

**NOTES:**

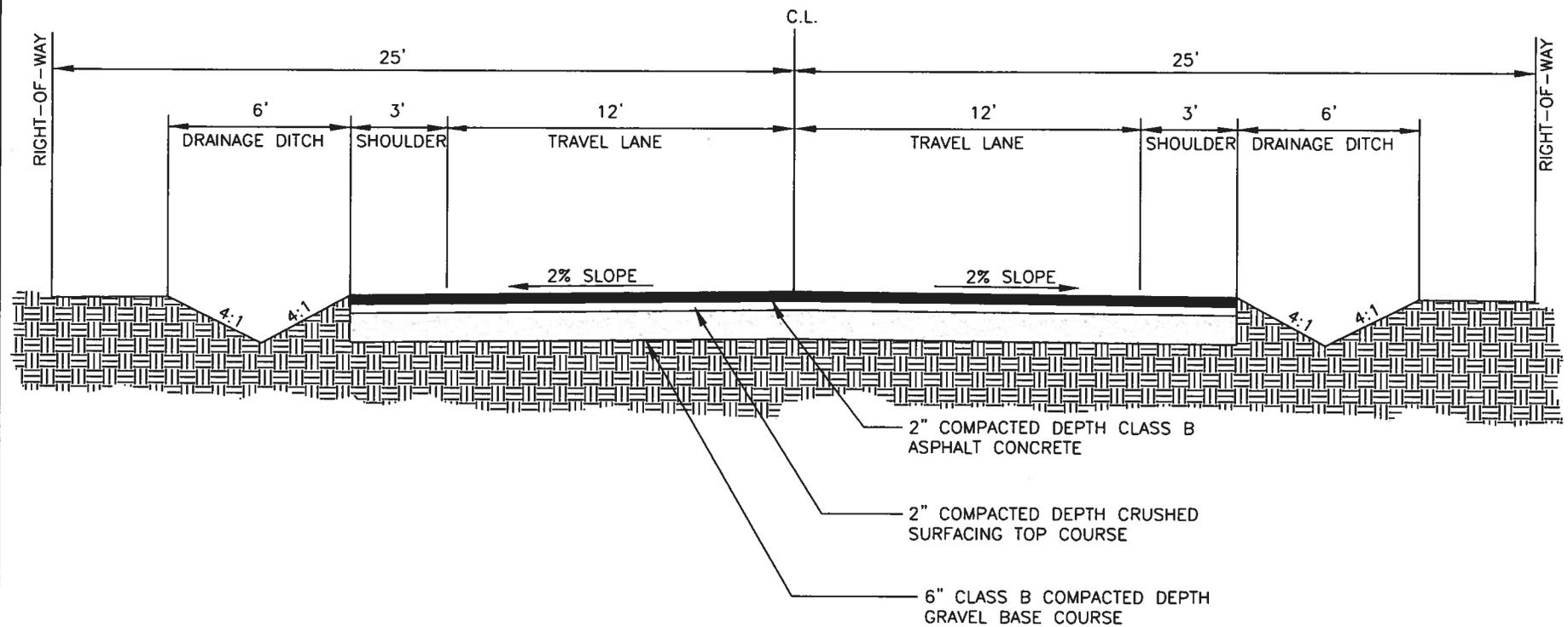
1. PUBLIC ROAD
2. CURBS DEVELOPER OPTION
3. ENCLOSED DRAINAGE DEVELOPER OPTION
4. THICKENED EDGE DEVELOPER OPTION

**APPROVED**  
 City of Oak Harbor  
 Engineering Dept.

\_\_\_\_\_  
 Signature

6/19/06  
 Date

COLLECTOR INDUSTRIAL  
 ENTERPRISE AREA STREET STANDARDS



NOTES:

1. PRIVATE OR PUBLIC ROAD
2. CURBS OPTIONAL
3. ENCLOSED DRAINAGE OPTIONAL
4. THICKENED EDGE OPTIONAL

**APPROVED**  
 City of Oak Harbor  
 Engineering Dept.

\_\_\_\_\_  
 Signature

6/8/06  
 Date

LOCAL INDUSTRIAL  
 ENTERPRISE AREA STREET STANDARDS

APPROVED

Signature

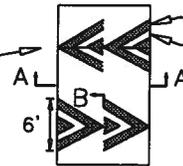
6/8/06  
Date



100'  
MINIMUM

STREET  
CENTERLINE

CENTER OF  
TRAVEL LANE



12" THERMOPLASTIC } PER 2003 MUTCD Figure 3B-29  
12" BLANK SPACE } OPTION B

STREET  
CENTERLINE

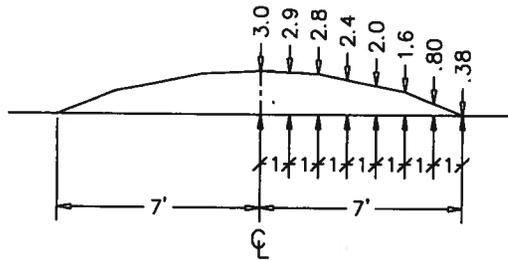
100'  
MINIMUM

14'

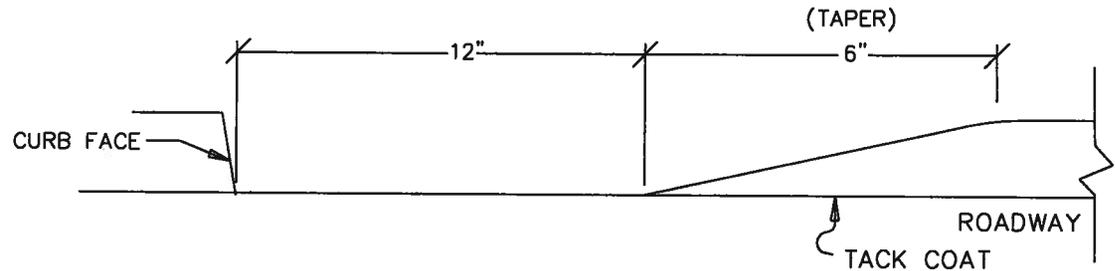


NOTES:

- 1) FLAGS TO BE REMOVED 60 DAYS AFTER INSTALLATION.
- 2) TEMPLATE SHALL BE USED FOR CONSTRUCTION OF THE SPEED BUMP USING DIMENSIONS AS SHOWN IN SECTION A-A.
- 3) MAXIMUM HEIGHT AT CROWN SHALL BE NO MORE THAN 3.00 INCHES AFTER COMPACTION WITH A MINIMUM ACCEPTABLE HEIGHT OF 2.75".

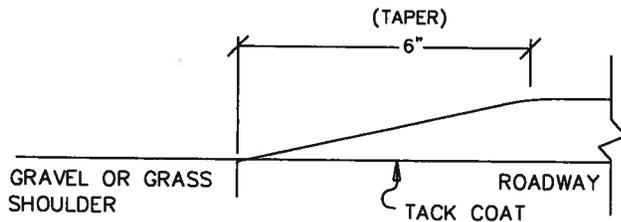


SECTION A-A  
NOT TO SCALE



SECTION B-B  
SHOULDER DETAIL FOR  
STREETS WITH CURBS

NOT TO SCALE



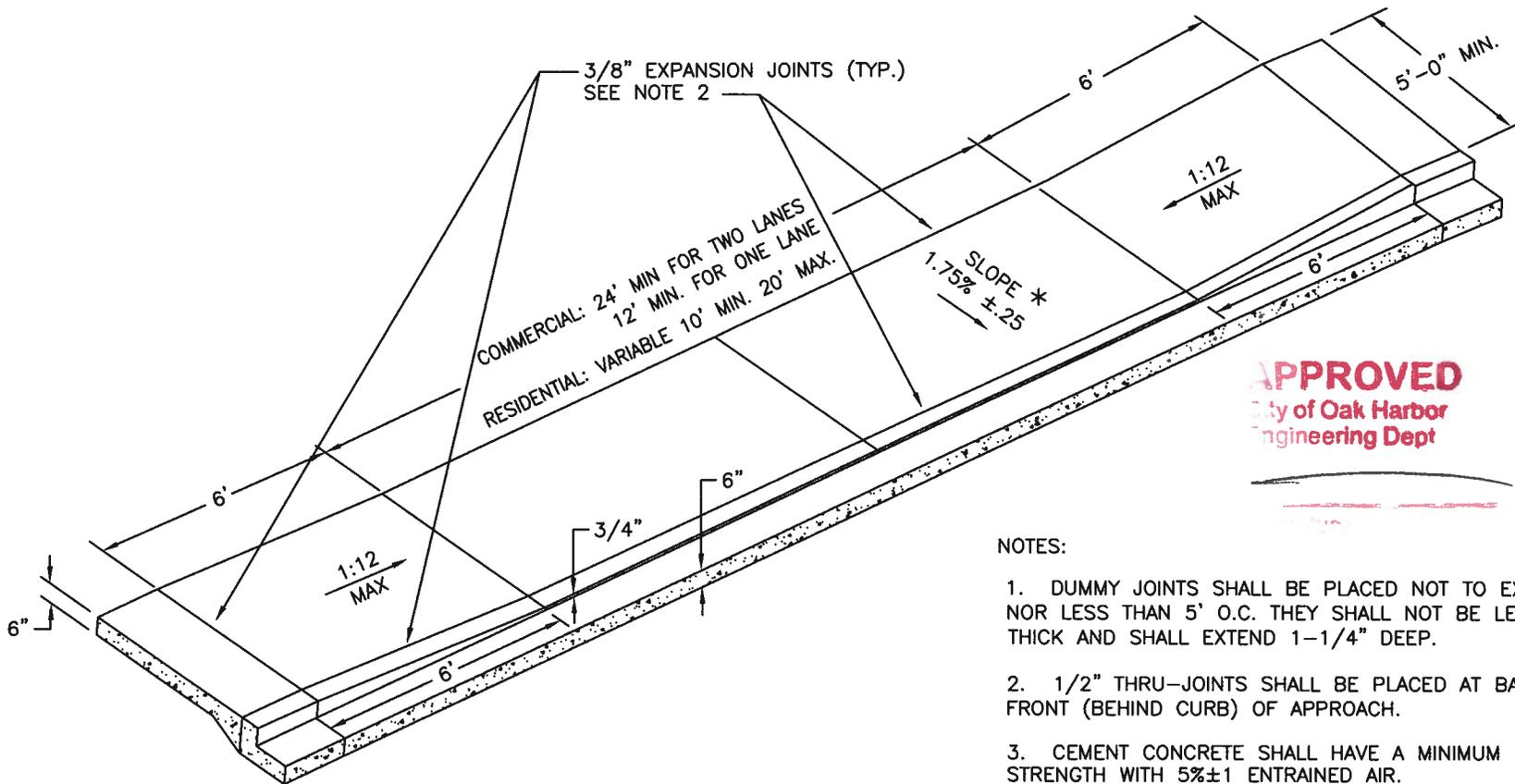
SECTION B-B  
SHOULDER DETAIL FOR  
STREETS WITHOUT CURBS

NOT TO SCALE



City of  
Oak Harbor  
ENGINEERING DEPARTMENT  
865 SE Barrington Drive  
Oak Harbor, WA 98277

SPEED HUMP

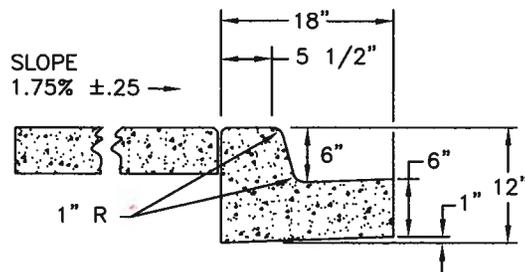


**APPROVED**  
City of Oak Harbor  
Engineering Dept

7-16-10  
Date

NOTES:

1. DUMMY JOINTS SHALL BE PLACED NOT TO EXCEED 15' O.C. NOR LESS THAN 5' O.C. THEY SHALL NOT BE LESS THAN 3/16" THICK AND SHALL EXTEND 1-1/4" DEEP.
2. 1/2" THRU-JOINTS SHALL BE PLACED AT BACK, SIDES AND FRONT (BEHIND CURB) OF APPROACH.
3. CEMENT CONCRETE SHALL HAVE A MINIMUM 3000psi 28-DAY STRENGTH WITH 5%±1 ENTRAINED AIR.
4. ALL JOINTS SHALL BE CLEANED AND EDGED.
5. APPROACH SHALL NOT BE POURED INTEGRAL WITH CURB AND GUTTER.
6. SUBGRADE COMPACTION SHALL BE TO 95% MODIFIED PROCTOR DENSITY.
- \* 7. THE ACCEPTABLE CROSS SLOPE OF SIDEWALK SHALL NOT BE LESS THAN 1.5% AND NOT GREATER THAN 2.0%.



NOT TO SCALE

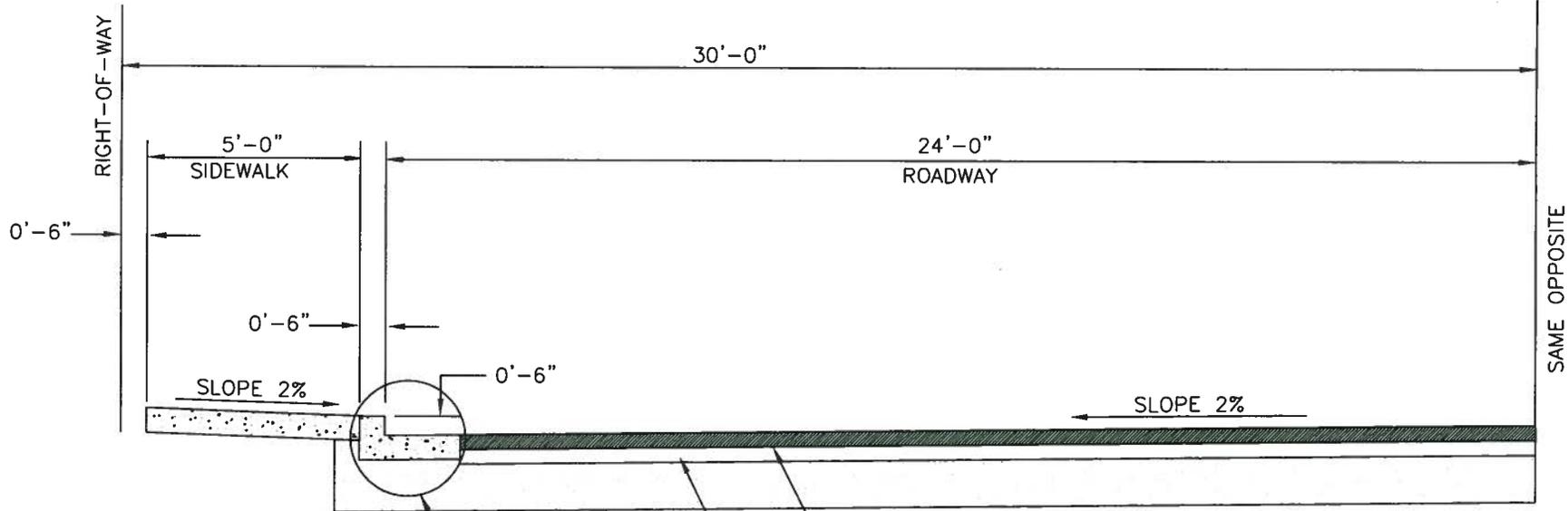


City of  
Oak Harbor  
ENGINEERING DEPARTMENT  
865 SE Barrington Drive  
Oak Harbor, WA 98277

Concrete Sidewalk Driveway  
Detail

ST-1Concrete driveway sidewalk detail.dwg

REVISED 7-16-10



**APPROVED**  
 City of Oak Harbor  
 Engineering Dept

Signature

6/8/06  
 Date

2" COMPACTED DEPTH CLASS B ASPHALT CONCRETE

2" COMPACTED DEPTH CRUSHED SURFACING TOP COURSE

6" CLASS B COMPACTED DEPTH GRAVEL BASE COURSE

VERTICAL CURBING ONLY  
 (see curbing detail ST-6 for dimensions)

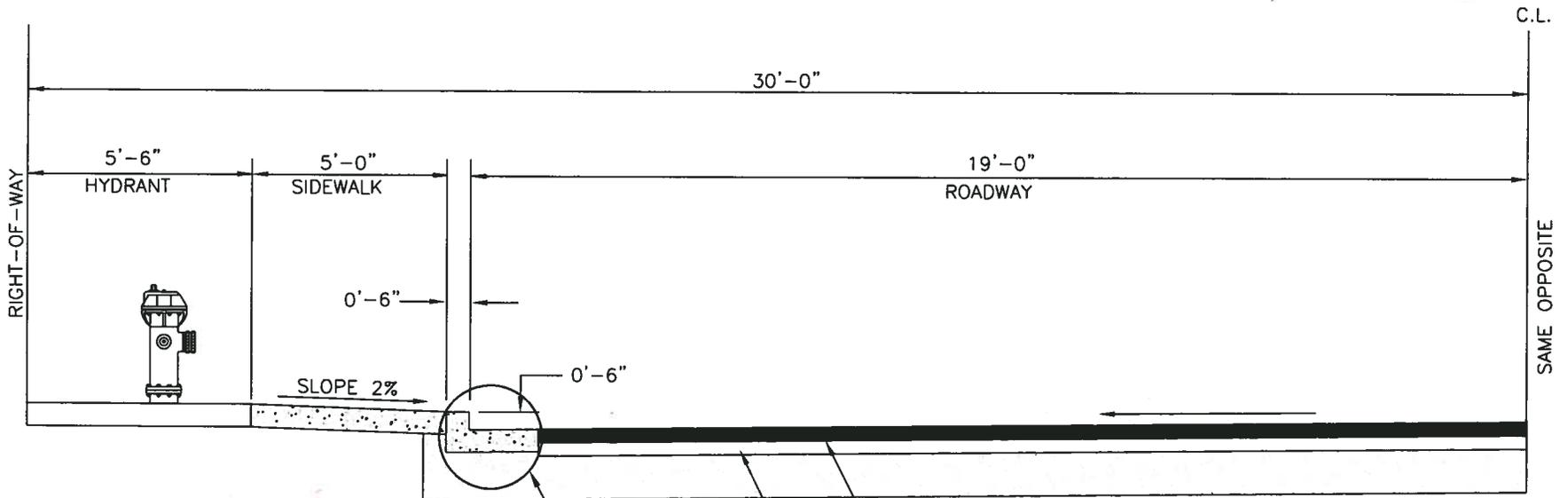
NOT TO SCALE

SIEVE SIZE	PERCENT PASSING	
	BASE COURSE	TOP COURSE
1 1/4" square	100	100
3/4" square		
5/8" square	50-80	
1/4" square	30-50	55-75
U.S. No. 40	3-18	8-24
U.S. No. 200	7.5 max	10.0 max
% Fracture	75 min	75 min
Sand Equivalent	35 min	35 min



City of  
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Typical Street Section  
 Arterial - 60 Foot ROW



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 City of Oak Harbor  
 Engineering Dept.

Signature

6/8/06  
 Date

SIEVE SIZE	PERCENT PASSING	
	BASE COURSE	TOP COURSE
1 1/4" square	100	
3/4" square		100
5/8" square	50-80	
1/4" square	30-50	55-75
U.S. No. 40	3-18	8-24
U.S. No. 200	7.5 max	10.0 max
% Fracture	75 min	75 min
Sand Equivalent	35 min	35 min

2" COMPACTED DEPTH CLASS B ASPHALT CONCRETE

2" COMPACTED DEPTH CRUSHED SURFACING TOP COURSE

6" CLASS B COMPACTED DEPTH GRAVEL BASE COURSE

VERTICAL OR ROLLED CURBING IS ACCEPTABLE (see curbing detail ST-6 for dimensions)

NOT TO SCALE

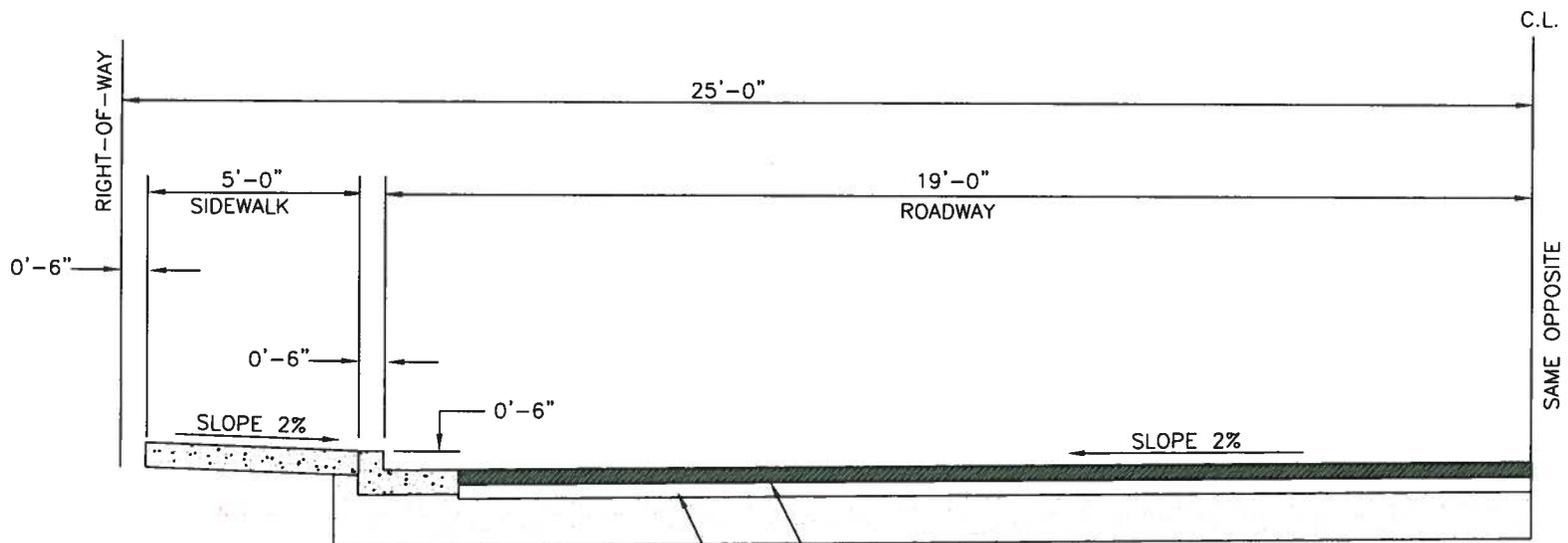


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 Oak Harbor, WA 98277

Street Section  
 Residential - 60 Foot ROW

ST-3Residential Street Section 60 foot ROW.dwg

REVISED 2-24-06



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 City of Oak Harbor  
 Engineering Dept

Signature

6/8/06  
 Date

SIEVE SIZE	PERCENT PASSING	
	BASE COURSE	TOP COURSE
1 1/4" square	100	
3/4" square		100
5/8" square	50-80	
1/4" square	30-50	55-75
U.S. No. 40	3-18	8-24
U.S. No. 200	7.5 max	10.0 max
% Fracture	75 min	75 min
Sand Equivalent	35 min	35 min

2" COMPACTED DEPTH CLASS B ASPHALT CONCRETE

2" COMPACTED DEPTH CRUSHED SURFACING TOP COURSE

6" CLASS B COMPACTED DEPTH GRAVEL BASE COURSE

NOT TO SCALE

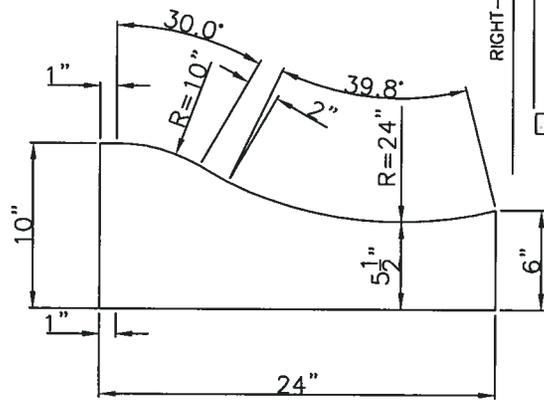


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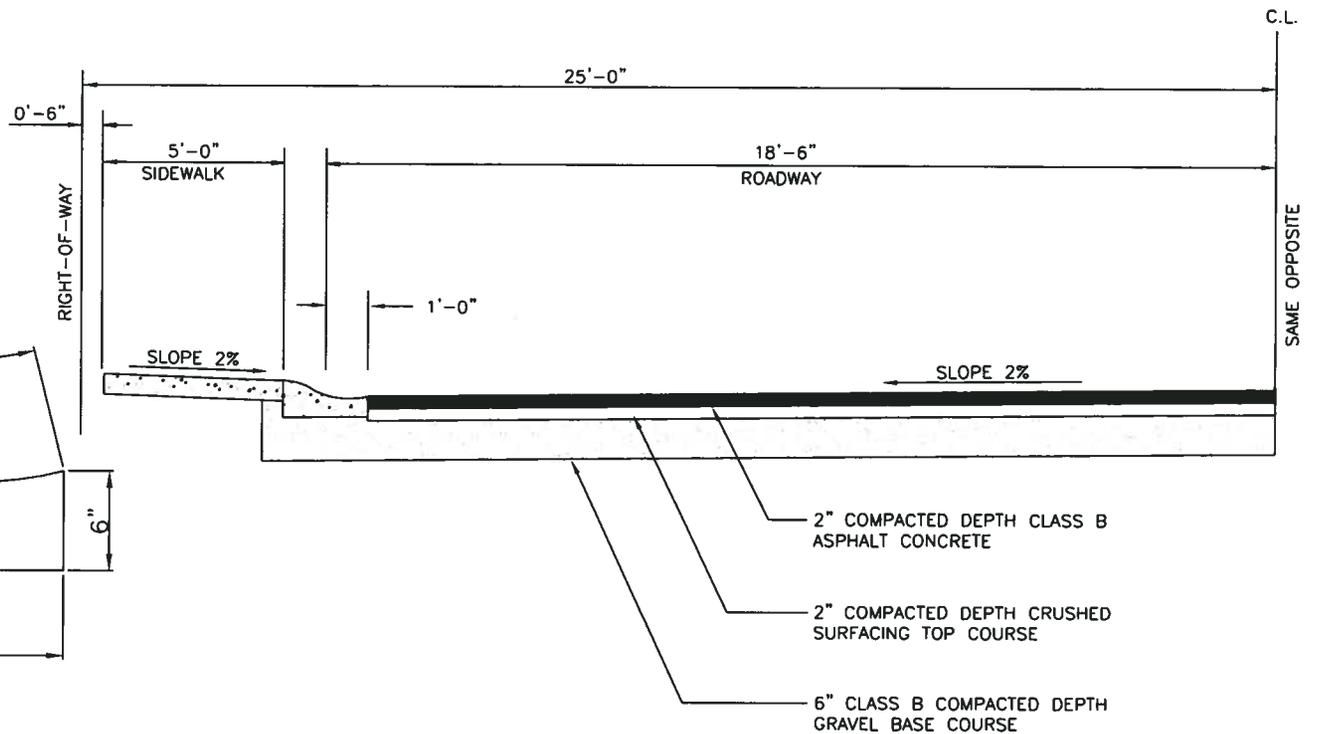
Street Section  
 Residential - 50 Foot ROW

ST-4Residential Street section 50 foot ROW standard curbing.dwg

REVISED 2-24-06



**ROLLED CURB**  
TYPICAL SECTION  
(NOT TO SCALE)



SIEVE SIZE	PERCENT PASSING	
	BASE COURSE	TOP COURSE
1 1/4" square	100	
3/4" square		100
5/8" square	50-80	
1/4" square	30-50	55-75
U.S. No. 40	3-18	8-24
U.S. No. 200	7.5 max	10.0 max
% Fracture	75 min	75 min
Sand Equivalent	35 min	35 min

**APPROVED**  
City of Oak Harbor  
Engineering Dept.

\_\_\_\_\_  
Signature

6/8/06  
Date

NOT TO SCALE

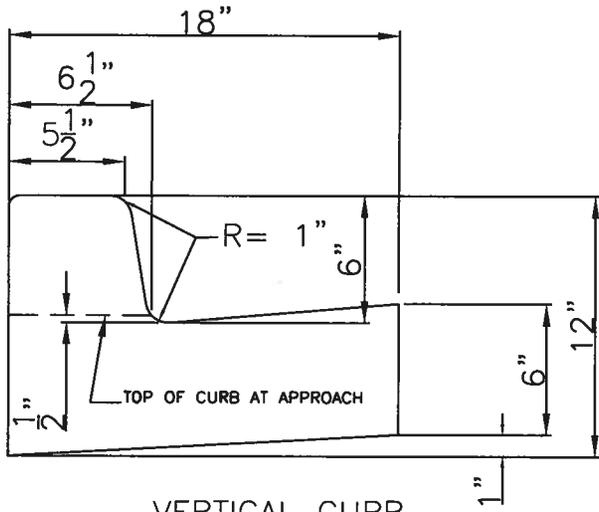


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Oak Harbor, WA 98277

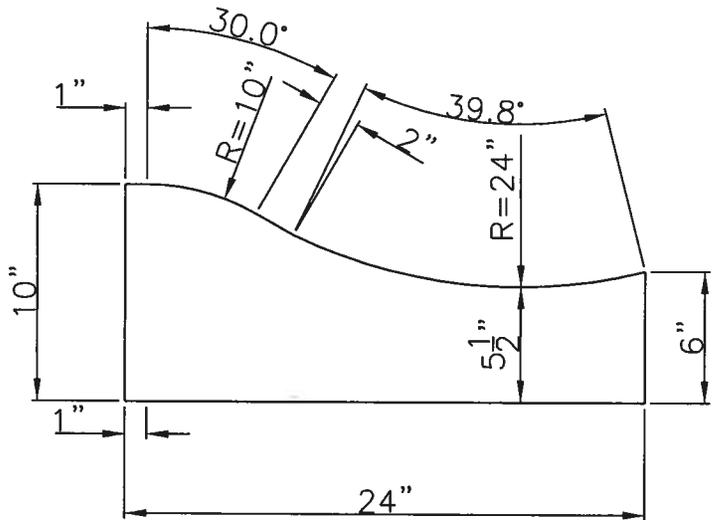
Street Section  
Residential - 50 Foot ROW

ST-5Residential Street Section 50 foot ROW rolled curbing.dwg

REVISED 2-24-06



**VERTICAL CURB**  
TYPICAL SECTION  
(NOT TO SCALE)



**ROLLED CURB**  
TYPICAL SECTION  
(NOT TO SCALE)

**NOTES:**

1. FORMS SHALL BE METAL OR WOOD AND SHALL EXTEND THE FULL DEPTH OF THE CONCRETE
2. SIDEWALKS SHALL BE BRUSH OR BROOMED FINISHED
3. FIBERBOARD EXPANSIONS JOINTS SHALL BE PLACE AT 15' o.c.
4. SIDEWALKS SHALL BE SCORED (DUMMY JOINTS) AT 5' o.c.
5. CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 3,000psi WITH 5%±1 ENTRAINED AIR.
6. SIDEWALK TERMINUS SHALL BE RAMPED WITH CONCRETE OR ASPHALT TO MATCH LOCAL GRADE CONDITIONS AS DIRECTED BY THE CITY ENGINEER.

**APPROVED**  
City of Oak Harbor  
Engineering Dept

\_\_\_\_\_  
Signature

6/8/06  
Date

NOT TO SCALE



City of  
Oak Harbor  
ENGINEERING DEPARTMENT  
865 SE Borrrington Drive  
Oak Harbor, WA 98277

Curbing Sections

**NOTES:**

1. All street openings will require a permit prior to excavation. Contractors must be bonded with the City prior to working in the right-of-way.
2. One lane of traffic must be maintained at all times. Street closures will not be authorized unless approved by the City Engineer.
3. Proper street signage is required on all projects as per the M.U.T.C.D. Flaggers must have cards stating that they are qualified flaggers.
4. Contractor shall notify all utilities in the area by giving a minimum 48-hour notice by calling 1-800-424-5555, a one number call system, before excavation begins.
5. Contractor shall notify City Engineering Department a minimum of 24 hours before start of work.
6. Maximum trench length that may be opened at one time is 300 feet.
7. Coldmix asphalt shall be placed in all street cuts within 48 hours if hotmix asphalt cannot be obtained. Coldmix to be maintained until final patch is completed. Final patch to be completed no later than 2 weeks after street opening.
8. "Skin patches" are not authorized by the City. If street patch settles, existing asphalt shall be removed, subgrade re-compacted and new hotmix asphalt placed.
9. Surface smoothness shall conform to Standard Spec. 5-04.3(13).
10. Gravel backfill for pipe zone bedding shall be in accordance with WSDOT Standard Spec. 9-03.12(3) and shall meet the following specifications for grading:

Sieve	Percent Passing
1 1/2" square	100
1" square	75-100
5/8" square	50-100
U.S. No. 4	20-80
U.S. No. 40	3-24
U.S. No. 200	10.0 max.
Sand Equivalent	35 min.

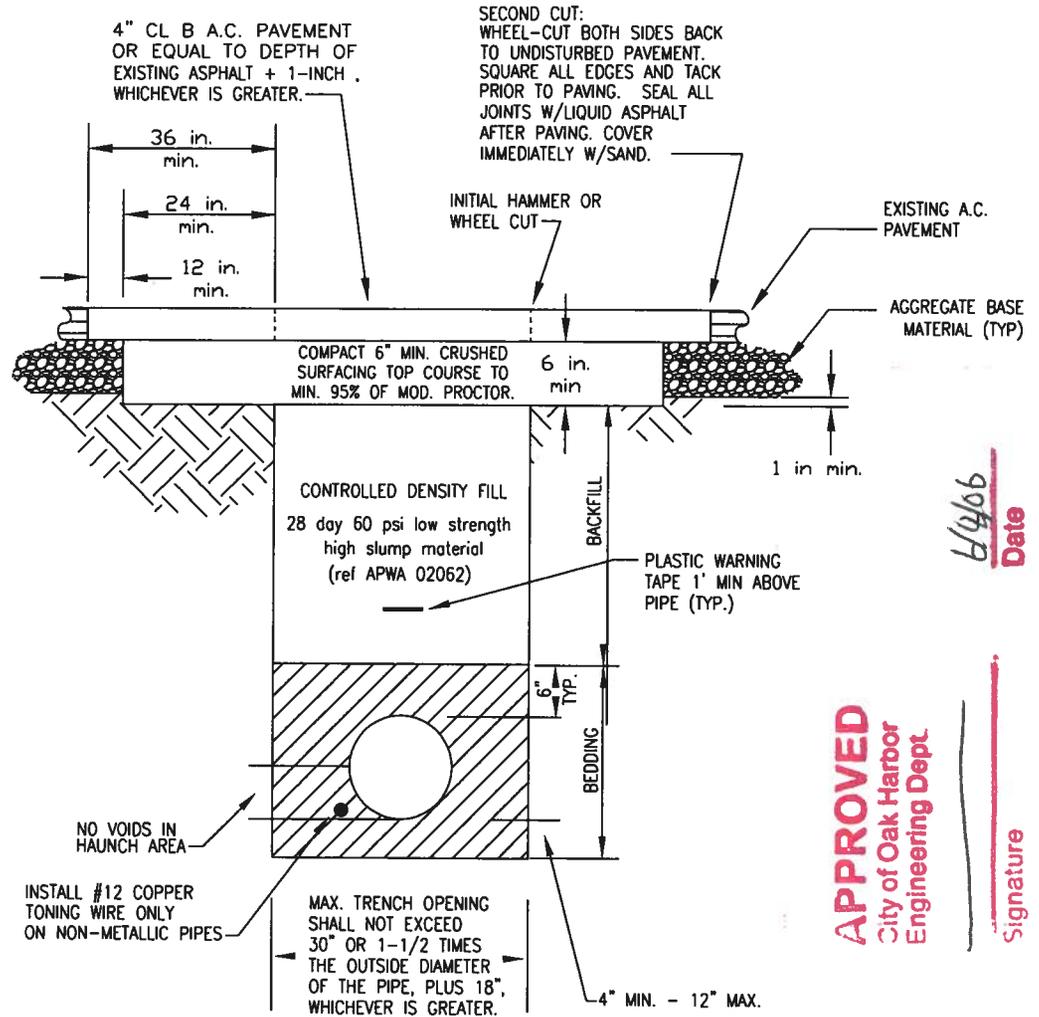
All percentages are by weight. Bedding placement shall be in accordance with WSDOT Standard Spec. 7-08.3(3).

11. Trench backfill materials shall consist of Controlled Density Fill (CDF), flowable fill, or equivalent in accordance with APWA section 02062.

12. All material excavated in a City street section shall be exported and new backfill imported in. Pea gravel shall not be used for backfill without prior approval of the City Engineer.

**NOTES (continued):**

13. CDF applies to all road crossings and all other trenches 6" deep or less. Import gravel backfill may be substituted in non-road crossing trenches if independent compaction testing is utilized and results provided to city inspector.



6/4/06  
Date

**APPROVED**  
City of Oak Harbor  
Engineering Dept.

Signature



**City of Oak Harbor**  
ENGINEERING DEPARTMENT  
865 SE Borrlington Drive  
Oak Harbor, WA 98277

Typical Utility Trench  
Asphalt Pavement Repair Section  
Within Right-Of-Way  
ST-8 Asphalt Street Repair-pipes 12" & Smaller.dwg

**NOTES:**

1. All street openings will require a permit prior to excavation. Contractors must be bonded with the City prior to working in the right-of-way.
2. One lane of traffic must be maintained at all times. Street closures will not be authorized unless approved by the City Engineer.
3. Proper street signage is required on all projects as per the M.U.T.C.D. Flaggers must have cards stating that they are qualified flaggers.
4. Contractor shall notify all utilities in the area by giving a minimum 48-hour notice by calling 1-800-424-5555, a one number call system, before excavation begins.
5. Contractor shall notify City Engineering Department a minimum of 24 hours before start of work.
6. Maximum trench length that may be opened at one time is 300 feet.
9. Surface smoothness shall conform to APWA/WSDOT Section 5-04.3(13).
10. Native or import backfill shall be in accordance with WSDOT Standard Spec. 9-03.15.
11. Trench backfill shall be gravel backfill in accordance with WSDOT Standard Spec. 9-03.19 and shall meet the following specifications for grading:

Sieve	Percent Passing
2 1/2" square	100
2" square	75-100
U.S. No. 4	22-100
U.S. No. 200	0-10
Dust Ratio:	2/3 max.
Sand Equivalent	30 min.

All percentages are by weight.

12. Gravel backfill for pipe zone bedding shall be in accordance with WSDOT Standard Spec. 9-03.12(3) and shall have such shall be the following grading:

Sieve	Percent Passing
1 1/2" square	100
1" square	75-100
5/8" square	50-100
U.S. No. 4	20-80
U.S. No. 40	3-24
U.S. No. 200	10.0 max.
Sand Equivalent	35 min.

All percentages are by weight.

13. Bedding and backfill placement shall be in accordance with WSDOT Standard Spec. 7-08.3(3).

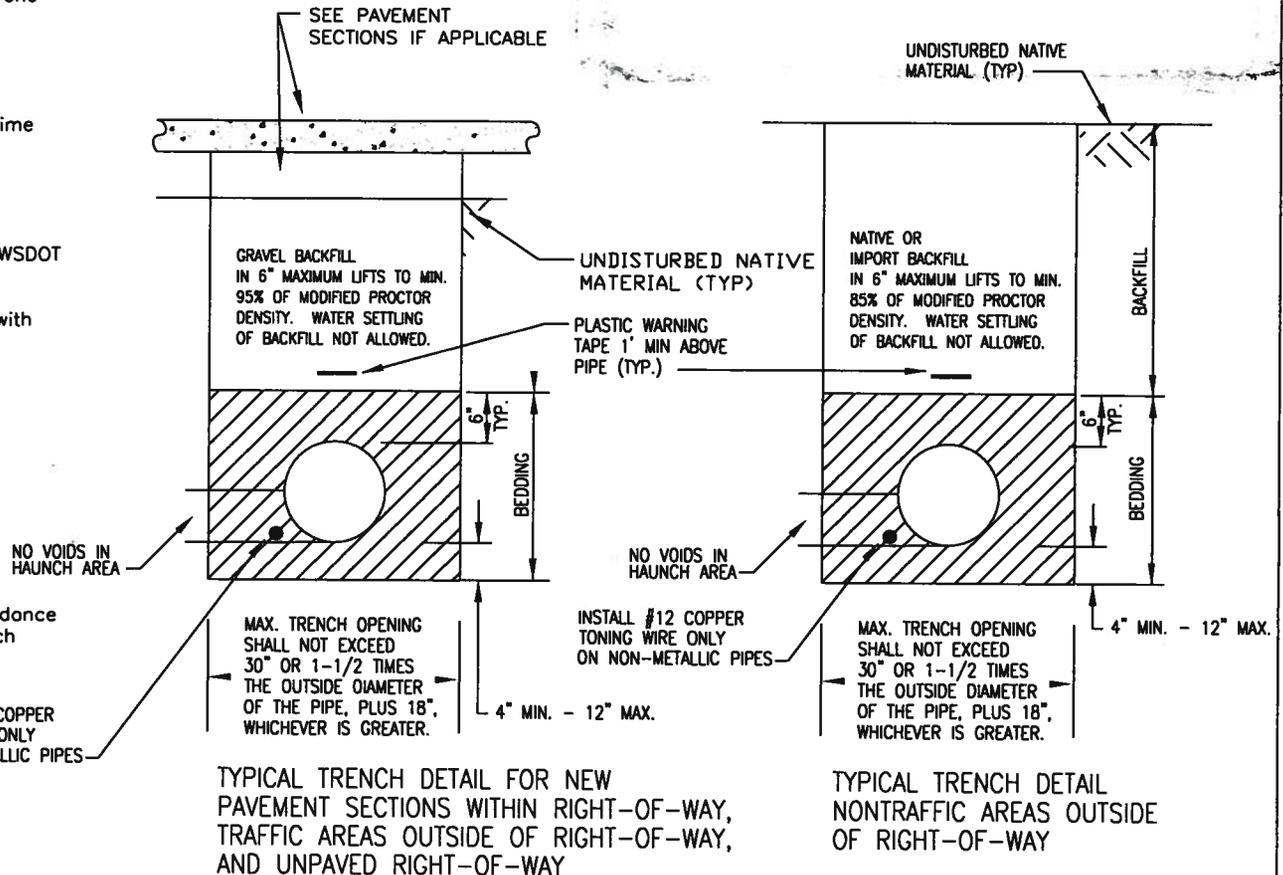
notes continued:

14. All material excavated in a City street section shall be exported and new backfill imported in. Pea gravel shall not be used for backfill without prior approval of the City Engineer.

**APPROVED**  
City of Oak Harbor  
Engineering Dept

Signature

7/12/06  
Date



City of  
Oak Harbor  
ENGINEERING DEPARTMENT  
865 SE Barrington Drive  
Oak Harbor, WA 98277

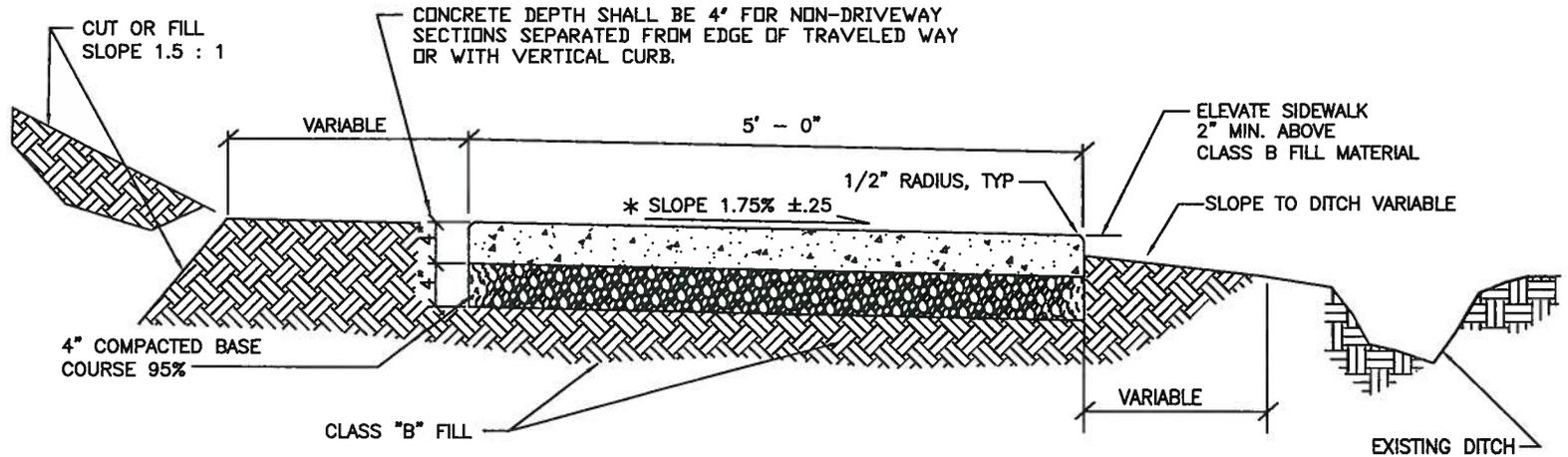
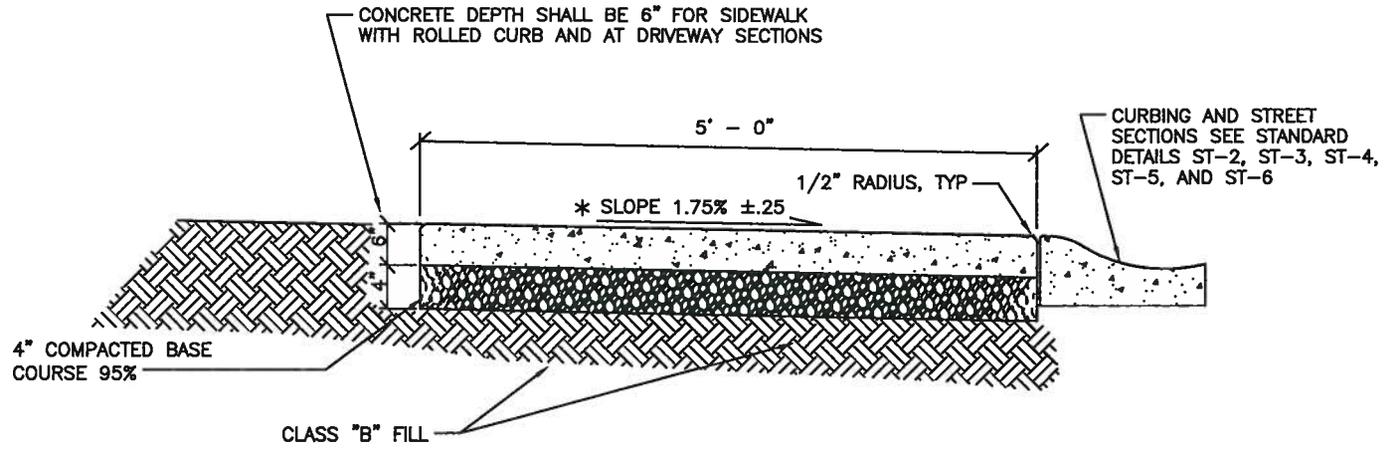
Typical Utility Trench  
Standard Detail

ST8B Typical Utility Trench.dwg

REVISED 2-24-06

NOTES:

1. FORMS SHALL BE METAL OR WOOD AND SHALL EXTEND THE FULL DEPTH OF CONCRETE.
2. SIDEWALKS SHALL BE BROOM FINISHED
3. FIBERBOARD EXPANSION JOINTS SHALL BE SPACED AT 15- FEET O.C.
4. SCORED DUMMY JOINTS SHALL BE PLACED AT 5- FEET O.C.
5. CURB AND SIDEWALK TERMINI SHALL BE RAMPED OR BEVELED TO MATCH LOCAL GRADE AS DIRECTED BY THE CITY ENGINEER
6. CEMENT CONCRETE SHALL HAVE A MINIMUM 3000psi 28-day STRENGTH WITH 5% ±1 ENTRAINED AIR
- \*7. THE ACCEPTABLE CROSS SLOPE OF SIDEWALK SHALL NOT BE LESS THAN 1.5% AND NOT GREATER THAN 2.0%.



**APPROVED**  
City of Oak Harbor  
Engineering Dept.

Signature

11-22-06  
Date



City of  
Oak Harbor  
ENGINEERING DEPARTMENT  
865 SE Barrington Drive  
Oak Harbor, WA 98277

SIDEWALK SECTION  
DETAIL

NOT TO SCALE