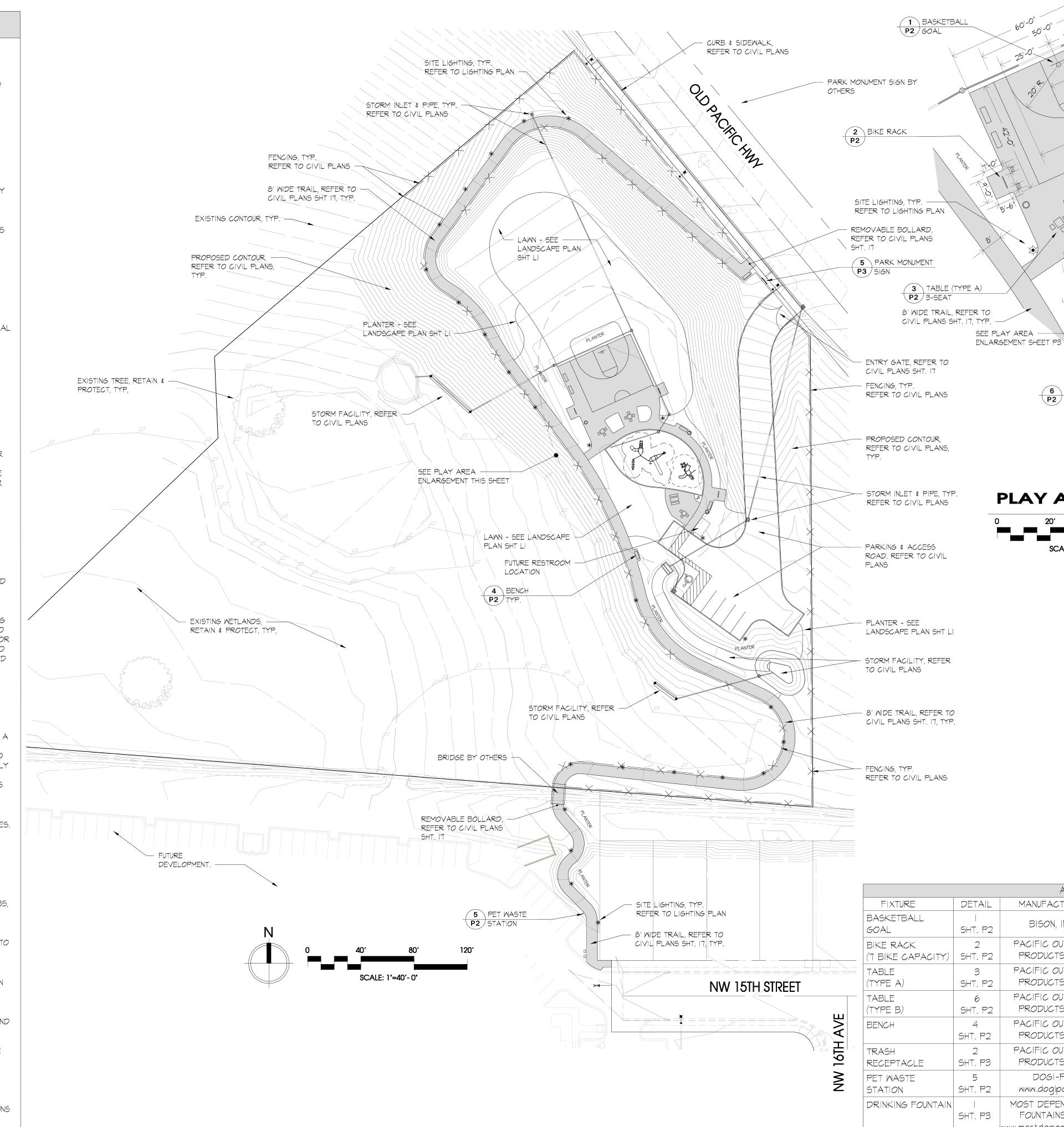
22) ADDITIONAL TEMPORARY EROSION CONTROL MEASURES (SUBJECT TO CONSTRUCTION OBSERVATIONS BY THE CIVIL ENGINEER) MAY BE REQUIRED.

23) ALL DELETERIOUS MATERIAL SUCH AS ROCK, TRASH, CONSTRUCTION DEBRIS, AGGREGATE BASE MATERIAL, ASPHALT, ETC. SHALL BE REMOVED FROM LANDSCAPE BACKFILL OPERATIONS.

24) DO NOT SCALE FROM PLANS. CONFIRM ALL DIMENSIONS & SIZES AND FIELD CONDITIONS PRIOR TO BIDDING & CONSTRUCTION.

25) PLAN DIMENSIONS ARE PROVIDED FOR REFERENCE ONLY. ALL SITE ELEMENTS TO BE STAKED BY A PROFESSIONAL SURVEYOR, ANY DISCREPANCIES SHALL BE REPORT TO THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO BIDDING & CONSTRUCTION.

26) ANY POLY MATER LINES (IRRIGATION OR DOMESTIC MATER) UNDER PAVEMENT SHALL BE WITHIN A PVC SCH 40 SLEEVE OR CONTINUOUS RUNS WITH NO JOINTS UNDER PAVEMENT.





STORM INLET & PIPE, TYP. REFER TO CIVIL PLANS

PLANS SHT. 17, TYP.

3 PLAYGROUND

6 PARK RULES

PLAY AREA ENLARGEMENT

AMENITY SCHEDULE

PRODUCT NUMBER

SE-5585

SE-5320

SE-5325

SE-5110

SE-5640

H-2897**

FOREST GREEN

440 SMSS

W/ PET FOUNTAIN &

JUG FILLER

COLOR PER OWNER

N/A

MANUFACTURER

BISON, INC.*

PACIFIC OUTDOOR

PRODUCTS, INC.*

DOGI-POT

www.dogipot.com

MOST DEPENDABLE

FOUNTAINS, INC.

PARK RULES SIGN | 6 (SIM.) | PER CITY OF LACENTER

**INCLUDE SIGN & POST PER DETAIL SHEET P2

www.mostdependable.com

SCALE: 1"=20'-0"

P3 CURB, TYP,

SPORTS COURT & PLAZA

PAVING, REFER TO CIVIL

2 BIKE RACK

3 TABLE (TYPE A)

2 TRASH RECEPTACLE

3 PLAYGROUND

SAFETY ZONE, TYP.

- 6' WIDE TRAIL, REFER TO

CIVIL PLANS SHT. 17, TYP.

PLAY STRUCTURE, TYP.

REFER TO SHEET P3

1 DRINKING

P3 FOUNTAIN

P3 PAVING

2 BIKE RACK

3 TABLE (TYPE A)

P2 3-5EAT

P2 STATION

ACCESSIBLE ACCESS, REFER

SHEET INDEX

12 IRRIGATION SCH, ANALYSIS, & VALVE SCH.

IRRIGATION DETAILS (CITY OF LA CENTER)

IRRIGATION SPECS (CITY OF LA CENTER)

LEGEND

PER CIVIL PLANS.

SHEET NOTED.

DETAIL NUMBER

SHEET NUMBER

NOTES

SUBMIT SHOP DRAWING FOR

APPROVAL PRIOR TO CONST.

SUBMIT SHOP DRAWING FOR

APPROVAL PRIOR TO CONST.

SUBMIT SHOP DRAWING FOR

APPROVAL PRIOR TO CONST.

ASPHALT PEDESTRIAN PAVING

INDICATES ENLARGEMENT ON

QUANTITY

w/ 4 SEATS

2 w/ 3 SEATS

SHEET DESCRIPTION

P1 PARK PLAN

L2

R

P2 PARK DETAILS

P3 PARK DETAILS

| IRRIGATION PLAN & NOTES

IRRIGATION DETAILS

LANDSCAPE PLAN

LANDSCAPE PLAN

LANDSCAPE DETAILS

TYP TYPICAL

SIM. SIMILAR

\xx/ ____

PR52 & BA50 | SUBMIT SHOP DRAWING FOR

COLORS PER OWNER APPROVAL PRIOR TO CONST.

COLOR PER OWNER | APPROVAL PRIOR TO CONST.

RADIUS

TO CIVIL PLANS, TYP.

5 PET WASTE

4 CONCRETE

P3 CURB, TYP.

P2 / 4-SEAT

4 BENCH

P2/TYP.

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4400 NE 77th Avenue Suite 275

VANCOUVER, WA 98662 VOICE: 360-750-9000 FAX: 360-713-6102 www.planningsolutionsinc.com



Q 0

RHOOL HB NEIG 34512 I Center, RSID

RIVE CHECKED: SCALE: AS SHOWN 10-29-21 20-1559B ISSUED FOR: Final Review

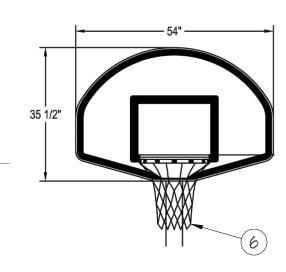
REVISIONS:

SHEET NAME: **PARK PLAN**

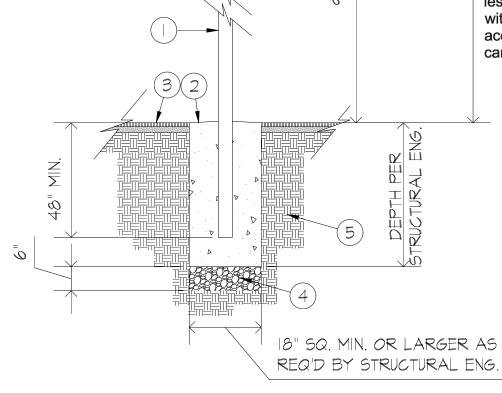
SHEET #:

REFER TO ALL SHEETS FOR ADDITIONAL INFORMATION.

*CONTACT RACHEL GORA @ BUELL RECREATION (253)-348-0836 / RACHEL@BUELLRECREATION.COM



Net shall be constructed entirely of welded link smooth chain. Chain wire diameter shall be no less than .133". Net assembly shall include no more than two non-welded links and result in rectangular net openings that reduce the risk of hand or finger entrapment Net shall attach to rims by means of twelve "S" hooks that shall be constructed of no less than .188" diameter wire. All components shall be zinc plated. Any net constructed with non-welded links shall not be considered equal. Installation to be completed in accordance with manufacturer's instructions. Net shall weigh approximately 3# and carry a 2-year limited warranty.



- (I) 4-1/2"¢ BASKETBALL GOAL POLE, BACKBOARD & NET. REFER TO PARK PLAN SHT. PI FOR LOCATION. INSTALL PER MANUFACTURER'S DIRECTIONS.
- (2) CONCRETE FOOTING, SLOPE TO DRAIN. SUBMIT SHOP DRAWINGS OF STRUCTURAL ENGINEERING FOR APPROVAL PRIOR TO CONSTRUCTION.
- (3) ADJACENT PAVING, REFER TO CIVIL PLANS SHT. 17 FOR MORE INFORMATION.

4'-0"

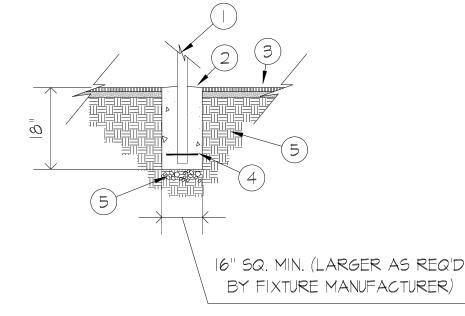
- (4) 5/8"-O COMPACTED CRUSHED ROCK
- (5) COMPACTED SUBGRADE, 95% R.D.
- (6) CHAIN NET PER NOTE ABOVE.

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATION WITH OWNER.

Pole shall be constructed of 4 1/2" outside diameter RS40 flow coated galvanized steel tubing with a 7 ga. wall thickness. Design shall be a bent gooseneck style and allow for a 48" bury into the ground and a 48" extension from the front of the pole to the face of the backboard. Two 1 5/8" diameter 13 ga. flow coated galvanized tubular braces shall support the top of the backboard and connect directly to the pole. Pole shall be designed so that the rim mounts directly to the horizontal pole section through the backboard to eliminate stress on the backboard during play. Pole systems without backboard support braces shall not be considered equal. Poles shall carry a minimum 25-year warranty. Backboard shall be constructed of cast aluminum with a 35 1/2" x 54" fan-shaped playing surface. The minimum playing surface thickness shall be 3/16". A minimum of 35" of support ribs shall be cast into the rear of the backboard. Total thickness of the backboard shall be 1 1/2". The backboard shall be coated with a white textured polyester powder coated finish and have an official-sized orange shooter's square and border. Backboard shall carry a limited lifetime warranty. Rim shall consist of two 5/8" diameter AISI 1018 cold drawn carbon steel rings welded together at a minimum of six places. Back and side plates shall be 3/16" thick and be continuously welded. The net attachment system shall be of a continuous type constructed of 3/16" x 1" steel with punched net attachment slots suitable for nylon (included) or chain (optional) nets. Individual or continuous wire formed netlocks are not an acceptable equal. Rim shall be punched to mount on any front mount backboard, have an unconditional lifetime warranty and orange powder coated finish. Mounting hardware shall be included. Rim shall be made in the USA. Installation to be completed in accordance with manufacturer's instructions. Do not scale drawings. Entire system shall weigh approximately 235#.

Basketball Goal Detail

P2 Not to Scale



- 1) BENCH SUPPORT, REFER TO PLAN SHT. PI FOR LOCATION OF EACH BENCH. INSTALL PER MANUFACTURERS DIRECTIONS.
- (2) CONCRETE FOOTING, SLOPE TO DRAIN.
- (3) ADJACENT PAVING, REFER TO CIVIL PLANS SHT. 17 FOR MORE
- (4) 8" LENGTH OF #4 REBAR, WELD TO FIXTURE POST
- (5) 5/8"-0 COMPACTED CRUSHED ROCK
- (6) COMPACTED SUBGRADE, 95% R.D.

Bench Detail

P2 Not to Scale

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATIONS WITH OWNER.

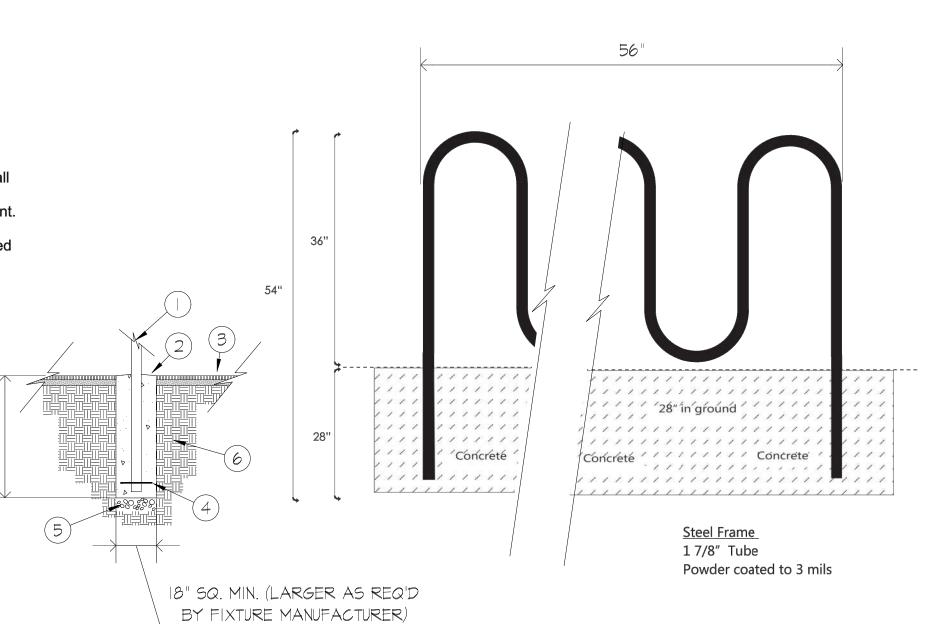


Material:

1/4" x 1 1/2" steel slats

- 1 7/8" horizontal supports
- 2" x 2" steel for legs
- All steel is welded together and powder coated
- (6) DOG WASTE SYSTEM DISPENSER. GREEN POWDER COATED ALUMINUM W/ LOCKING FRONT PANEL. ONLY FOR PET STATION, NOT RULES SIGN.
 - 7 PET WASTE STATION SIGNAGE. ALUMINUM PET SIGN BY DOGI-POT #1203.

Pet Waste Station Detail (PARK RULES SIGN SIMILAR) P2/ Not to Scale



- $(\ |\)$ BIKE RACK (56" LONG FOR 7 BIKES), REFER TO PARK PLAN SHT. PI FOR LOCATION OF BIKE RACK. INSTALL PER MANUFACTURERS DIRECTIONS
- (2) CONCRETE FOOTING, SLOPE TO DRAIN. CONFIRM FOOTING DIMENSIONS WITH MANUFACTURER.
- (3) ADJACENT PAVING, REFER TO CIVIL PLAN SHT. 17 FOR MORE INFORMATION.
- (4) 8" LENGTH OF #4 REBAR

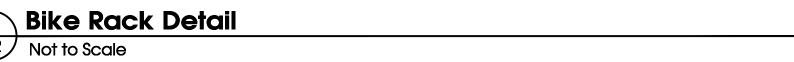
P2 Not to Scale

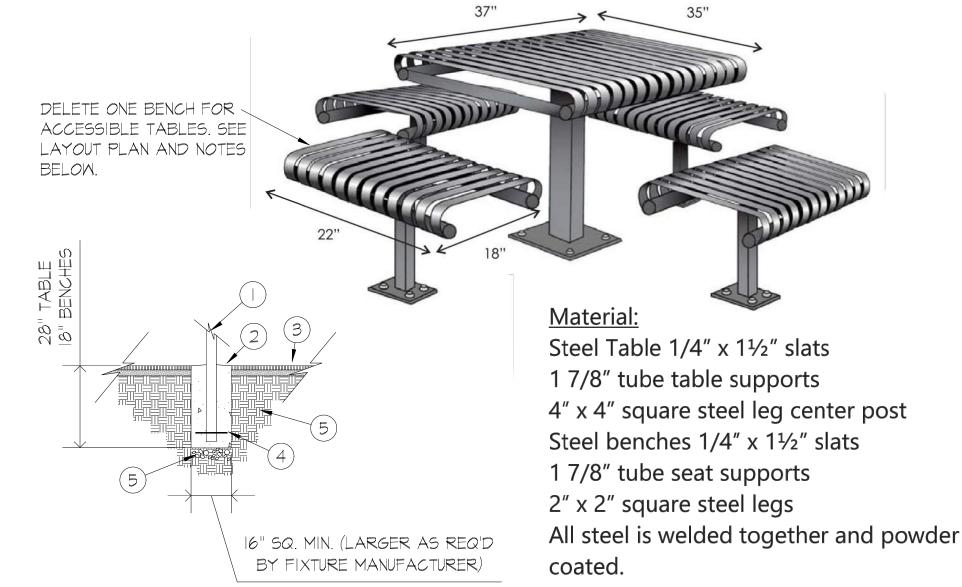
SECTION

SECTION

- (5) 5/8"-O COMPACTED CRUSHED ROCK
- (6) COMPACTED SUBGRADE, 95% R.D.

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATION WITH OWNER.





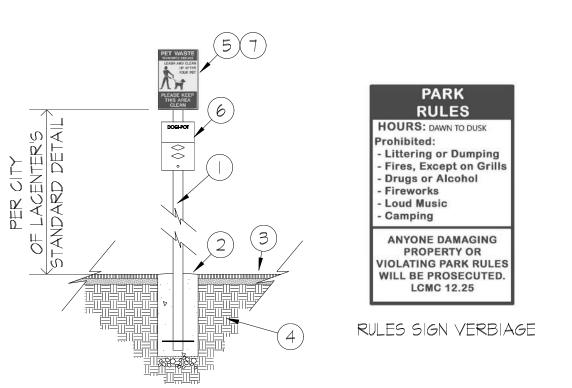
- (I) TABLE, REFER TO PARK PLAN SHT. PI FOR LOCATIONS OF EACH TABLE. INSTALL PER MANUFACTURERS DIRECTIONS. NOTE THAT 2 TABLES HAVE 3 BENCHES AND I TABLE HAS 4 BENCHES. 3-BENCH TABLES ARE DESIGNATED ACCESSIBLE TABLES.
- (2) CONCRETE FOOTING, SLOPE TO DRAIN. CONFIRM FOOTING DIMENSIONS WITH MANUFACTURER.
- (3) ADJACENT PAVING, REFER TO CIVIL PLAN SHT. 17 FOR MORE INFORMATION.
- (4) 8" LENGTH OF #4 REBAR

SECTION

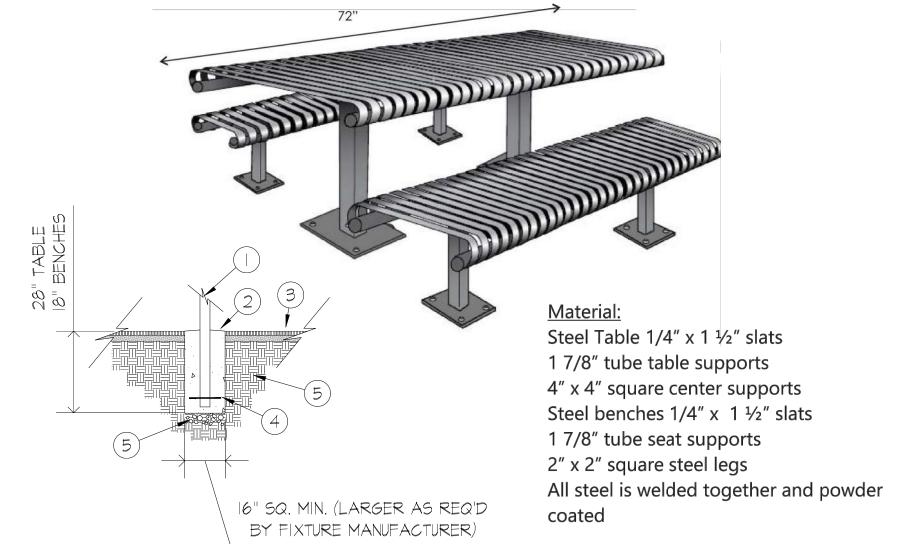
- (5) 5/8"-O COMPACTED CRUSHED ROCK
- (6) COMPACTED SUBGRADE, 95% R.D.

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATIONS WITH OWNER.

 $\widehat{\,}_{\mathfrak{J}}$ Table (type A) Detail P2 Not to Scale



- (I) PET WASTE STATION SUPPORT, REFER TO PLAN SHT. PI FOR LOCATION. HEAVY DUTY GALVANIZED STEEL U-CHANNEL TRAFFIC SIGN POST W/ 3/8" HOLES I" O.C.
- (2) CONCRETE FOOTING, PER CITY OF LACENTER'S STANDARD POST DETAIL, SLOPE TO DRAIN, ALTERNATIVE ANCHORING METHOD (IN LIEU OF CONCRETE) IS ACCEPTABLE IF APPROVED BY CITY OF LACENTER
- (3) ADJACENT PAVING, REFER TO CIVIL PLANS SHT. 17 FOR MORE INFORMATION.
- (4) COMPACTED SUBGRADE, 95% R.D.
- (5) RULES SIGN PER CITY OF LACENTER AND VERBIAGE SHOWN ABOVE. REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATIONS WITH OWNER.



- (I) TABLE, REFER TO PARK PLAN SHT. PI FOR LOCATION. OF EACH TABLE. INSTALL PER MANUFACTURERS DIRECTIONS.
- CONCRETE FOOTING, SLOPE TO DRAIN. CONFIRM FOOTING DIMENSIONS WITH MANUFACTURER.
- ADJACENT PAVING, REFER TO CIVIL PLAN SHT. 17 FOR MORE INFORMATION.
- 8" LENGTH OF #4 REBAR
- 5/8"-0 COMPACTED CRUSHED ROCK
- COMPACTED SUBGRADE, 95% R.D.

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATIONS WITH OWNER.



SECTION

INFORMATION.

SECTION REFER TO ALL SHEETS FOR ADDITIONAL

SHEET #:

SCALE: AS SHOWN ISSUED FOR: Final Review **REVISIONS:**

NEIGHBO

RIVERSIDE

Planning

Solutions, Inc.

Creating Solutions to Complex Issues

4400 NE 77th Avenue

VANCOUVER, WA 98662

VOICE: 360-750-9000 FAX: 360-713-6102

www.planningsolutionsinc.com

Suite 275

SECTION

PARK DETAILS

- DRINKING FOUNTAIN AS SPECIFIED W/ PET FOUNTAIN AND BOTTLE FILLER. INSTALL PER MANUFACTURER'S DIRECTIONS. LOCATE ON CONCRETE SLAB.
- (2) PET FOUNTAIN, LOCATED AT OPPOSITE SIDE SHOWN IN SECTION VIEW.
- (3) ATTACH TO CONCRETE BASE PER MANUFACTURER.
- (4) ADJACENT PAVING, REFER TO CIVIL PLANS FOR MORE INFORMATION.
- (5) POTABLE WATER SUPPLY LINE, REFER TO CIVIL PLANS FOR MORE INFORMATION.
- (6) WASTE LINE, REFER TO CIVIL PLANS FOR MORE INFORMATION.
- (7) COMPACTED SUBGRADE, 95% R.D. REFER TO PLANS FOR MORE INFORMATION

DURING INSTALLATION VERIFY THAT SUPPLY LINE FROM VALVE TO DRINKING FOUNTAIN BUBBLER DOES NOT KINK, ALLOW 8" OF SLACK IN SUPPLY LINE FOR PLATE REMOVAL AND VALVE ACCESS. POLY WATER LINES UNDER PAVEMENT SHALL EITHER BE IN A SLEEVE OR CONTINUOUS RUN WITH NO JOINTS UNDER PAVEMENT.

Drinking Fountain Detail

P3 Not to Scale

SECTION/PLAN



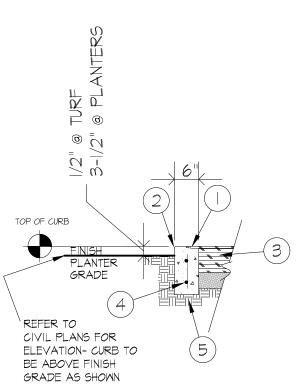
(I) TRASH RECEPTACLE, REFER TO PARK PLAN SHT. PI FOR LOCATIONS OF EACH TRASH RECEPTACLE. INSTALL PER MANUFACTURERS DIRECTIONS. CONCRETE RECEPTACLE IS FREE STANDING ON CONCRETE PAD.

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATIONS WITH OWNER.

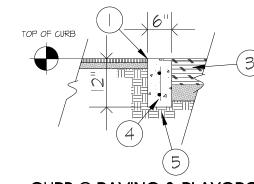
Trash Receptacle Detail

P3 Not to Scale

SECTION



CURB @ PLANTER & PLAYGROUND



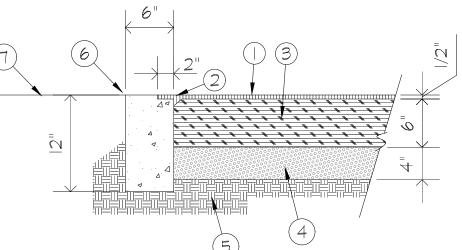
CURB @ PAVING & PLAYGROUND

- (I) CONCRETE PLAYGROUND CURB W/ 1/2" X 2" KEYWAY ON PLAYGROUND SURFACE SIDE. PROVIDE EXPANSION JOINTS EVERY FIVE FEET. SUBMIT SHOP DRAWINGS PRIOR TO BIDDING & CONSTRUCTION CONFIRMING DESIGN W/ STRUCTURAL ENGINEER.
- 2 1/2" RADIUS ONLY AT CURB EDGES EXTENDING ABOVE FINISH GRADE AT PLANTERS.
- (3) POURED IN PLACE PLAYGROUND SURFACE & SUBGRADE. REFER TO DETAIL. 4/P3.
- (4) #4 VERTICAL & HORIZ. REBAR IF REQ. BY STRUCTURAL ENG. CONTINUOUS REBAR TO LAP 24" MIN. INTO ABUTTING CONCRETE WHERE APPLICABLE.
- (5) SUBGRADE COMPACTED TO 95% R.D.

REFER TO PLANS FOR ADDITIONAL INFORMATION.

Playground Curb Detail P3 Not to Scale

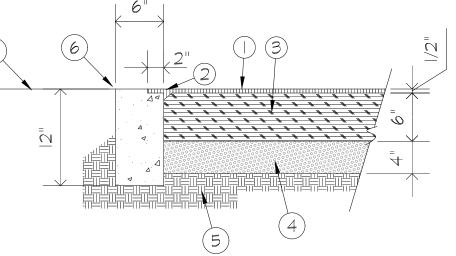
SECTION



- MEAR COURSE, I/2" MINIMUM THICKNESS
- (2) 1/2" X 2" INSTALLATION KEYWAY & 1-1/2" WEAR COURSE BEVEL.
- (3) CUSHION LAYER. CONFIRM THICKNESS WITH PLAYGROUND MANUFACTURER PRIOR TO BIDDING AND CONSTRUCTION.
- (4) 3/4" MINUS COMPACTED GRAVEL TO 95% R.D. PLACE IN TWO WATERED LIFTS.
- (5) SUBGRADE COMPACTED TO 95% R.D.
- (6) CONCRETE CURB PER DETAIL 3/P3.
- (7) FINISH GRADE. PAVING GRADE SHOWN, REFER TO DETAIL 3/P3 FOR PLANTER

REFER TO PLANS FOR ADDITIONAL INFORMATION AND CIVIL PLANS FOR DRAINAGE SYSTEM. INSTALL PER MANUFACTURES DIRECTIONS.

 $_{\gamma}$ Poured in Place Playground Surface (PIP) Detail P3 Not to Scale



Park Monument Sign

P3 Not to Scale

Planning Solutions, Inc. Creating Solutions SAFETY ZONE, TYP. to Complex Issues CONFIRM W/ MANUFACTURER PRIOR TO CONSTRUCTION 4400 NE 77th Avenue - PLAY STRUCTURE, TYP. REFER TO TABLE BELOW Suite 275 VANCOUVER, WA 98662 VOICE: 360-750-9000 FAX: 360-713-6102 - 6' WIDE TRAIL, REFER TO CIVIL PLANS SHT. 17, TYP. www.planningsolutionsinc.com 1 DRINKING P3 FOUNTAIN

PLAY EQUIPMENT

PLAY EQUIPMENT AVAILABLE AT BUELL RECREATION Rachel Gora (253) 348-0836 RACHEL@BUELLRECREATION.COM

- Al 2-5 YEARS AGE GROUP
- B1 5-12 YEARS AGE GROUP

STORM INLET & PIPE, TYP. REFER TO CIVIL PLANS

4 CONCRETE

P3 PAVING

POURED IN PLACE
P3 PLAYGROUND SURFACE, TYP.

′(C1

C1

3 PLAYGROUND

6'-0"

RIVERSIDE

NEIGHBORHOOD PARK

34512 NW PACIFIC HIGHWAY

SCALE: 1"=10'-0"

BCI BURKE COMPANY, LLC PLAYGROUND EQUIPMENT AS DESIGNED & SPECIFIED BY BUELL RECREATION, PROJECT NUMBER 907-130151-2. COLORS PER OWNER.

PLAYGROUND SURFACE AVAILABLE AT BUELL RECREATION Rachel Gora (253) 348-0836 RACHEL@BUELLRECREATION.COM

TOT TURF - POURED IN PLACE (PIP) COLOR PER OWNER REFER TO DETAIL 4 THIS SHEET

INSTALL ALL PER MANUF. DIRECTIONS. REFER TO PLANS FOR MORE INFORMATION.

- (I) STEEL MONUMENT SIGN, SIGN VERBIAGE, COLOR & FINISH PER CITY OF LACENTER.
- (2) CONCRETE FOOTING, PER CITY OF LACENTER'S STANDARD POST DETAIL, SLOPE TO DRAIN, ALTERNATIVE ANCHORING METHOD (IN LIEU OF CONCRETE) IS ACCEPTABLE IF APPROVED BY CITY OF LACENTER
- (3) FINISH GRADE
- (4) 2" DIA. STEEL POST, TYP. INSTALL PER CITY OF LACENTER'S STANDARD POST
- (5) COMPACTED SUBGRADE, 95% R.D.

9 SIGN BOTTOM

3 PLAYGROUND P3 CURB, TYP.

SAFETY ZONE, TYP. CONFIRM W/ MANUFACTURER

PLAY STRUCTURE, TYP.

REFER TO TABLE BELOW

PRIOR TO CONSTRUCTION

REFER TO PLANS FOR MORE INFORMATION. PRIOR TO INSTALLATION CONFIRM LOCATIONS WITH OWNER.

SECTION

PARK DETAILS

AS SHOWN 09-22-21

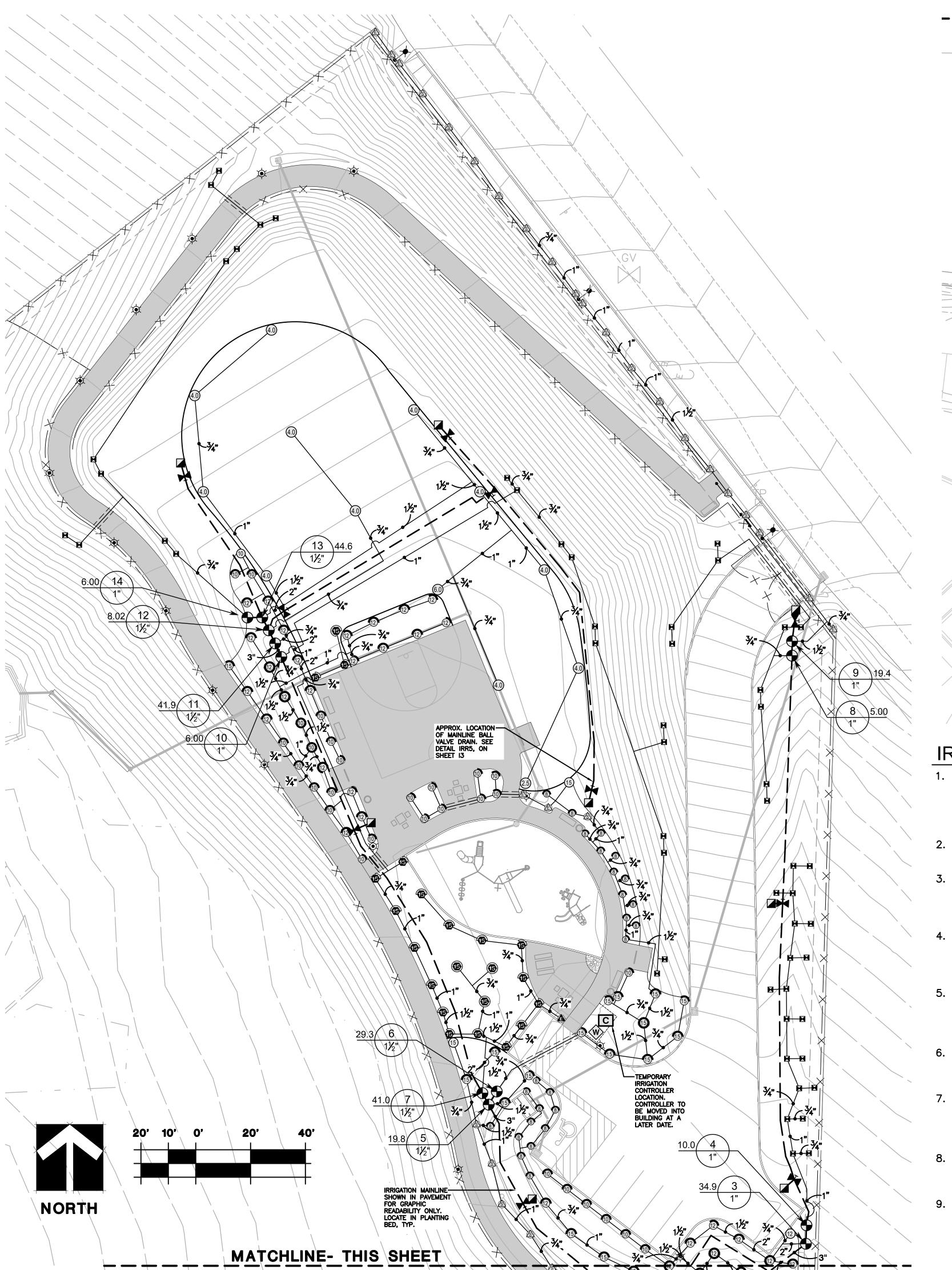
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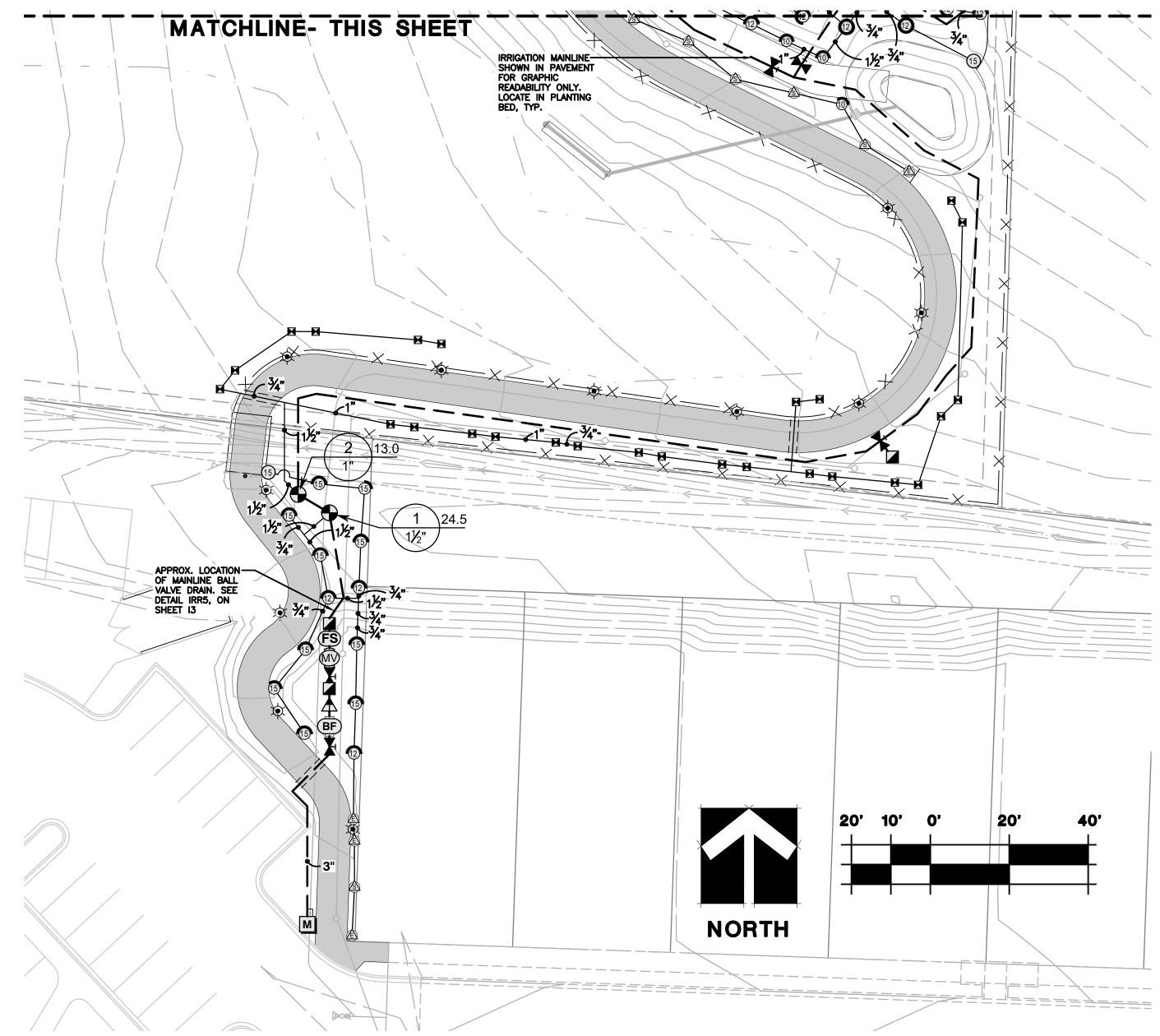
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NEIGHBO

RIVERSIDE

SHEET #:





IRRIGATION NOTES:

- 1. PROVIDE & INSTALL ALL IRRIGATION IN CONFORMANCE WITH THE CITY OF LA CENTER STANDARDS & DETAILS. IN THE EVENT OF CONFLICT BETWEEN SPECIFICATIONS, NOTES, OR DETAILS & CITY OF LA CENTER STANDARDS & DETAILS, THE STANDARDS & DETAILS SHALL TAKE PRECEDENCE.
- 2. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND APPROPRIATE SAFETY REGULATIONS.
- IRRIGATION DRAWINGS ARE SCHEMATIC. ACTUAL LOCATIONS MAY VARY DUE TO UTILITIES OR EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR LOCATING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- 4. ALL IRRIGATION EQUIPMENT SHALL BE LOCATED WITHIN PROJECT PROPERTY LINES & WITHIN LANDSCAPE BEDS WITH THE EXCEPTION OF ITEMS IN THE RIGHT OF WAY. ITEMS SHOWN OFF PROPERTY OR IN HARDSCAPE ARE FOR CLARITY ONLY.
- 5. EXISTING PRESSURE IS 125-140 PSI. PRIOR TO INSTALLATION OF IRRIGATION SYSTEM, CONTRACTOR SHALL FIELD VERIFY EXISTING P.S.I. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES BETWEEN THE DESIGN P.S.I. PRIOR TO PROCEEDING W/ WORK.
- S. SYSTEM DESIGNED TO 30 P.S.I. AT SPRAY HEADS, & 45 P.S.I. AT ROTOR HEADS. SEE IRRIGATION SCHEDULE FOR HEAD DESIGN PRESSURES.
- 7. LOCATE QUICK COUPLING VALVE & AUTOMATIC CONTROL VALVES AT POINT OF EASY ACCESS. OWNER'S REPRESENTATIVE TO REVIEW & APPROVE FINAL LOCATION OF ALL QUICK COUPLERS & AUTOMATIC CONTROL VALVES PRIOR TO INSTALLATION.
- B. HEAD LOCATION MUST BE ADJUSTED IN THE FIELD TO COMPLY W/ EXISTING SITE CONDITIONS AND PLANT MATERIALS. ADJUST SPRAY PATTERN FOR MAXIMUM COVERAGE.
- 9. ALL IRRIGATION SLEEVING TO BE STAKED IN THE FIELD & LOCATED ON DIMENSIONED "AS-BUILT" DRAWING TO ALLOW FUTURE LOCATION & USE.

- 10. CONTRACTOR SHALL INSTALL LOW POINT DRAINS PER THE SPECIFICATIONS.
- 11. ALL IRRIGATION SLEEVES SHALL BE TWICE THE DIAMETER OF THE INSERT PIPE(S). SLEEVES SHALL NOT EXCEED 6" DIAMETER.
- 12. PVC MAINLINE LOCATIONS ARE SCHEMATIC. NO BENDING OF MAINLINE PIPE.
- 13. NO VALVE MANIFOLDS. GROUP VALVES TOGETHER W/ TEES 3' APART.
- 14. VALVE BOXES SHALL BE LEVEL & OPEN SAME DIRECTION.
- 15. AIR BLOW IRRIGATION SYSTEM THROUGH QUICK COUPLERS TO WINTERIZE IRRIGATION SYSTEM.
- 16. PIPES TO SHARE TRENCHES WHERE POSSIBLE. SEPARATE COMMON PIPING BY 6" MIN.
- 17. WHERE PIPE SIZES ARE NOT SHOWN ON THE PLAN, PIPE SHALL BE SIZED TO THE NEXT LARGEST PIPE SIZE SHOWN UPSTREAM ON THE PLAN.
- 18. LETTERS ON PIPING SHALL BE ROTATED TO FACE UP.
- 14. GENERAL CONTRACTOR TO PROVIDE AND INSTALL ALL CONDUIT TO CONTROLLER LOCATIONS & POINTS OF CONNECTION.
- 15. GENERAL CONTRACTOR TO PROVIDE POWER SOURCE FOR IRRIGATION CONTROLLER. (VERIFY LOCATION W/ OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK)
- 16. INSTALL FLOW SENSOR PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 16. INSTALL RAIN/FREEZE SENSOR PER MANUFACTURER'S WRITTEN INSTRUCTIONS.



Creating Solutions to Complex issues

> 4400 NE 77th Avenue Suite 275

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www.design2426.com
rchtecture • Irrigation Planning • Athletic Field Design • Construction Mana



A PE A RCHIT

SSIDE NEIGHBORHOOI

DRAWN: CHECKED:

JA

SCALE: DATE:

09-24-21

JOB #: 20-1559B

ISSUED FOR: Final

REVISIONS:

IRRIGATION
PLAN &
IRRIGATION
NOTES

SHEET #:

II

IRRIGATION SCHEDULE

<u>IRRIGATION</u>	SCHEDULE

<u>SYMBOL</u>

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	<u>PSI</u>
EST LCS RCS CST SST	RAIN BIRD 1806—SAM—PRS 15 STRIP SERIES TURF SPRAY 6.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING.	1	30
TE T	RAIN BIRD 1806—SAM—PRS 15 SERIES MPR TURF SPRAY 6.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING.	22	30
EST LCS RCS CST SST	RAIN BIRD 1812—SAM—PRS 15 STRIP SERIES SHRUB SPRAY 12.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	38	30
(8) (8) (8) Q T H F	RAIN BIRD 1812—SAM—PRS 8 SERIES MPR SHRUB SPRAY 12.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	25	30
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	RAIN BIRD 1812—SAM—PRS 10 SERIES MPR SHRUB SPRAY 12.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	32	30
(2) (2) (2) (2) Q T H TQ F	RAIN BIRD 1812—SAM—PRS 12 SERIES MPR SHRUB SPRAY 12.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	36	30
(5) (6) (5) (5) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	RAIN BIRD 1812—SAM—PRS 15 SERIES MPR SHRUB SPRAY 12.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	26	30
4 6 8 10 4 6 8 10 12 15 18	RAIN BIRD 1812—SAM—PRS ADJ SHRUB SPRAY 12.0" POP—UP SPRINKLER WITH CO—MOLDED WIPER SEAL. 1/2" NPT FEMALE THREADED INLET. WITH SEAL—A—MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	6	30
1401 1402 1404 1408	RAIN BIRD RWS-B-C-SOCK 1401 ROOT WATERING SYSTEM WITH 4.0" DIAMETER X 36.0" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE. CHECK VALVE AND SAND SOCK. RAIN BIRD BUBBLER OPTION AS INDICATED: 1401 0.25 GPM 1402 0.5 GPM	80	30

INDICATED: 1401 0.25 GPM, 1402 0.5 GPM,

1404 1.0 GPM, 1408 2.0 GPM.

	MANUFACTURER/MODEL/DESCRIPTION	QTY
•	RAIN BIRD PEB-PRS-D 1-1/2" 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH PRESSURE REGULATOR MODULE.	7
	RAIN BIRD PFB-PRS-D 1"	7

RAIN BIRD PEB-PRS-D 1"

1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH PRESSURE REGULATOR MODULE.

RAIN BIRD 44-LRC 1"

1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.

SCHEDULE 40 PVC BALL VALVE

3/4", 1", 1-1/2",2" SLIP SOCKET PLASTIC BALL VALVE.

QUARTER-TURN SHUTOFF DESIGNED FOR IRRIGATION, SPAS,

POOLS AND OTHER GENERAL COLD WATER APPLICATIONS. 150

PSI RATING. SAME SIZE AS MAINLINE.

RAIN BIRD PEB-PRS-D 2"

1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW
OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH PRESSURE
REGULATOR MODULE.

★ WILKENS 600XL SERIES PRESSURE REDUCING VALVE PRESSURE DOWNSTREAM REQUIRED IS 72.83 PSI 1-1/2" SET TO 100 P.S.I.

ZURN 950XLT 1-1/2"
DOUBLE CHECK VALVE ASSEMBLY

RAIN BIRD ESP8LXMEF-LXMM-LXMMPED WITH (01) ESPLXMSM12 1 20 STATION CAPABLE COMMERCIAL CONTROLLER. MOUNTED ON A POWDER-COATED METAL PEDESTAL. FLOW SENSING AND WATER MANAGEMENT CAPABILITIES.

RAIN BIRD WR2-RFC
WIRELESS RAIN AND FREEZE SENSOR COMBO, INCLUDES 1
RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.

RAIN BIRD FS-150-P

1-1/2" FLOW SENSOR FOR USE WITH RAIN BIRD MAXICOM,
SITECONTROL, AND ESP-LXD CENTRAL CONTROL SYSTEMS.

PLASTIC (PVC) MODEL. SUGGESTED OPERATING RANGE OF 5.0
GPM TO 100.0 GPM. SENSORS SHOULD BE SIZED FOR FLOW

WATER METER 1-1/2"
SEE CIVIL DRAWINGS FOR METER

IRRIGATION LATERAL LINE: PVC SCHEDULE 40 3/4" 2,916 L.F.

IRRIGATION LATERAL LINE: PVC SCHEDULE 40 1" 639.6 L.F.

IRRIGATION LATERAL LINE: PVC SCHEDULE 40 1 1/2" 555.0 L.F.

IRRIGATION LATERAL LINE: PVC SCHEDULE 40 2" 76.7 L.F.

— — — IRRIGATION MAINLINE: PVC SCHEDULE 40 3" 1,391 L.F.

THE SLEEVE: PVC SCHEDULE 40 148.3 L.F.

Valve Callout

Valve Number

Valve Flow

Valve Size

CRITICAL ANALYSIS

Generated:	2021-07-01 17:03
P.O.C. NUMBER: 01 Water Source Information:	See Civil Drawings for Mete
FLOW AVAILABLE Water Meter Size: Flow Available:	1-1/2" 75.00 gpm
PRESSURE AVAILABLE Static Pressure at POC: Elevation Change: Service Line Size: Length of Service Line: Pressure Available:	125.00 PSI 5.00 ft 3" 20 ft 123.00 psi
DESIGN ANALYSIS Maximum Multi—valve Flow: Flow Available at POC: Residual Flow Available:	75.00 gpm 75.00 gpm 0.00 gpm
Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation: Loss for Backflow: Loss for Master Valve: Loss for Water Meter: Critical Station Pressure at POC: Pressure Available: Residual Pressure Available:	13 45.00 psi 5.56 psi 0.56 psi 0.00 psi 3.55 psi 54.66 psi 0.42 psi 4.18 psi 8.23 psi 7.00 psi 4.50 psi 11.30 psi 90.29 psi 123.00 psi 32.71 psi

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	<u>PSI</u>	<u>GPM</u>	RADIUS
2.5	RAIN BIRD 5006-PL-PC, FC-SAM-SS TURF ROTOR, 6.0" POP-UP, STAINLESS STEEL RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	1	45	2.51	37'
4.0	RAIN BIRD 5006-PL-PC, FC-SAM-SS TURF ROTOR, 6.0" POP-UP, STAINLESS STEEL RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	11	45	4.01	42'
60	RAIN BIRD 5006-PL-PC, FC-SAM-SS TURF ROTOR, 6.0" POP-UP, STAINLESS STEEL RISER. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE NOZZLE AND FLOW SHUT-OFF DEVICE. WITH SEAL-A-MATIC CHECK VALVE.	1	45	6.01	46'

QUANTITIES SHOWN IN SCHEDULES ARE SHOWN AS A COURTESY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACTUAL QUANTITIES.

VALVE SCHEDULE

									**									
<u>NUMBER</u>	<u>MODEL</u>	<u>SIZE</u>	<u>TYPE</u>	<u>GPM</u>	<u>HEADS</u>	<u>PIPE 3/4"</u>	<u>PIPE 1"</u>	<u>PIPE 1 1/2"</u>	<u>PIPE 2"</u>	<u>WIRE</u>	<u>DESIGN PSI</u>	FRICTION LOSS	<u>VALVE LOSS</u>	<u>PSI</u>	<u> PSI @ POC</u>	<u>HEAD ELEV</u>	<u>VALVE ELEV</u>	<u>PRECIP</u>
1	RAIN BIRD PEB-PRS-D	1-1/2"	SHRUB SPRAY	24.47	18	193.2		34.6		473.8	30	2.29	3.77	36.05	61.7	0.00 ft	5.00 ft	1.41 in/h
2	RAIN BIRD PEB-PRS-D	1"	BUBBLER	13.00	26	269.9	69.6	24.7		464.5	30	4.7	2.13	36.83	62.54	0.00 ft	5.00 ft	1.7 in/h
3	RAIN BIRD PEB-PRS-D	1"	SHRUB SPRAY	34.86	34	221.8	47.3	51.7	27.2	232.9	30	4.03	7.74	41.76	74.95	0.00 ft	17.00 ft	1.39 in/h
4	RAIN BIRD PEB-PRS-D	1"	BUBBLER	10.00	20	152.3	39.9			239.7	30	3.99	1.8	35.8	69	0.00 ft	17.00 ft	1.71 in/h
5	RAIN BIRD PEB-PRS-D	1-1/2"	SHRUB SPRAY	19.75	17	169.5	48.0	24.1		54.9	30	3.55	3.9	37.46	70.9	0.00 ft	17.00 ft	1.37 in/h
6	RAIN BIRD PEB-PRS-D	1-1/2"	SHRUB SPRAY	29.26	35	219.4	46.2	126.4		54.9	30	5.12	3.62	38.75	72.2	0.00 ft	17.00 ft	1.37 in/h
7	RAIN BIRD PEB-PRS-D	1-1/2"	TURF SPRAY	40.97	23	239.2	97.0	23.3	20.5	59.7	30	4.68	3.51	38.19	71.66	0.00 ft	17.00 ft	1.45 in/h
8	RAIN BIRD PEB-PRS-D	1"	BUBBLER	5.00	10	174.3				449.4	30	0.63	1.7	32.32	72.18	0.00 ft	32.00 ft	1.7 in/h
9	RAIN BIRD PEB-PRS-D	1"	SHRUB SPRAY	19.41	21	114.0	65.3	117.2		454.7	30	5.95	2.84	38.79	78.65	0.00 ft	32.00 ft	1.68 in/h
10	RAIN BIRD PEB-PRS-D	1"	BUBBLER	6.00	12	215.0	112.4			235.9	30	3.2	1.72	34.92	70.35	0.00 ft	19.00 ft	1.7 in/h
11	RAIN BIRD PEB-PRS-D	1-1/2"	SHRUB SPRAY	41.87	38	340.1	28.7	35.0	20.1	241.4	30	1.69	3.52	35.2	70.67	0.00 ft	19.00 ft	1.51 in/h
12	RAIN BIRD PEB-PRS-D	1-1/2"	TURF ROTOR	8.02	2	106.9				246.7	45	4.94	3.9	53.84	89.33	0.00 ft	19.00 ft	0.23 in/h
13	RAIN BIRD PEB-PRS-D	1-1/2"	TURF ROTOR	44.61	11	258.8	66.0	118.0	8.9	252.0	45	5.73	3.55	56.01	91.51	4.00 ft	19.00 ft	0.56 in/h
14	RAIN BIRD PEB-PRS-D	1"	BUBBLER	6.00	12	251.1				257.4	30	3.3	1.72	35.02	70.52	0.00 ft	19.00 ft	1.7 in/h
	Common Wire						1,391											

Planning Solutions, Inc.

Creating Solutions to Complex Issues

> 4400 NE 77th Avenue Suite 275 VANCOUVER, WA 98662

VOICE: 360-750-9000 FAX: 360-713-6102 www.planningsolutionsinc.com

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14835 161ST COURT SE

14835 161ST COURT SE RENTON, WA 98059-8819 ph. (425) 881-2426 cll. (206) 335-7719 www.design2426.com



DRHOOD PARK Hwy

34512 NW Pacific Hwy La Center, Washington 98629

NEIGHBC

DRAWN: CHECKED:

SCALE: DATE:

O9-24-21

JOB #: 20-1559B

ISSUED FOR: Final

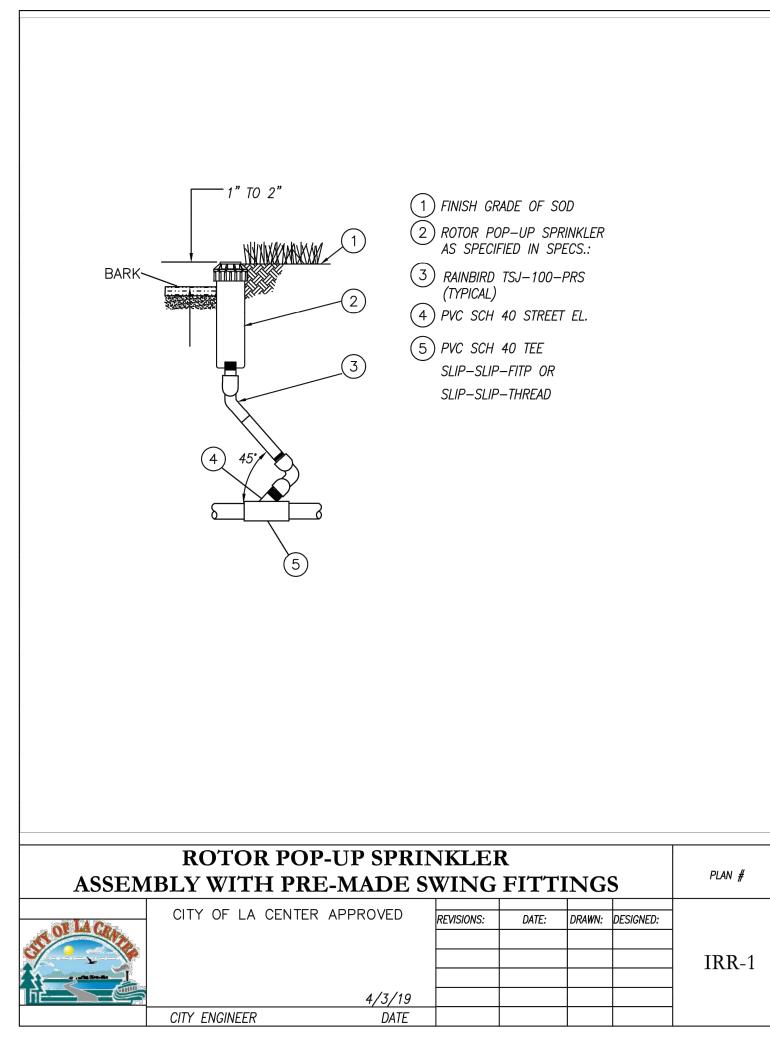
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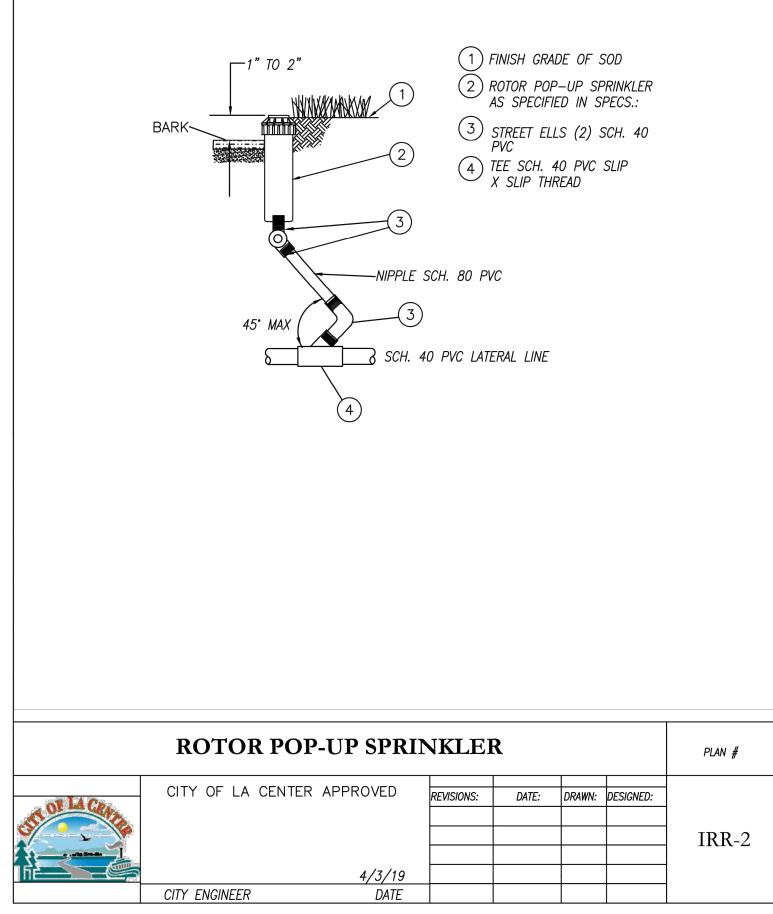
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IRRIGATION
SCHEDULE, CRIT.
ANALYSIS, &
VALVE SCHEDULE

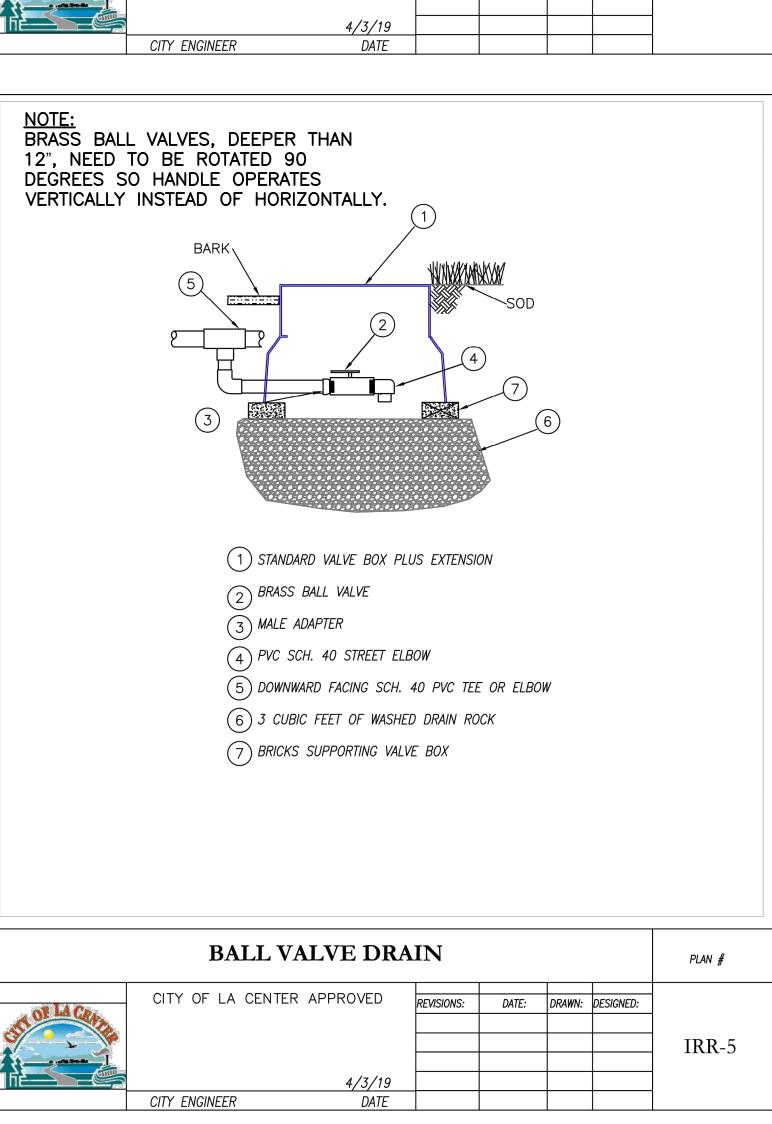
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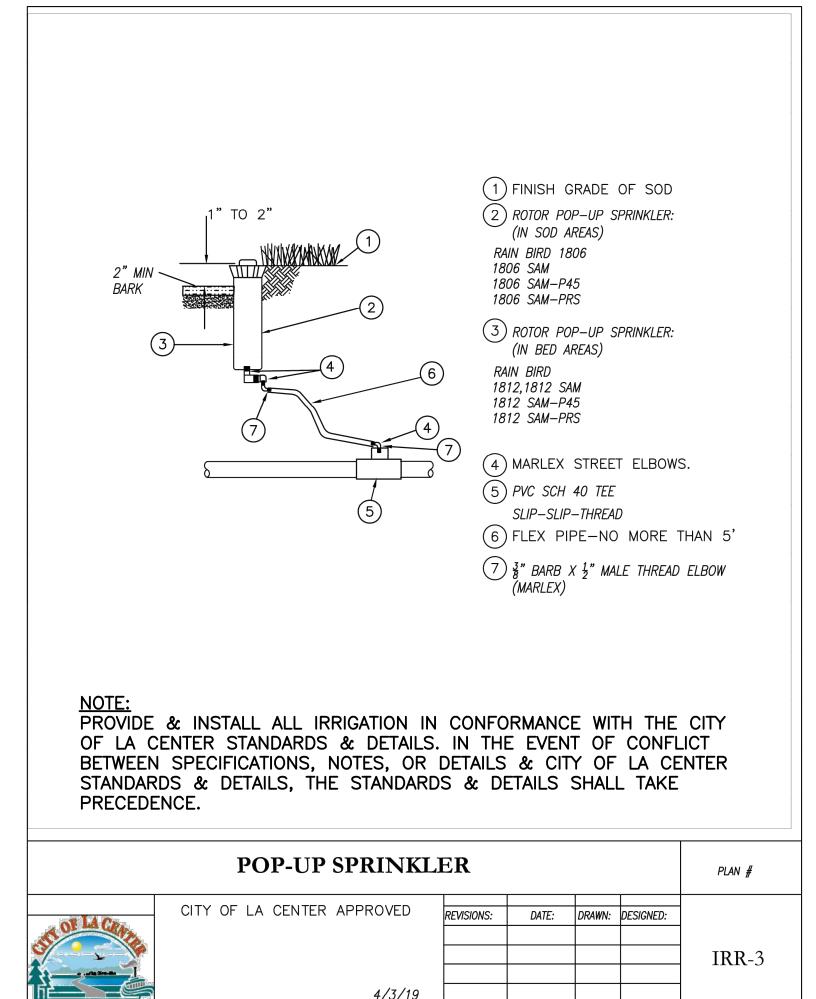
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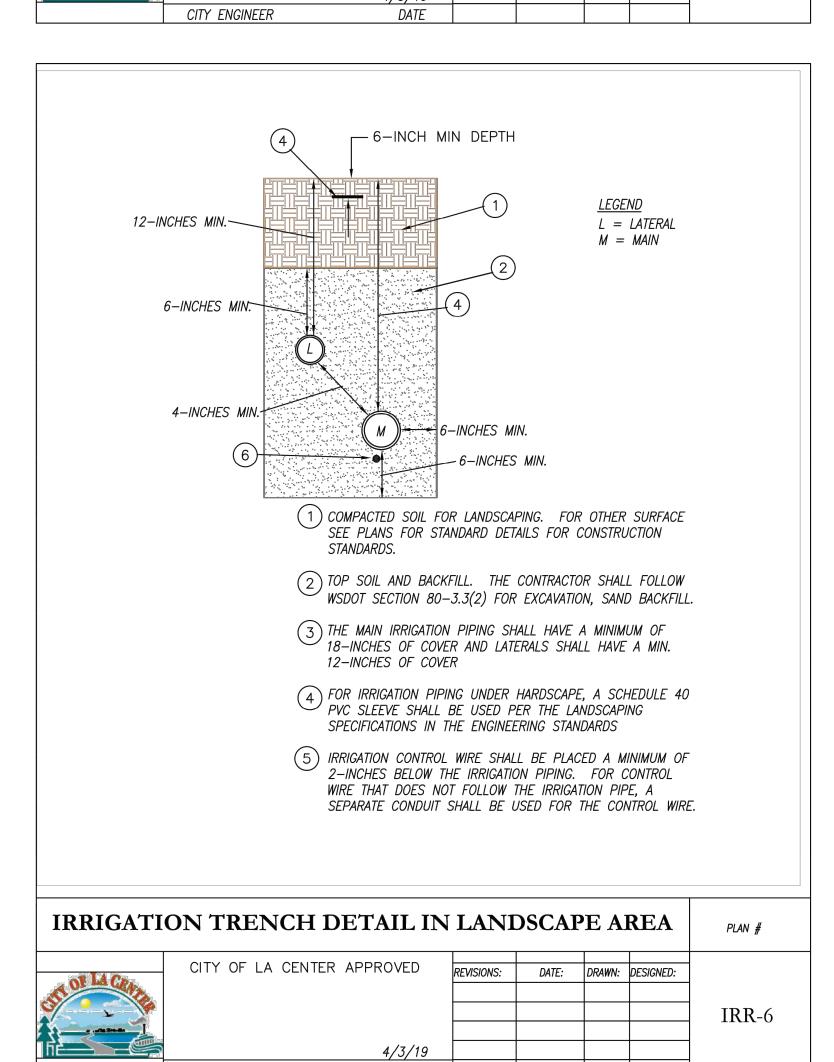
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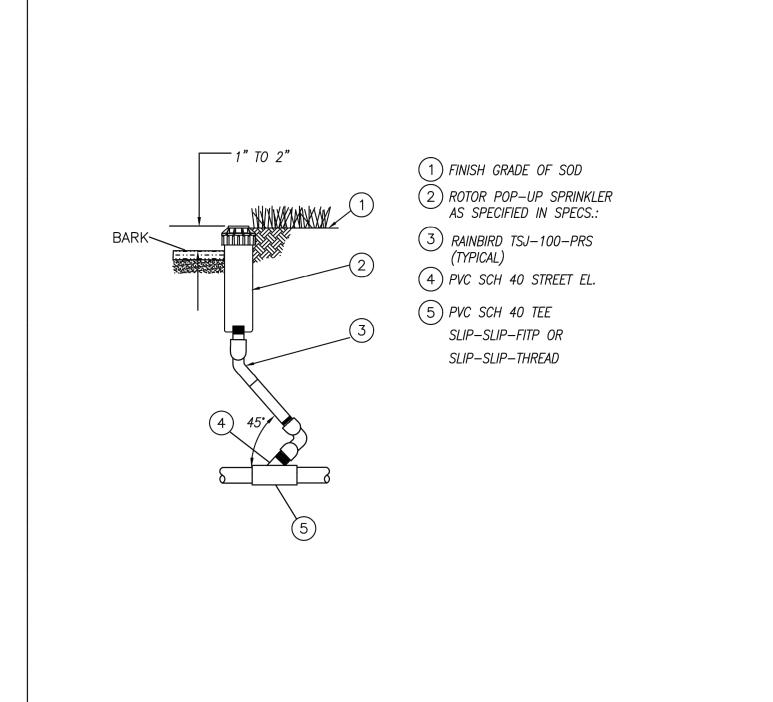


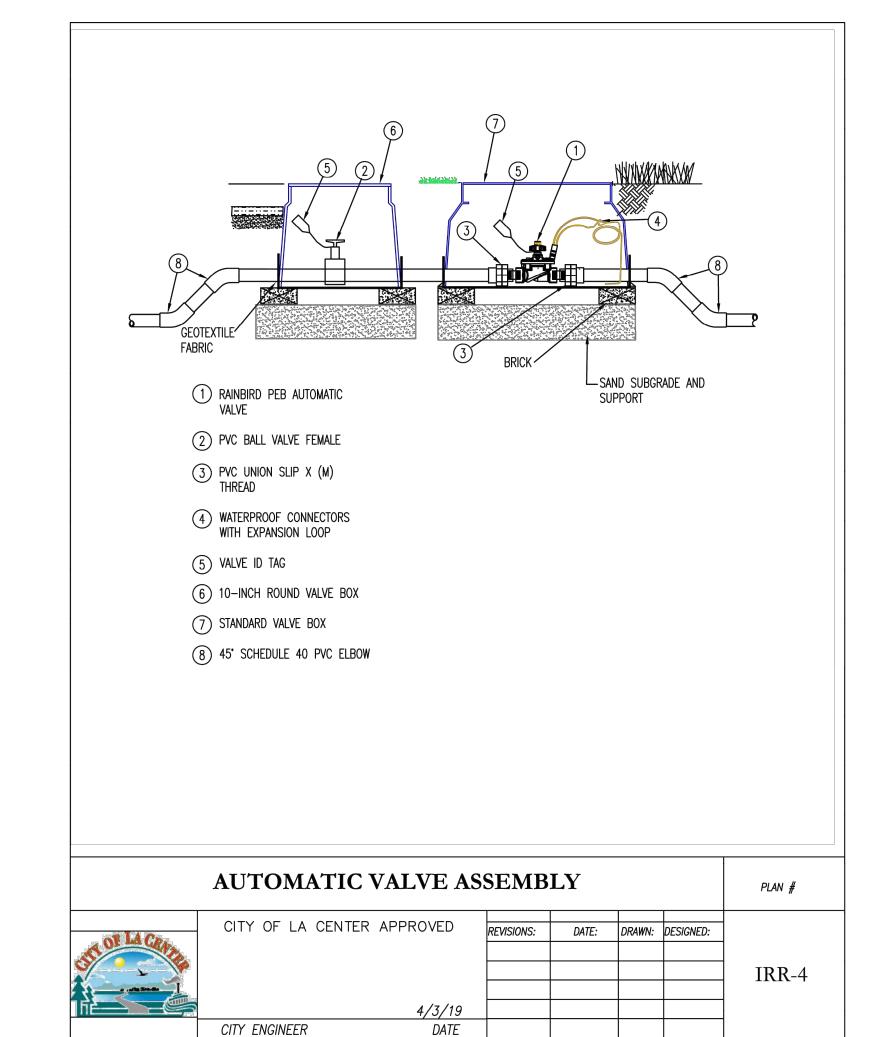




DATE

CITY ENGINEER







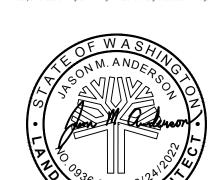
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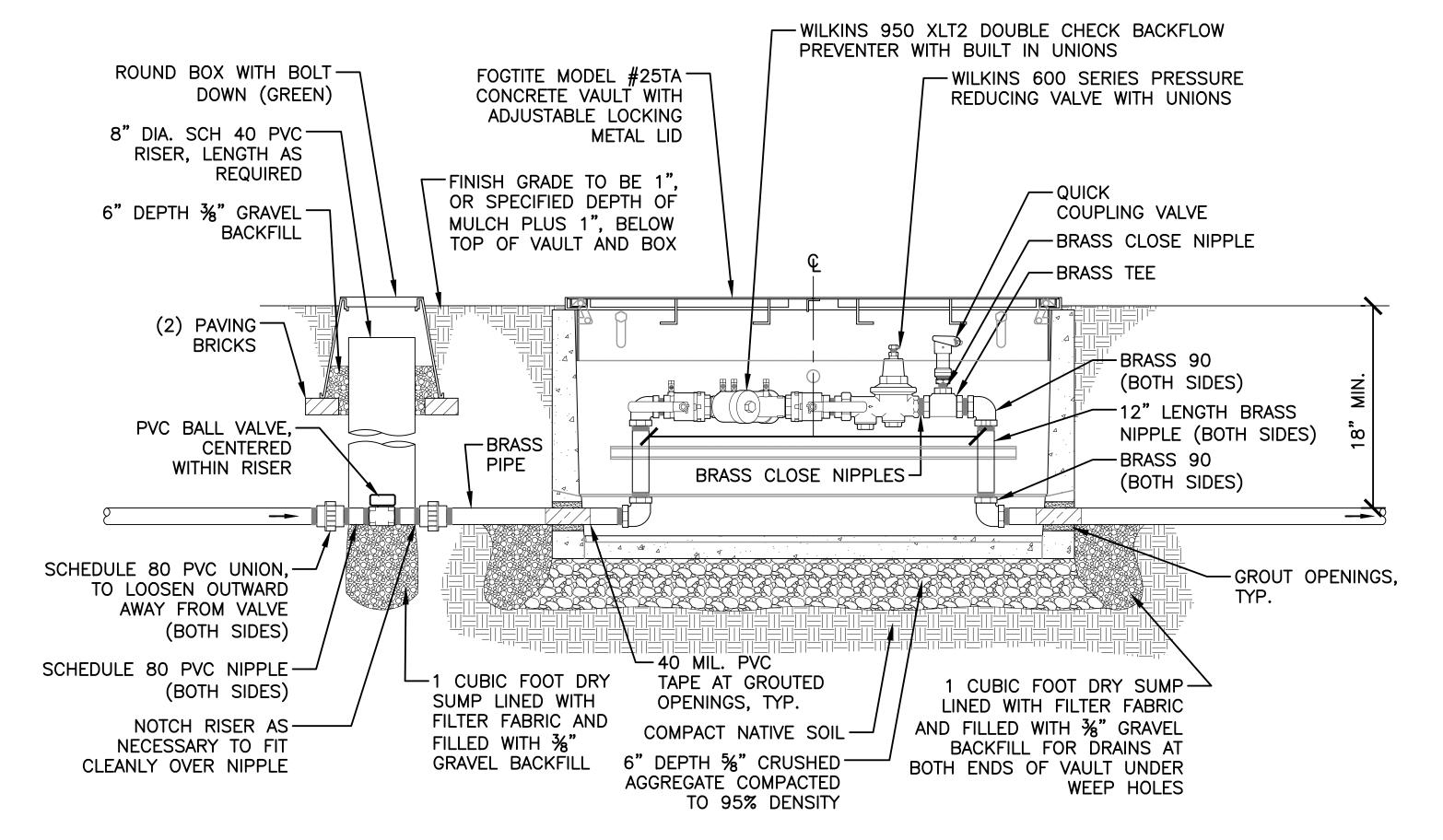
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JOB#: ISSUED FOR: Final **REVISIONS:**

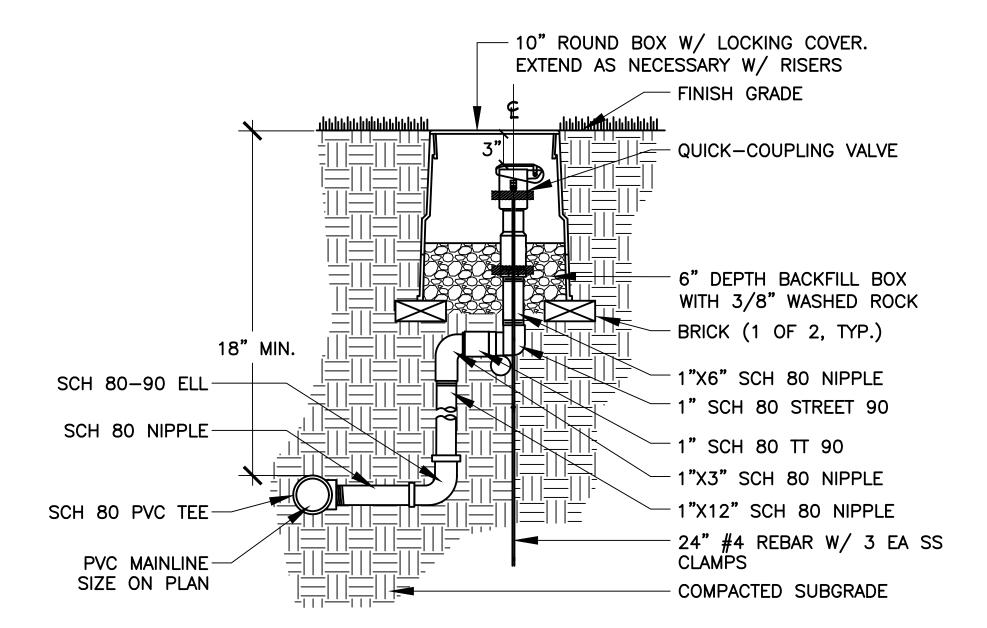
SHEET NAME: **IRRIGATION DETAILS** (CITY OF LA **CENTER STDS.)**

SHEET #:

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DOUBLE CHECK BACKFLOW PREVENTER



QUICK COUPLING VALVE

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SHEET #:

7 OF 11

Excerpt from

3.1. System Design.

3.1.1. Irrigation zoning shall take into account as much as possible:

3.1.1.1. Landscaping, slopes, reflective heat, subgrade material, and current and future shading in regards to water needs.

3.1.1.2. The potential for partial landscape water conservation based on usage/aesthetic priorities.

3.1.1.3. Localization.

3.1.2. Head spacing shall allow for a minimum of head to head coverage under operating pressure, and in no case shall exceed the maximum manufacturers recommendations.

3.1.3. Systems shall not be designed to utilize maximum nozzles.

3.1.4. Head selection and placement shall account for mature plants.

3.2. Point-of-Connection.

3.2.1. All irrigation systems shall have an approved backflow device.

3.2.2. Backflow devices shall be installed using brass ells, unions, and nipples.

3.2.3. All properties 0.5 acre and larger shall have a flow meter and a master valve rated for a minimum of twice the street pressure.

3.2.3.1. Flow meters shall be installed directly downstream of the master valve and to

3.2.3.2. Flow meters and irrigation zones shall be sized so that the meter is capable of reading the minimum and the maximum expected flows.

3.3. Pipe

3.3.1. All pipe shall be schedule 40 or better.

of a quick coupling valve.

the manufacturer's instructions.

3.3.2. Standard pipe sizes shall be used, including only ¾", 1", 1.5", and 2" and larger. No quarter sized pipes shall be used for design or construction.

3.3.3. Minimum depth of pipe, measured from top of pipe to the final grade, excluding bark,

3.3.3.1. 12" for laterals.

3.3.3.2. 18" for mainlines

3.3.3.3. 18" for wiring conduit.

3.3.4. Lateral trenches shall contain a sand backfill enclosing the pipe a minimum of 4" above, 2" below, and 1" to each side of pipe.

3.3.5. Mainline and conduit trenches shall contain a sand backfill enclosing the pipe a minimum of 6" above, 2" below, and 1" to each side of pipe.

3.3.6. Trenches shall be compacted after every 6" of backfill. Contractor shall be responsible for any settling.

3.3.7. All runs of pipe shall have a minimum clearance of 4" from each other and 24" from other

3.3.8. Mainline pipe shall not be bent or otherwise externally loaded.

3.3.9. Pipe sized 1.5" and larger shall not be bent or otherwise externally loaded.

3.3.10. Mainlines shall not use 90-degree fittings except for tee junctions, unless otherwise approved by the City.

3.3.11. Pipe sized 1.5" and larger shall not use 90-degree fittings except for tee junctions.

3.3.12. At minimum fittings shall be schedule 40 PVC or stronger. Class 200 PVC will not be allowed for irrigation piping.

3.3.13. Crosses and other 4-way fittings shall not be used.

3.3.14. Tee junctions shall not be installed within 12" of any other fitting.

3.3.15. All slip connections shall be scuffed, and receive a thorough coating PVC primer and glue of different colors.

3.3.16. All threaded fittings shall be properly Teflon taped.

3.3.17. PVC to metal connections shall be made by threading male PVC fittings into female metal

3.3.18. All pipe ¾" and larger shall be marked with locate tape or wire. Locate tape and wire shall have an accessible connection point such as a locate station or valve box flush with the ground surface.

3.3.19. All pipe installed underneath a non-permeable surface shall have sleeves made of schedule 40 PVC or stronger.

3.3.19.1. Sleeves shall extend a minimum of 18" beyond the non-permeable surface.

3.3.19.2. Sleeves shall be sealed at the ends to prevent dirt entry with foam or other durable method.

3.3.19.3. Sleeves shall be a minimum of twice the diameter of the pipe. Sleeves containing multiple pipes shall be a minimum diameter of twice the largest pipe plus the diameters of the remaining pipes as approved by the City.

3.3.19.4. Wire shall be sleeved independently from pipe. Wire sleeves may be placed inside pipe sleeves, but must extend an additional 12

3.3.20. Isolation valves shall be provided for all mainline branches with pipe in excess of 120 linear feet.

3.4. Valves.

3.4.1. All manual valves shall be of the ball valve variety.

3.4.2. All valves shall have an identification tag.

3.4.3. Valves shall be no more than 18" below final grade (excluding bark.) Valves with lines deeper than 18" shall use 45-degree ells to raise the valve to 18".

3.4.3.1. System drains are exempt from the depth requirement.

3.4.4. Automatic valves shall be Rain Bird PEB series unless otherwise approved by the City.

3.4.5. A zone-specific pressure regulator, such as a PRS-Dial, or other method as approved by the City, shall be used if needed to prevent erratic water pressure.

3.4.6. Automatic valves shall have a union fitting immediately upstream and downstream of the

3.4.7. Isolation valves shall be installed for all automatic control valves.

3.4.8. Each automatic valve shall be independently operated from the controller.

3.4.9. Isolation valves shall be installed for each quick coupler valve.

3.5. Quick Couplers.

3.5.1. Quick coupling valves shall be installed such that all points on the property are within 150'

3.5.2. Quick coupler valves shall be a Rain Bird model 44-RC unless otherwise approved by the

3.5.3. Each quick coupler shall be installed on a swing joint, and secured with stainless hose clamps to #4 rebar with a minimum length of 24". The quick coupler lid shall be approximately 3" below the box lid.

3.6. Valve Boxes.

3.6.1. Valve boxes shall be Highline/Armor/Pentek HDPE landscape boxes w/latching lids, as approved by the City.

3.6.1.1. Round boxes may be twist lock instead of latching.

3.6.2. Boxes shall be set level and square to hardscaping, other boxes, and internal components.

3.6.3. Boxes shall have a minimum separation of 12" to hardscaping and 9" to other boxes.

3.6.4. Quick connects, angle-valve drains, and isolation valves shall be placed individually into 10" round boxes, or as a pair in a standard box (approximately 12" x 17").

3.6.5. Automatic valves shall be placed individually in a standard box.

3.6.6. Automatic valves 1.5" and smaller may be placed with the associated isolation valve only when placed in jumbo boxes (approximately 14" x 21" and larger.)

3.6.7. Ball valve system drains shall be placed in a standard box.

3.6.8. Valve boxes shall be placed on brick, or other acceptable material to secure from settling. The bottom edge of the box shall be a minimum 2" below the valve.

3.6.8.1. Quick connects and drain valves are exempt from the minimum box depth requirement.

3.6.9. Valve boxes shall have a secured fabric barrier underneath the box to prevent soil intrusion.

3.6.9.1. Drain valves shall not have fabric below.

3.6.10. Boxes shall have a minimum of 12" sand below the fabric barrier that extends beyond the edges of the box.

3.6.11. The number of boxes set in turf areas shall be minimized.

3.7. System Drains.

3.7.1. All irrigation mainlines shall have sufficient low-point drains to empty the mainline.

3.7.2. For pipe depth of 24" or less system drains shall have a horizontal brass ball valve with a vertical drain.

3.7.3. System drains with a pipe depth in excess of 24" shall be a brass angle valve.

3.7.4. System drains shall empty into a minimum of 3 cubic feet of drain rock.

3.8. Irrigation Heads.

3.8.1. All irrigation heads shall contain an integrated check valve to prevent leakage.

3.8.1.1. The check valves may be omitted for popup zones without any elevation

3.8.2. Heads shall be installed perpendicular and flush with finished grade in grass areas, and 1" to 2" above finished grade (including bark) in bed areas.

3.8.3. Rotor heads shall have stainless steel risers.

3.8.4. Rotor heads shall be Rain Bird 5000-plus series or Rain Bird 8000 series unless otherwise approved by the City.

3.8.5. Rotors shall be installed on swing fittings sized no smaller than the inlet port and set at an angle no greater than 45 degrees above horizontal.

3.8.6. Swing fittings (see detail) shall consist of one of the following:

3.8.6.1. A street ell installed horizontally into the lateral line, followed by a second street ell, a nipple, and two street ells.

3.8.6.2. The equivalent pre-made solution, such as a Rain Bird TSJ or TSJ-PRS series swing joint installed above a street ell installed horizontally into the lateral line.

3.8.7. Popup heads shall be Rain Bird 1800 series unless otherwise approved by the City.

3.8.9. Each popup head shall have a filter or screen installed.

3.8.10. Popups shall be installed on a swing fitting (see detail) consisting of:

3.8.8. Popups shall be a minimum of 6" in turf zones and 12" in beds.

3.8.10.1. A street ell installed horizontally into the lateral line, followed by a swing pipe ell, swing pipe, a swing pip ell, and two street ells.

3.9. Controllers.

3.9.1. Each site shall have one Irrigation clock/controller.

3.9.2. The controller shall be a Rain Bird ESP-LXME, ESP-LXMEF, or ESP-LXD.

3.9.2.1. The controller shall be installed with an IQ Communications Cartridge and a local rain gauge, such as a Rain Bird WR2-RFC or equivalent.

3.9.2.2. The controller shall be installed in an above ground, locking, water-tight stainless-steel enclosure as approved by the City.

3.9.3. If AC power is not available onsite, Rain Bird TBOS-BT controllers shall be used.

3.9.3.1. The controllers shall be installed with a moisture or rain sensor such as an RSD-

3.9.3.2. The number of controllers shall be minimized.

3.9.3.3. The contractor shall provide one TBOS-II field transmitter.

3.9.4. An irrigation zone map shall be provided with the as-built drawings for city review.

3.10. Wire.

3.10.1. All wire shall be UL approved direct-bury, solid copper insulated wire.

3.10.2. Wire shall be a minimum AWG 14 gauge.

3.10.2.1. Double jacketed multi conductor cable control wire used for irrigation valves may be AWG 18 gauge.

3.10.2.2. Installation shall comply with all manufacture's requirements.

3.10.3. Control wire shall be color coded and labeled.

3.10.3.1. Common wire shall be white in color.

3.10.4. Wire splices shall be made inside a valve box, and shall be approved by the City on a case by case basis.

3.10.5. All connections shall be made with waterproof connectors.

3.10.6. Expansion loops/curls 24" in length shall be provided as follows:

• At every valve, sensor, flow meter, and AC controller.

• Within two feet of every junction or direction change of 45 degrees and greater.

• For every 100' of run without an expansion loop.

3.10.7. Wiring not installed in schedule 80 PVC conduit shall be buried underneath the mainline and bundled every 10 feet.

3.10.8. Extra control wires shall be installed at a ratio of one wire for every five valves, with a minimum of two extra wires to the end of every control wire run.

3.11. Inspections, testing.

3.11.1. Pressure lines shall be tested to be water tight under hydrostatic water pressure at 150 PSI for one hour with a line loss of 5 psi per WSDOT specifications..

3.11.2. All pipe shall be flushed per WSDOT specification 8-03.3(7)

3.11.3. All pipe shall not be backfilled until pressure tested and inspected.

3.11.4. All lines must be flushed to remove debris prior to the installation of nozzles.

3.11.6. Hydroseeding shall not be done until 100% coverage of the irrigation system is demonstrated.

3.11.5. Heads and nozzles must be adjusted for head to head coverage and minimal overspray.

3.11.7. Proper operation of all valves and sensors shall be demonstrated from the controller.

3.11.8. The controller shall be programmed by the contractor with city review prior to acceptance.

3.11.9. As built drawings shall reflect all changes of the plans and with measurements taken in

3.11.9.1. The length and depth of all sleeves and runs of pipe shall be indicated.

3.11.9.2. Operations manuals shall be submitted for all materials.

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DRAWN: CHECKED: SCALE: DATE: 09-24-21 JOB #: 20-1559B ISSUED FOR: Final **REVISIONS:**

SHEET NAME: **IRRIGATION SPECIFICATIONS CENTER STDS.)**

SCALE: 1"=40'-0"

	PLANT LEGEND		
TREES			
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QUANTITY
+	ACER RUBRUM 'ARMSTRONG' / ARMSTRONG MAPLE	2" Cal. Min. 8' Ht. Min.	6
	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	2" Cal. Min. 8' Ht. Min.	13
A CONTRACTOR OF	CORNUS X 'RUTGAN' STELLAR PINK DOGWOOD	2" Cal. Min. 8' Ht. Min.	7
The state of the s	THUJA PLICATA 'HOGAN' / HOGAN'S MESTERN RED CEDAR	6' ht. Min.	16
	PICEA OMORIKA/ OMORIKA SPRUCE	6' ht. Min.	4
	POPULUS TREMULA 'ERECTA'/ SWEDISH ASPEN	2" Cal. Min. 8' Ht. Min.	6
•	PRUNUS SERRULATA 'KWANZAN' / KWANZAN CHERRY	2" Cal. Min. 8' Ht. Min.	4
	TILIA CORDATA / GREENSPIRE LINDEN	2" Cal. Min. 8' Ht. Min.	3
the state of the s	PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' / VANDERWOLF PINE	6' ht. Min.	13
	ZELKOVA SERRATA / VILLAGE GREEN SELKOVA	2" Cal. Min. 8' Ht. Min.	6
	IRRIGATED PLANTER BEDS - SEE SHEET L2 FOI LEGEND	R PLANTINGS	S AND PLANT
+ + + + + + + + + + + + + + + + + + +	NON-IRRIGATED EROSION CONTROL SEE MIX: ECO PRAIRIE OR SIMILAR BY SUNMARK SEEDS PER 1,000 S.F. INFO@SUNMARKSEEDS.COM 503-241-7333	IN RATE OF	: I.5 LB.
	NON-IRRIGATED WETLAND BUFFER TEMPORARY SEED BANK PLUS MIX BY SUNMARK SEEDS IN R I,000 S.F. REFER TO THE BANK USE PLAN PREP ECOLOGICAL LAND SERVICES (360-578-1371) F INFORMATION. INFO@SUNMARKSEEDS.COM 503-241-7333	ATE OF 2 L ARED BY	B. PER

EXISTING TREES RETAINED (IF ANY). ANY EXISTING TREES RETAINED SHALL BE SHOWN ON THE FINAL LANDSCAPE PLAN AS-BUILT. THE PROPOSED TREES IN THIS AREA SHALL BE PLANTED WHEREVER EXISTING TREES ARE NOT RETAINED.

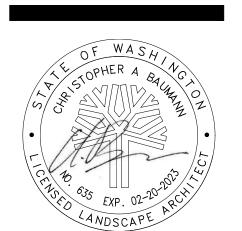
REFER TO SHEET L2 FOR FOR SHRUBS AND GROUND COVER PLACEMENT AND LEGEND & SHEET L3 FOR NOTES & DETAILS.



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ISSUED FOR: Final Review

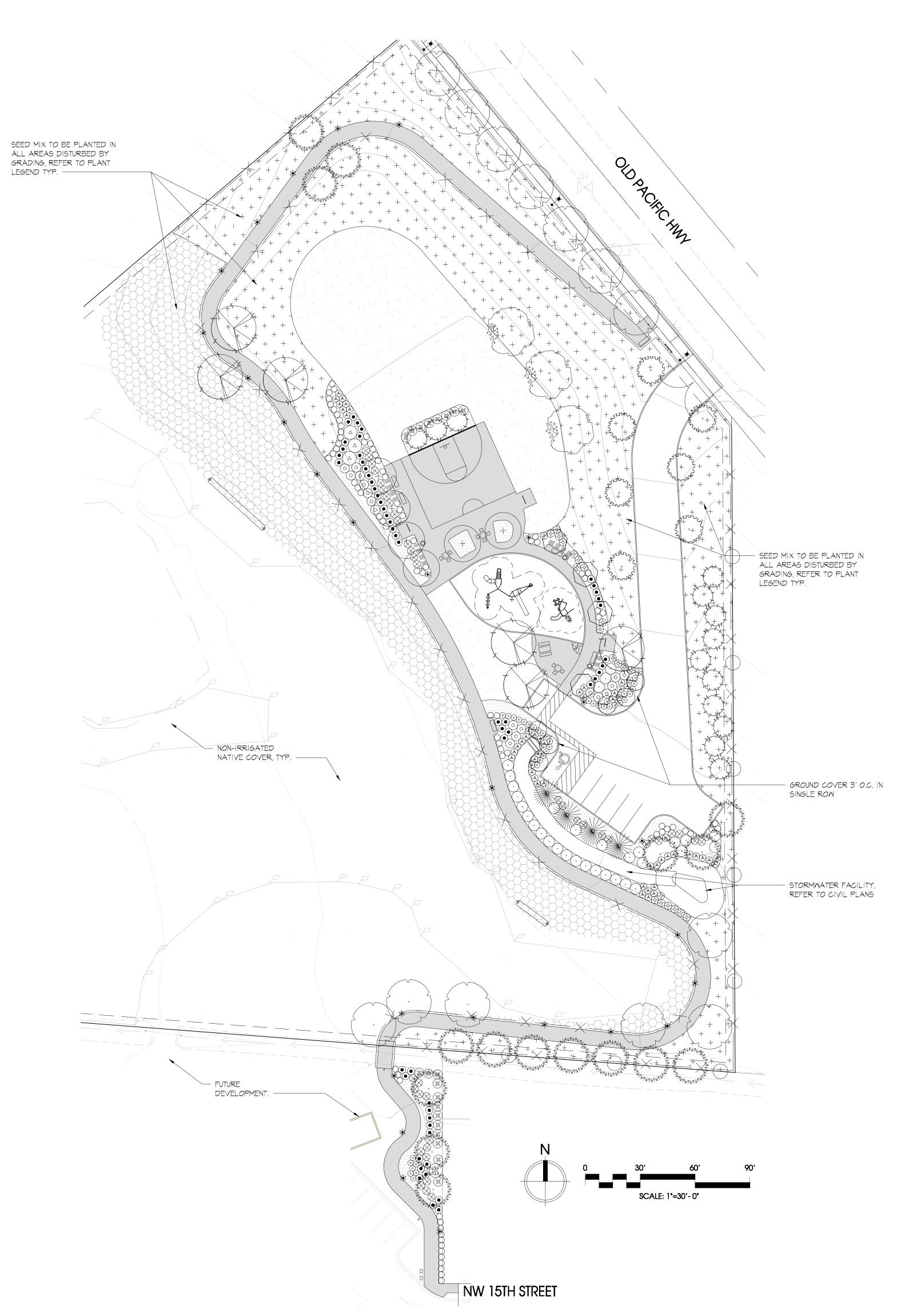
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SHEET NAME:

LANDSCAPE
PLAN

SHEET #:





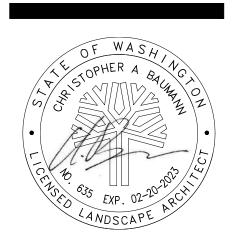
SHRUBS \$ GRO	DUND COVER		T
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QUANTITY
Δ	ARBUTUS UNEDO 'COMPACTA' / COMPACT STRAWBERRY BUSH	5 GAL.	4
\otimes	BERBERIS THUNBERGII 'ROSE GLOM' / ROSE GLOM BARBERRY	2 GAL.	44
0	EUONYMUS JAPONICUS 'AUREO-MARGINATUS' / GOLDEN EUONYMUS	5 GAL.	81
0	FESTUCA GLAUCA / BLUE FESCUE	I GAL.	89
*	ILEX X MESERVEAE 'BLUE BOY / BLUE BOY HOLLY	2 GAL.	20
•	KALMIA LATIFOLIA 'ELF' / ELF DWARF MOUNTAIN LAUREL	I GAL.	54
(MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	2 GAL.	50
	NANDINA DOMESTICA 'FIREPOWER' / FIREPOWER NANDINA	2 GAL.	25 5 AT EACH LOCATION IN SINGLE ROW
©	NANDINA DOMESTICA 'MOONBAY' / MOONBAY NANDINA	2 GAL.	38
\odot	PRUNUS L.AUROCERASUS SCHIPKAENSIS' SCHIPKA CHERRY LAUREL	5 GAL.	33
<u></u>	SPIREA NIPPONICA 'SNOWMOUND' / SNOWMOUND SPIREA	2 GAL.	18
⊕	VIBURNUM DAVIDII / DAVID VIBURNUM	2 GAL.	27
	EUONYMUS FORTUNEI 'EMERALD GAIETY' / EMERALD GAIETY EUONYMUS	I GAL.	ITO PLANT IN TRIANGULAR SPACING EXCEPT WHERE NOTED ON PLAN
	TURF - SOD OR SEED		
+ + + + + + + + + + + + + + + + + + + +	NON-IRRIGATED EROSION CONTROL SEE MIX:EC SUNMARK SEEDS IN RATE OF 1.5 LB. PER 1,000		OR SIMILAR BY
+ + + + +	INFO@SUNMARKSEEDS.COM 503-241-7333		
	NON-IRRIGATED WETLAND BUFFER TEMPORARY SEED BANK PLUS MIX BY SUNMARK SEEDS IN RA REFER TO THE BANK USE PLAN PREPARED BY E SERVICES (360-578-1371) FOR ADDITIONAL INFO	ATE OF 2 L ECOLOGICA	B. PER 1,000 S.
	INFO@SUNMARKSEEDS.COM 503-241-7333		



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SHEET NAME:

LANDSCAPE
PLAN

SHEET #:

L2

REFER TO SHEET LI FOR FOR TREE PLACEMENT / LEGEND AND SHEET L3 FOR NOTES & DETAILS.

2. IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL PROPERTY.

3. THE LANDSCAPE DESIGNER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BOUNDARIES, UTILITIES AND WETLANDS.

4. THIS PLAN SHALL BE INSTALLED TO MEET ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL

5. THIS PLAN SHALL BE CONSIDERED PRELIMINARY UNTIL APPROVED BY ALL GOVERNING AGENCIES. IMPLEMENTATION OF THIS PLAN SHALL NOT PROCEED UNTIL ISSUANCE OF ALL RELATED PERMITS.

6. PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY, THE PLAN SHALL GOVERN.

7. ALL WORK IS TO BE PERFORMED BY LICENSED CONTRACTORS AND EXPERIENCED WORKERS.

8. THE CONTRACTOR IS TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S WORK, AT NO ADDITIONAL COST TO THE OWNER. CONTACT ALL UTILITY PROVIDERS SERVING THE SITE AREA 48 HOURS PRIOR TO ANY EXCAVATION.

9. ALL PLANT MATERIALS SHALL MATCH SPECIFICATIONS PER SPECIES AND SHALL COMPLY WITH ANSI Z60.1 'STANDARD FOR NURSERY STOCK'.

10. THE CONTRACTOR SHALL ADHERE TO THE WASHINGTON ASSOCIATION OF NURSERYMEN'S GUIDELINES FOR PLANTING PRACTICES.

II. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ELEMENTS ON AND OFF SITE, RESULTING FROM THE CONTRACTOR'S WORK.

12. THE CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR 2 YEARS AFTER COMPLETION OF PLANTING. DISEASED, DYING, OR DEAD PLANT MATERIAL SHALL BE REPLACED BY THE CONTRACTOR DURING THE TWO YEAR PERIOD AND MAINTAINED FOR AN ADDITIONAL 2 YEAR

13. IMMEDIATELY UPON BID AWARD, CONTRACTOR SHALL SECURE THE PLANT MATERIALS AS SPECIFIED FROM AVAILABLE SOURCES. IN THE EVENT THAT PLANT MATERIALS ARE NOT AVAILABLE, CONTACT THE CITY OF LACENTER & THE LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTION FOR PLANT MATERIAL WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.

14. TOP DRESS ALL SHRUB AND GROUND COVER AREAS (NOT LAWN) WITH 2" OF FIR BARK MULCH. SUBMIT SAMPLE TO THE CITY OF LACENTER & THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION.

15. TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.

16. THE CONTRACTOR SHALL ENSURE THAT ALL EXCAVATED PLANTING PITS HAVE POSITIVE DRAINAGE. PLANT PITS FULLY FLOODED WITH WATER SHALL DRAIN WITHIN (12) HOURS OF FILLING.

17. FINISH GRADE SHALL BE SET TO ALLOW POSITIVE DRAINAGE

18. ROTOTILL 2" OF COMPOST INTO ALL PLANTED AREAS.

19. INCORPORATE PEAT INTO THE ROOT ZONE OF RHODODENDRONS, AZALEAS AND OTHER ACID LOVING PLANTS.

20. INCORPORATE 10-20-20 FERTILIZER INTO THE ROOT ZONE OF ALL NEW PLANTINGS.

21. RONSTAR, OR APPROVED EQUAL, PREEMERGENT HERBICIDE TO BE APPLIED TO ALL PLANTED AREAS PER MANUFACTURERS INSTRUCTIONS.

22. EXISTING VEGETATION TO BE SPRAYED WITH ROUNDUP, OR APPROVED EQUAL, PER MANUFACTURERS INSTRUCTIONS. SUFFICIENT TIME SHALL BE GIVEN TO ALLOW EXISTING MATERIAL TO DIE. REMOVE EXISTING VEGETATION MAT AND ROTOTILL OR SCARIFY EXISTING SOIL.

23. CROWN LAWN AREAS AND GRADE TO PROVIDE POSITIVE DRAINAGE.

24. ROLL LAWN AREA TO INSURE PROPER COMPACTION TO MINIMIZE SETTLING.

25. AMEND SOIL IN LAWN AREAS WITH 80 LBS. OF DOLOMITE LIME AND 40 LBS. OF 10-20-20 SLOW RELEASE FERTILIZER OR EQUIVALENT. PROVIDE A 3" LAYER OF SANDY LOAM TOPSOIL FOR LAWN AND BED AREA.

26. SEED LAWN AREAS WITH GRASS SEED MANUFACTURER'S RECOMMENDATIONS. COVER SEED WITH FINE MULCH APPLIED WITH ROLLER OR HYDROSEED

27. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING TURF PLANTED WITHIN THE RIGHT OF WAY.

28. PLANT MATERIAL SHALL BE PLANTED W/ ROOT CROWN I" ABOVE FINISHED GRADE TO ALLOW POSITIVE DRAINAGE AWAY FROM CROWN.

29. STAKE ALL TREES OVER 6 FT. IN HEIGHT PER DETAIL 'A' AND 'B' ON THIS SHEET.

30. REFER TO DETAILS FOR ADDITIONAL INFORMATION.

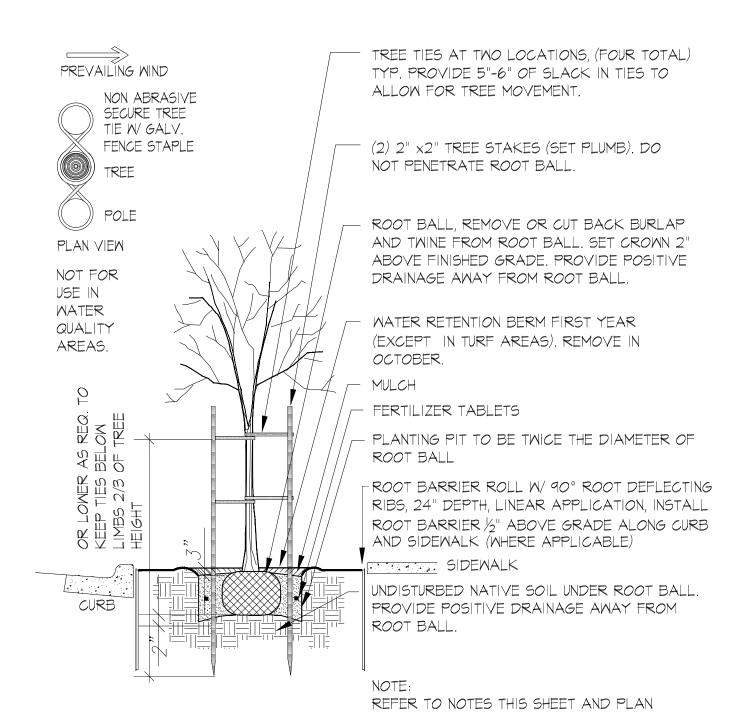
31. ALL PLANTING SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM.

32. ALL PLANT MATERIALS FURNISHED ARE TO BE HEALTHY, UNIFORMLY BRANCHED AND WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS.

33. ALL PLANT MATERIALS FURNISHED ARE TO BE FREE FROM DEAD OR BROKEN BRANCHES, LICHENS, SCARS, BROKEN BARK OR WOUNDS. ALL PLANT MATERIALS WILL BE INSECT, WEED, AND DISEASE FREE ACCORDING TO THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE FOR NURSERY PLANT MATERIALS SOLD FOR WHOLESALE OR RETAIL. ALL PRUNING WOUNDS MUST BE WELL HEALED WITH NO EVIDENCE OF DECAY.

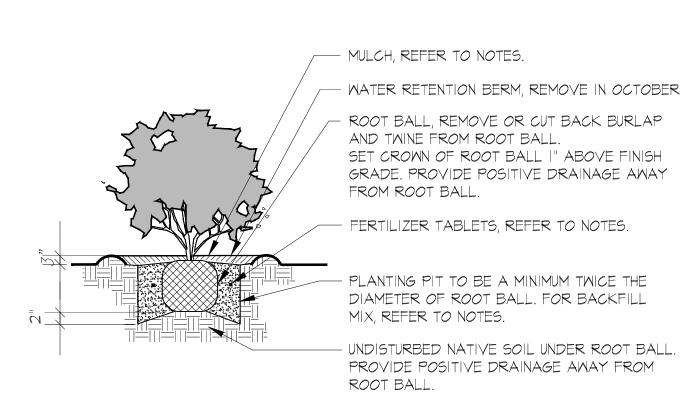
34. SIX (6) MONTHS PRIOR TO THE FINAL CITY OF LACENTER ACCEPTANCE & AT FINAL CITY OF LACENTER ACCEPTANCE ALL LANDSCAPING SHALL BE WEED FREE. LAWN AREAS WITH CLOVER WILL NOT BE ACCEPTED.

35. HYDROSEEDED LAWN AREAS MUST BE ACTIVELY GROWING FOR LONGER THAN 4 FOUR (4) MONTHS PRIOR TO FINAL CITY OF LACENTER ACCEPTANCE



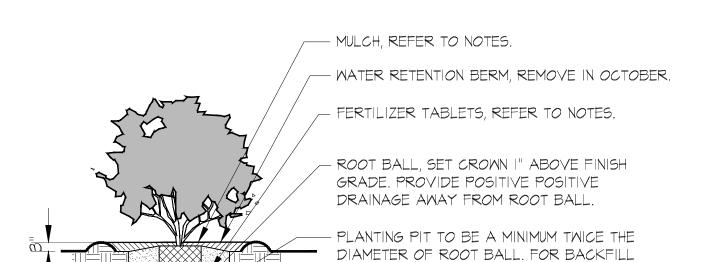
 γ B & B Tree Planting Detail SECTION / PLAN VIEW

SHEETS FOR MORE INFORMATION



REFER TO NOTES AND PLANS PRIOR TO BIDDING AND CONSTRUCTION.





Container Ground Cover Planting Detail

Not To Scale

UNDISTURBED NATIVE SOIL UNDER ROOT BALL. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOT BALL.

MIX, REFER TO NOTES.

SECTION

NON ABRASIVE SECURE TREE TREE TIES AT TWO LOCATIONS, TIE W/ GALV. (FOUR TOTAL), TYP. FENCE STAPLE PROVIDE 5"-6" OF SLACK IN TIES TO ALLOW TREE FOR TREE MOVEMENT. POLE ROOT BALL, REMOVE OR CUT BACK BURLAP AND TWINE FROM ROOT BALL. SET CROWN 2" PLAN VIEW ABOVE FINISHED GRADE, PROVIDE POSITIVE DRAINAGE AWAY FROM ROOT BALL. WATER RETENTION BERM FIRST YEAR (EXCEPT IN TURF AREAS). REMOVE IN OCTOBER. MULCH, REFER TO NOTES THIS SHEET PLANTING PIT TO BE TWICE THE DIAMETER OF ROOT BALL. FOR BACKFILL MIX, REFER TO NOTES THIS SHEET FERTILIZER, REFER TO NOTES THIS SHEET UNDISTURBED NATIVE SOIL UNDER ROOT BALL. PROVIDE POSITIVE DRAINAGE AWAY FROM REFER TO NOTES THIS SHEET AND PLAN SHEETS

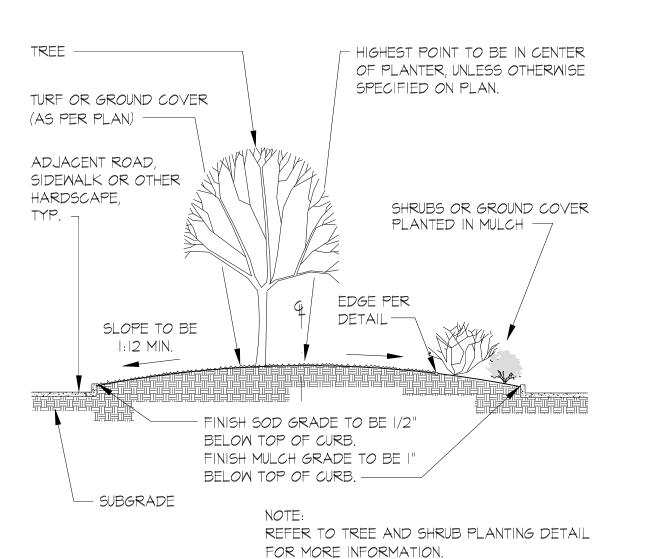
PREVAILING WIND

Not To Scale

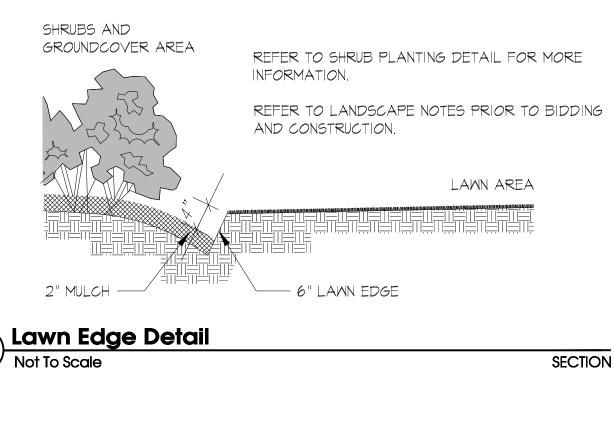
(2) 2"X2" TREE STAKES (SET PLUMB). DO NOT

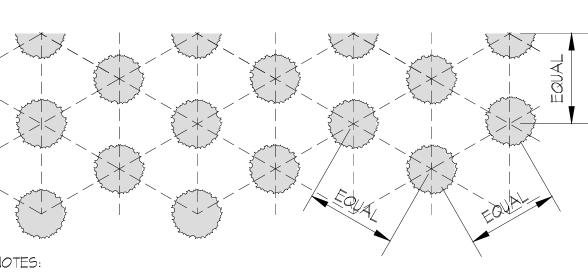
PENETRATE ROOT BALL

FOR MORE INFORMATION \setminus B & B Tree Planting Detail: Evergreen under 8' Height



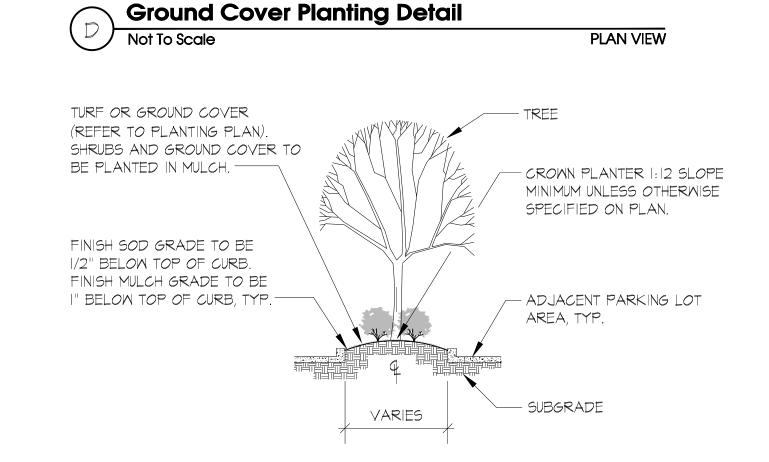
Typical Curbed Planter Area Not To Scale





ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING AS SPECIFIED IN PLANTING LEGEND.

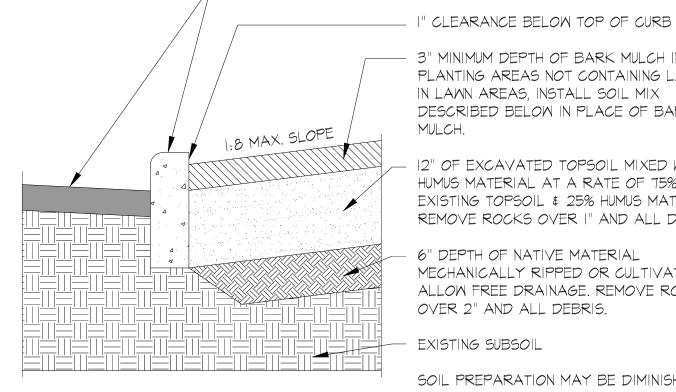
GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY HARD SURFACE, UNLESS OTHERWISE SPECIFIED.



REFER TO TREE AND SHRUB PLANTING DETAIL FOR MORE INFORMATION.



SECTION B-B



3" MINIMUM DEPTH OF BARK MULCH IN PLANTING AREAS NOT CONTAINING LAWN. IN LAWN AREAS, INSTALL SOIL MIX DESCRIBED BELOW IN PLACE OF BARK

SECTION / PLAN VIEW

12" OF EXCAVATED TOPSOIL MIXED WITH HUMUS MATERIAL AT A RATE OF 75% EXISTING TOPSOIL \$ 25% HUMUS MATERIAL. REMOVE ROCKS OVER I" AND ALL DEBRIS.

6" DEPTH OF NATIVE MATERIAL MECHANICALLY RIPPED OR CULTIVATED TO ALLOW FREE DRAINAGE. REMOVE ROCKS OVER 2" AND ALL DEBRIS.

EXISTING SUBSOIL

SECTION A-A

ROADWAY AND CURB

SOIL PREPARATION MAY BE DIMINISHED IN ORDER TO AVOID CONFLICT WITH EXISTING UNDERGROUND UTILITIES.

Soil Section at Curb within Planting Strips & Finger Islands Not To Scale SECTION

ALL DETAILS SHOWN MAY NOT BE REQUIRED FOR THIS PROJECT.

20-1559B ISSUED FOR: Final Review **REVISIONS:**

SCALE:

Planning

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Suite 275

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34512 NW Pacific Center, Washingt

CHECKED:

AS SHOWN | 10-29-21

SHEET NAME: LANDSCAPE

SHEET #:

DETAILS