# PAVEMENT DESIGN - AASHTO METHOD

SEE STD. PLAN PD-01 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 ($S_o$): ☐
INITIAL SERVICEABILITY INDEX (Pi): 4.2
TERMINAL SERVICEABILITY INDEX (Pt): ☐
$\Delta$ PSI = Pi - Pt = 4.2 - ☐ = ☐
SUBGRADE: $Mr = 2555 \times CBR^{.64}$
CBR VALUE* FROM SOIL TEST = ☐ => Mr ☐ psi
USING AASHTO DESIGN METHOD:** SN = ☐ , PROVIDE NOMOGRAPH OR
CALCULATIONS.
$$SN = (A_1D_1) + (A_2D_2) + (A_3D_3) \ldots + (A_nD_n)$$
STRUCTURAL COEFFICIENT FOR STANDARD HMA:

| | |
|---|---|
| HMA | A = 0.44 |
| ASPHALT TREATED BASE | A = 0.34 |
| CSTC OR CSBC | A = 0.14 |
| BALLAST | A = 0.10 |
| PULVERIZED ASPHALTIC CONCRETE | A = 0.14 |

STANDARD HMA SHALL BE A MINIMUM OF CLASS ½" PG 64-22

STRUCTURAL COEFFICIENT FOR POROUS HMA (PHMA):

| | |
|---|---|
| POROUS HMA | A = 0.40 |
| ASPHALT TREATED PERMEABLE BASE | A = 0.30 |
| PERMEABLE BALLAST | A = 0.10 |

POROUS HMA BINDER SHALL BE CLASS ½" PG 70-22ER POLYMER MODIFIED OR
HIGHER GRADE.

* AASHTO T193: THE CALIFORNIA BEARING RATIO
** AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES

| REVIEWED BY | | APPROVED FOR PUBLICATION | CITY OF TACOMA PAVEMENT DESIGN WORKSHEET |
|---|---|---|---|
| DCS — PUBLIC WORKS | GMS — ENVIRONMENTAL SERVICES | | |
| NA — TACOMA POWER | NA — TACOMA WATER | CITY ENGINEER            DATE | STANDARD PLAN NO.    PD-02 |