

# PAVEMENT DESIGN – AASHTO METHOD

SEE PREVIOUS PAGE FOR INPUT IN DOUBLE BOXES (  )  
 SOIL TEST RESULTS MUST BE SUBMITTED WITH THIS WORKSHEET.

STREET CLASSIFICATION:   
 INITIAL AADT:  % OF AADTT:   
 GROWTH RATE:

DESIGN LIFE: 20 YEARS

DESIGN (EAL):   
 RELIABILITY LEVEL (R%): % STANDARD DEVIATION (S<sub>o</sub>):   
 INITIAL SERVICEABILITY INDEX (P<sub>i</sub>): 4.2

TERMINAL SERVICEABILITY INDEX (P<sub>t</sub>):   
 $\Delta \text{PSI} = P_i - P_t = 4.2 - \text{[ ]} = \text{[ ]}$

SUBGRADE:  $M_r = 1000 + (555 \times R)$   
 RVALUE FROM SOILTEST =  => Mr  psi

USING AASHTO DESIGN METHOD: SN =  , PROVIDE NOMOGRAPH OR CALCULATIONS.

$$SN = (A_1 D_1) + (A_2 D_2) + (A_3 D_3) + (A_4 D_4)$$

|                             |                      |
|-----------------------------|----------------------|
| STRUCTURAL COEFFICIENT: HMA | A <sub>1</sub> =0.42 |
| ASPHALT TREATED BASE        | A <sub>2</sub> =0.34 |
| CSTC OR CSBC                | A <sub>3</sub> =0.14 |
| BALLAST                     | A <sub>4</sub> =0.10 |

ALL HMA SHALL BE A MINIMUM OF CLASS 1/2" PG 64-22

|   |               |               |                   |                 |
|---|---------------|---------------|-------------------|-----------------|
| CITY OF TUMWATER, WASHINGTON<br>DEPT. OF PUBLIC WORKS |               |               |                   |                 |
| <b>PAVEMENT DESIGN<br/>WORKSHEET</b>                  |               |               |                   |                 |
| APPROVED BY: _____                                    |               |               |                   | DWG. NO.        |
| CITY ENGINEER   |               |               |                   | <b>ST-3</b>     |
| DES.<br>PW  | DWG. BY<br>PW | CK'D BY<br>MW | DATE<br>JAN. 2015 | NOT TO<br>SCALE |