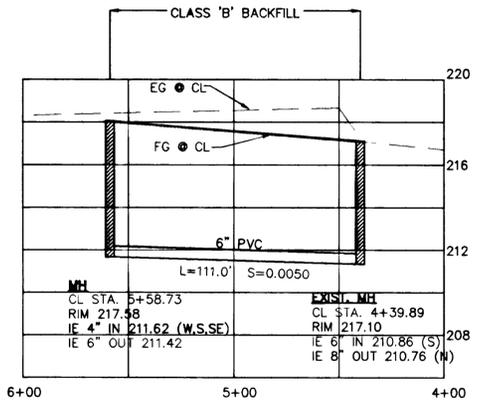
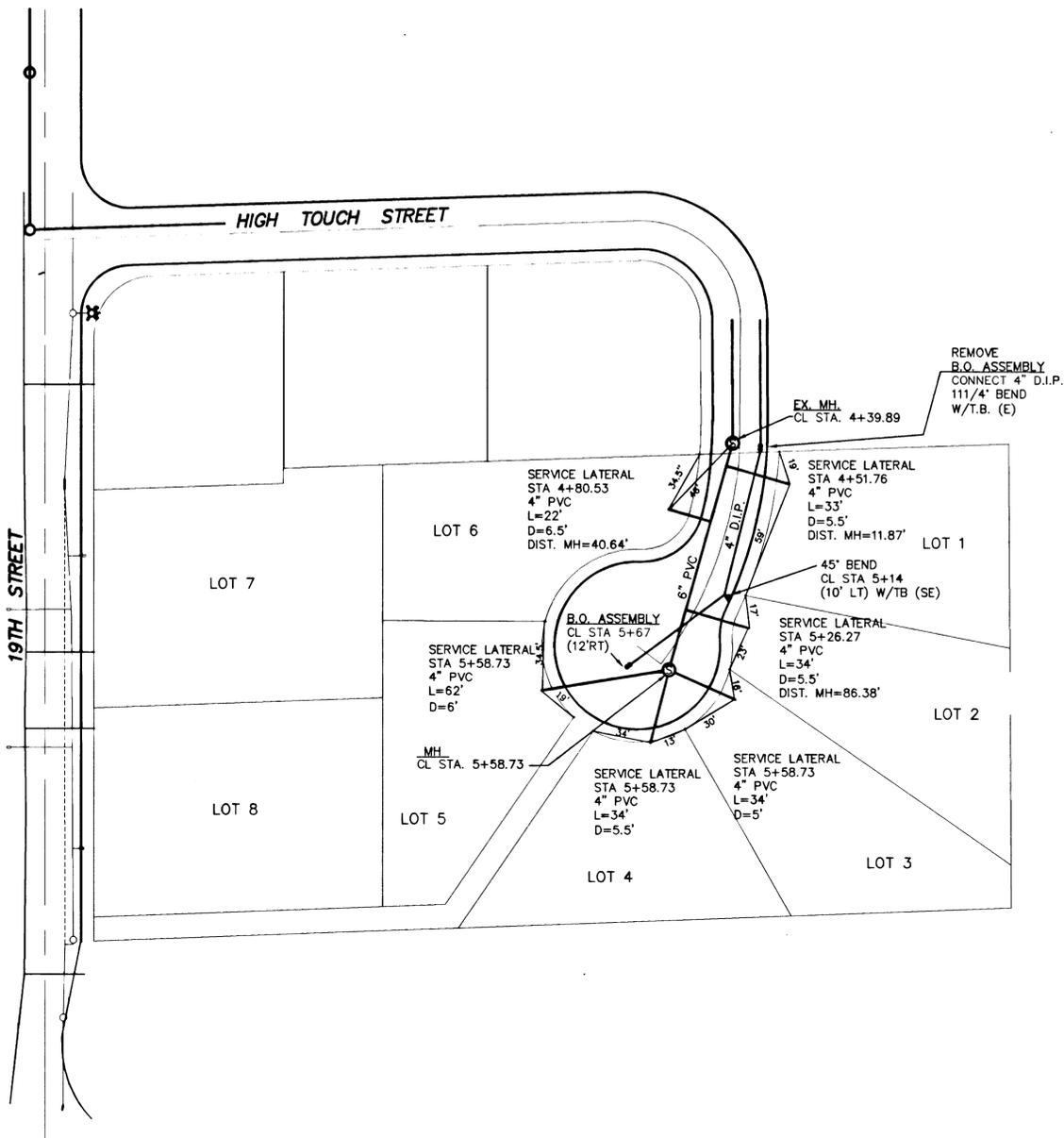


REVISIONS	BY
AS-BUILT	LD
06/02/97	LD

AS-BUILT



**SANITARY LINE**  
SCALE: H: 1" = 40'  
V: 1" = 4'



WATERLINE AND  
SANITARY SEWER PLAN

CHINOOK PLACE  
RENAISSANCE DEVELOPMENT CORP.

**SISUL ENGINEERING**  
876 PORTLAND AVENUE  
CLATSOP, OREGON 97087  
(503) 867-0188

DATE	JAN, 1996
SCALE	1" = 40'
DRAWN	JJ
JOB	95-59
SHEET	1
OF 3 SHEETS	

Chinook Place '97

REVISIONS	BY
AS-BUILT	JJ
	6/1/97

CHINOOK PLACE  
RENAISSANCE DEVELOPMENT CORP.

STREET, GRADING AND  
EROSION CONTROL PLAN

SISUL ENGINEERING  
370 PORTLAND AVENUE  
CLATSOP, OREGON 97087  
(503) 867-0168

DATE	JAN. 1996
SCALE	1" = 40'
DRAWN	JJ
JOB	95-59
SHEET	2
OF	3 SHEETS

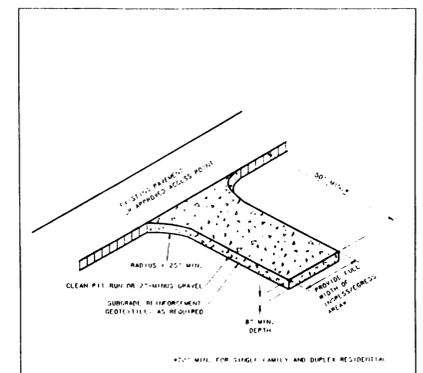
- Streets:**
- New street sections are to be cleared of all surface vegetation and other miscellaneous structures or materials. Grub improvement areas to remove all buried vegetative matter and debris to a depth of 8" below subgrade. Properly dispose of all waste material.
  - Immediately following fine grading operations proof roll subgrade areas to achieve 95% of maximum density for a 6" depth per AASHTO T-99 test method. Embankment or fills are to be constructed in 6" maximum lifts with each lift being compacted to 95% maximum dry density prior to proceeding with the next lift. Areas to receive fill are to be inspected by City of West Linn personnel prior to placement of the fill. Where required by the City of West Linn or the Engineer, the Contractor shall have fill areas tested for compaction by a certified testing lab. Such testing will be at the contractor's expense.
  - Aggregate base rock shall be 1"-0" crushed rock as per Oregon State Highway Division specifications. Aggregate base is to be compacted in 6" maximum lifts to 95% of maximum dry density per AASHTO T-99 test. City of West Linn requires a proof roll with a loaded 10 yard dump truck of the subgrade prior placement of the rock and again after placement of the base rock and prior to paving. All underground utilities including laterals, services and power or gas conduits will be in place before subgrade proof roll will take place.
  - Asphalt concrete is to be Class 'C' A.C. as per Oregon State Highway Division specifications. Pave only during dry weather and when the temperature is 40° or warmer.
  - Construct curb and gutter using Class 'A' 3000 psi concrete with maximum 1/2" aggregate size. Construction joints at 15' maximum on centers. Three inch weepholes are to be installed on all lots uphill or even with the street. Generally weepholes shall be located at the center and lowest edge of curb for each lot. Curb depressions for handicap ramps shall be centered between curb returns at intersections unless otherwise noted on the plans.
  - All materials, installation, tests, and inspections to be in strict accordance with the City of West Linn standards and specifications.
  - A street construction encroachment permit or similar permit may be required from the City of West Linn. Construction permit fees or other similar fees or bonding required of the contractor will be the contractor's responsibility to obtain.

- General Grading and Erosion Control:**
- Clean waste material excavated from road cut or trenching areas not used in street fill areas may be spread evenly across lot areas in depths of less than one foot, except where noted otherwise on the plans.
  - During construction, straw bales, cutoff trenches or some other method of runoff control shall be used to prevent erosion and/or siltation from crossing outside the work area boundaries.
  - Large organic material, miscellaneous pipe or construction material must be removed from the site and disposed of properly.

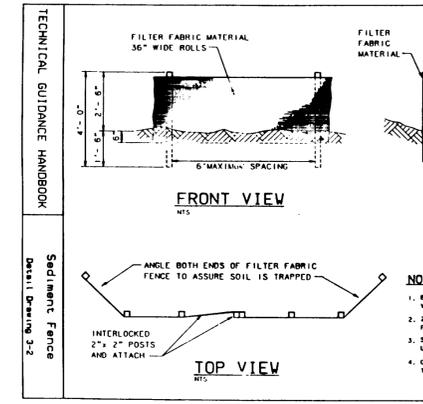
- Erosion Control:**
- Summary:**
- The intent of the requirement is to prevent siltation from reaching storm drain systems and drainage ways.
  - The minimum measures need to be made on all projects.
    - A gravel pad, at least 50 feet long, is required where vehicles will leave the construction site.
    - A sediment barrier is to be constructed of straw bales or a sediment fence where noted in the details or where sediment will cross outside the work area.
    - Where excavated material is placed on hard surfaces (such as streets) material must be broomed or scraped clean as soon as possible.
    - Riprap exits from all culverts and storm drain pipes draining into the ditches or swales. Riprap is to be Class 50 riprap or larger or as noted elsewhere in the plans.
    - Reseed or cover disturbed areas as soon as is possible and practical but no later than the completion of construction on the other phases of work. Erosion control measures such as straw bales and silt fences must remain in place until seeded areas show growth substantial to prevent erosion.

- General:**
- Approval of this erosion control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g. size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
  - The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the applicant/contractor until all construction is completed and approved, and vegetation of landscaping is established.
  - The ESC facilities on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to ensure that sediment laden water does not enter the drainage system or violate applicable water standards.
  - The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded as needed for unexpected storm events and to ensure that sediment laden water does not leave the site.
  - The ESC facilities shall be inspected daily by the applicant/contractor and maintained as necessary to ensure their continued functioning.
  - The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month, or within 24 hours following a storm event.
  - 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.
  - Stabilized construction entrances shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures may be required to ensure that all paved areas are kept clean for the duration of the project.

- Sediment Fence:**
- The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6 inch overlap, and both ends securely fastened to the post.
  - The filter fabric fence shall be installed to follow the contours, where feasible. Then fence posts shall be spaced a maximum of six feet apart and driven securely into the ground a minimum of 18 inches.
  - A trench shall be excavated, roughly 6 inches wide by 6 inches deep, upslope and adjacent to the wood post to allow the filter fabric to be buried. Bury the bottom of the fabric 6" vertically below finished grade. All areas of filter fabric trench shall be compacted.
  - The filter fabric shall be installed with stitched loops over fence posts. The fence post shall be constructed of 2"x2" fir, pine, or steel. The fence post must be a minimum of 48" long. The filter fabric shall not be stapled or attached to existing trees.
  - Sediment fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.
  - Sediment fences shall be inspected by applicant/contractor immediately after each rainfall, and at least daily during prolonged rainfall. Any required repairs shall be made immediately.



TECHNICAL GUIDANCE HANDBOOK Gravel Construction Entrance Detail Drawing 3-1A



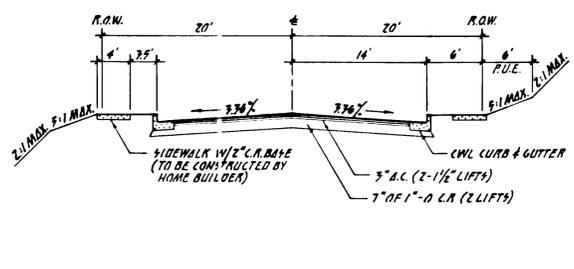
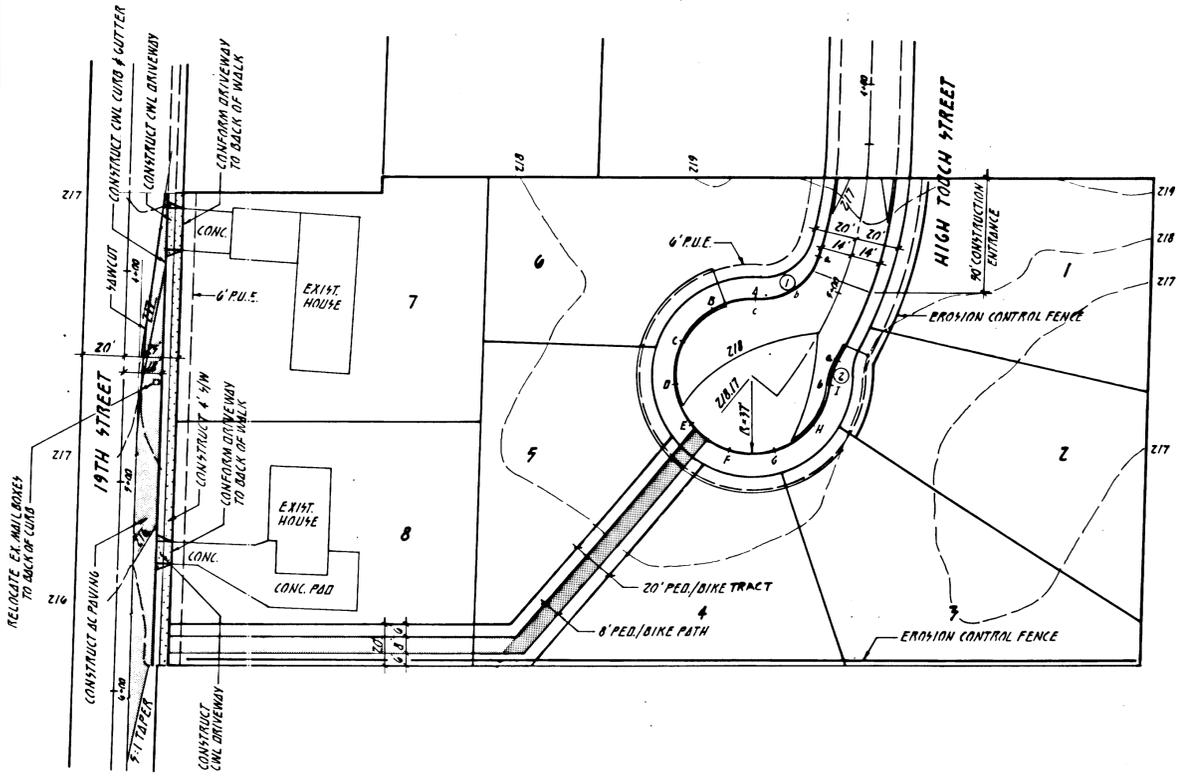
TECHNICAL GUIDANCE HANDBOOK Sediment Fence Detail Drawing 3-2

**CURB RETURN DATA (ELEVATIONS ARE TOP OF CURB)**

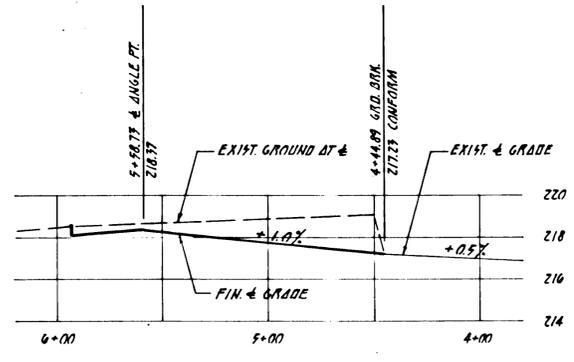
NO.	DATA	a	b	c
①	$\Delta = 75^\circ 23' 16''$ $R = 30.00'$ $L = 39.47'$	217.65 ± 4-26.98	217.78	217.91
②	$\Delta = 23^\circ 45' 09''$ $R = 30.00'$ $L = 12.44'$	218.08 ± 5-29.40	218.17	

**CUL-DE-SAC DATA**

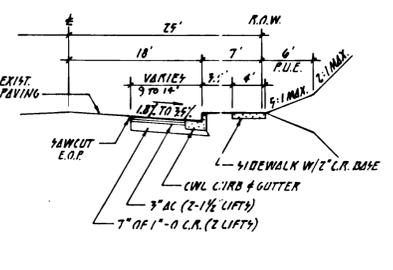
POINT	RADIUS	DELTA FROM P.C.	T.C. ELEV.
A	37.00'	0° 00' 00"	217.91
B	"	33° 22' 33"	218.05
C	"	66° 45' 06"	218.19
D	"	100° 07' 39"	218.34
E	"	133° 30' 12"	218.48
F	"	166° 52' 45"	218.59
G	"	200° 15' 18"	218.67
H	"	233° 37' 51"	218.72
I	"	266° 59' 24"	218.77



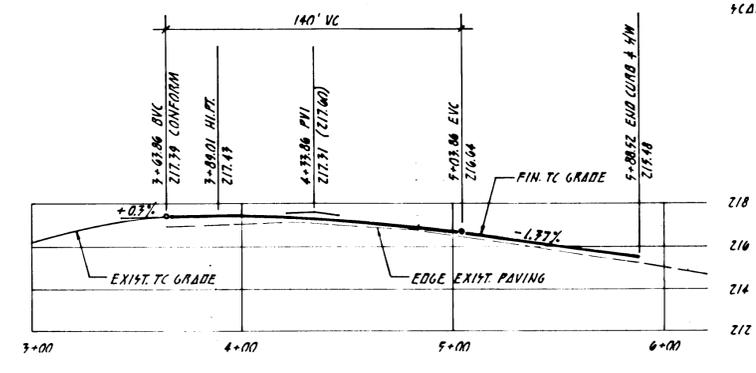
TYPICAL SECTION HIGH TOUCH STREET N.T.S.



PROFILE HIGH TOUCH STREET



TYPICAL SECTION 19TH STREET N.T.S.



PROFILE 19TH STREET

AS-BUILT

