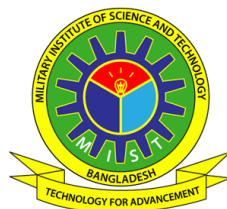


**INVERSE ANALYSIS OF PAVEMENT LAYER
PROPERTIES FROM FALLING WEIGHT
DEFLECTOMETER DATA USING MACHINE
LEARNING MODELS**

MD ZAMAL MAHMOOD SIDDIQ

M.Sc. ENGINEERING THESIS



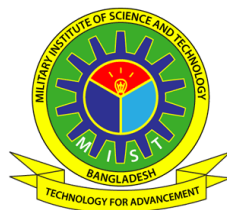
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A Thesis Submitted in Partial Fulfillment of Requirements for the Degree of Master of
Science in Civil Engineering



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M.Sc. Engineering Thesis

By

MD ZAMAL MAHMOOD SIDDIQ (SN. 1017110007)

Approved as to style and content by the Board of Examination on 21 November 2022:

Lt Col Mohammed Russedul Islam, PhD
Instructor Class A, Department of Civil Engineering
Military Institute of Science and Technology, Dhaka
Chairman (Supervisor)

Dr. Tanvir Mustafy
Assistant Professor, Department of Civil Engineering
Military Institute of Science and Technology, Dhaka
Member (Co-Supervisor)

Dr. Md. Mizanur Rahman
Professor, Department of Civil Engineering
Bangladesh University of Engineering and Technology, Dhaka
Member (External)

Brig Gen Shah Md Muniruzzaman (Retd), PhD
Professor, Department of Civil Engineering
Military Institute of Science and Technology, Dhaka
Member (Internal)

Colonel Mir Sarwar Hossain Chowdhury, awfc, psc
Head, Department of Civil Engineering
Military Institute of Science and Technology, Dhaka
Member (Ex-officio)

Department of Civil Engineering MIST, Dhaka

INVERSE ANALYSIS OF PAVEMENT LAYER PROPERTIES FROM FALLING WEIGHT DEFLECTOMETER DATA USING MACHINE LEARNING MODELS

DECLARATION

I hereby declare that the study reported in this thesis entitled as above is my own original work and has not been submitted before anywhere for any degree or other purposes. Further I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged and/ or cited in the reference section.

.....

Md Zamal Mahmood Siddiq

Student No. 1017110007

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ABSTRACT

Inverse Analysis of Pavement Layer Properties from Falling Weight Deflectometer Data Using Machine Learning Models

Finding the layer thicknesses and pavement moduli are essential to evaluate construction quality and pavement life. Destructive test like core sampling provides limited information about pavement characteristics. Nowadays, Falling Weight Deflectometer (FWD), a nondestructive test, is famous for determining pavement health and predicting layer moduli using back-calculated software. However, the accuracy of that back-calculated software is not always acceptable. The accuracy depends on the exactness of layer moduli's seed values and the layer thicknesses values. This research aims to determine the relationship between FWD deflection basin parameters (DBPs) and asphalt pavement layer properties from a database and to predict the layer properties from that relationship. Machine learning models are developed to find the relationship. Due to the scarcity of field FWD data of Roads and Highways Department (RHD) this study uses layered elastic system-based software, General Analysis of Multilayered Elastic System (GAMES), to simulate FWD test on flexible pavement and generate synthetic data base. Validation of the GAMES software's capability to simulate FWD test is conducted beforehand. For developing models, a total of two thousand FWD tests were conducted using GAMES software to generate deflection data and DBPs with the randomly selected layer properties of the national highways of Bangladesh. Random selection process is applied within the data range to nullify the issue of biasness. Prediction models for pavement layer property are developed embracing Machine Learning (ML) technique like Support Vector Regression (SVR), Random Forest (RF) and multilinear regression using the FWD data base. Thicknesses and moduli were predicted with reasonable accuracy by all three methods. RF, SVR and multilinear regression models establish good relationship between FWD deflection data, DBPs and layer properties. The accuracy co-efficient Mean Absolute Error (MAE), Root Mean Square (RMSE), and Goodness of fit (R^2) show that the proposed formulation can predict the thicknesses and moduli with reasonable accuracy. The thickness of the HMA layer is predicted well with R^2 values of 0.98, 0.65, and 0.91 with SVR, RF, and multilinear regression models, respectively. Additionally, the modulus of the HMA layer is predicted with R^2 values of 0.95, 0.87, and 0.87 with RF, SVR, and multilinear regression models, respectively. SVR method predicts layer

parameter with lowest MAE and RMSE values. The results indicate that SVR classification produce more accurate results than Random Forest and linear regression. Developed prediction models utilizing FWD deflection data may be applied to predict layer thicknesses and moduli of pavement layers, minimizing the need for destructive tests in a busy roadway and overcoming the dependencies of the back-calculated software.

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LIST OF MAIN NOTATION

FWD	Falling Weight Deflectometer
DBP	Deflection Basin Parameters
SCI	Surface Curvature Index
BLI	Base Layer Index
MLI	Middle Layer Index
LLI	Lower Layer Index
GAMES	General Analysis of Multilayered Elastic System
RHD	Roads and Highways Departments
ML	Machine Learning
SVR	Support Vector Regression
RF	Random Forest
R^2	Goodness of Fit
MAE	Mean Absolute Error
RMSE	Root Mean Square Error
PMS	Pavement Management System
NDT	Non-Destructive Testing
KDD	Knowledge Discovery and Data-mining
RoC	Radius of Curvature
BDI	Base Damage Index
L	Length of the Curve
D_x	FWD point of Interest
TRH	Technical Recommendation for Highways
CSRA	Civil Service Reform Act
ANN	Artificial Neural Network
FLA	Fuzzy Logic Approach
ANFIS	Adaptive Neural-Based Fuzzy Inference System
SPS	Specific Pavement Study
LTPP	Long-Term Pavement Performance
AC	Asphalt Concrete
E	Layer Moduli
LTPP	Long-Term Pavement Performance
SHRP	Strategic Highway Research Program
PCC	Plain Cement Concrete
FEM	Finite Element Model
HMA	Hot Mixed Asphalt
AASHTO	American Association of State Highway and Transportation Officials
h	Thickness of granular layer in mm
MR	Resilient Modulus

MPa	Mega Pascals
μ	Poisson's ratio
p	Contact pressure
a	Radius of Circular Contact Area
δ	Surface deflection
Y_b	Individual decision trees
X'	Unknown instances
B	Total number of the decision trees
μm	Micrometer
RM	Regression Method
ESA	Equivalent Standard Axle

ANNEX

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CHAPTER 1: INTRODUCTION

1.1 General

Layer thickness and moduli of pavement are important properties to evaluate construction quality and finding remaining life of pavement. Design records regarding layer thickness may vary from the real layer thickness, where uncertainty level is high for construction variability and subsequent maintenance and rehabilitation works. Destructive test like core sampling provides only local information about pavement characteristics (Sebaaly et al., 1986). For this reason, non-destructive Falling Weight Deflectometer (FWD) test became extremely popular to determine health condition and remaining life of pavement. However, to determine the pavement layer thickness road agency still rely on destructive test or on other devices as data from the FWD test are not reliably correlated with layer thickness.

For modern FWD and increased emphasis on pavement management system agencies are working towards extensive FWD testing (Rabbi & Mishra, 2021). For some major drawbacks of Benkelman beam and La Croix deflecto Figure, FWD became main deflection measuring device in USA by 1980. The FWD has the advantage; it does not require a reference point and provides more accurate deflection measurement (Horak, 2008).

In the past, researchers (Horak, 1987; Tutumluer, 2008; Talvik & Aavik, 2009) highlighted the effectiveness of deflection basins parameters (DBPs) rather than deflection data in evaluating the structural condition of in service pavements. Some found strong correlations among DBPs namely Surface Layer Index (SCI) or Base Layer Index (BLI), Middle layer Index (MLI) and Lower Layer Index (LLI) with condition of bituminous layer, base layer and subgrade layer respectively (Horak, 2008). Studies found promising correlation between pavement layer thickness with FWD deflection data but did not explore the possibility of relating the DBPs with pavement thickness (Terzi et al., 2013).

Many studies have used software to generate FWD data and created FWD data base for subsequent use (Islam et al., 2013; Rabbi & Mishra, 2021). Due to the scarcity of field FWD data of Roads and Highways Department (RHD), a layered elastic system-based software (GAMES) may be used to conduct FWD test on flexible pavement to generate synthetic data base. This General Analysis of Multilayered Elastic System (GAMES) is an open source software that can predict the deflection values, stress, strain at different

points of flexible multilayered pavement system basing on Mechanistic Empirical method (Khan et al., 2017). The validation of proposed software's capability to generate FWD test results may be conducted beforehand.

With the introduction of machine learning (ML) techniques, many researchers have contemplated and developed pavement performance prediction model embracing machine learning tools (Chen et al., 2021; YAN Ke-zhen, LIAO Huarong, YIN Honghui, 2011). In developing the prediction models for pavement layer property, the maximum minimum range of pavement properties of national highways may be used as seed value or input value. Random selection process may be applied within the data range to nullify the issue of biasness. For Bangladesh suitable database basing on the correlations of pavement structural condition using DBPs has huge potentials.

1.2 Objectives

The objectives of the investigation were set as follows:

- i. To develop empirical equations in predicting pavement layer thickness and modulus from deflection basin parameters.
- ii. To develop correlation between structural parameters and pavement performance indices.

1.3 Scope

To fulfill the above objectives, the specific task sequence would be as follows:

- a. To conduct review of previous study.
- b. To conduct validation of General Analysis of Multilayer Elastic System (GAMES) software in simulating FWD field test.
- c. Generation of synthetic and unbiased FWD data in accordance with National Highways Standard of RHD.
- d. Exploring FWD deflections and DBPs from synthetic data base.
- e. Development of prediction models for pavement layer properties embracing Machine Learning techniques like Support Vector Regression (SVR), Random Forest (RF) and Regression using the FWD data base.
- f. Accuracy comparison and validation of models using R^2 , MAE and RMSE values.

1.4 Structure of the Thesis

The present study has been divided into five chapters which have been arranged to present the sequential development of the study for better understanding. Chapter One contains the introduction, present state of the problem, background of the study, specific objectives of the research along with organization of thesis.

Chapter Two contains the literature review. This chapter states the current practices of structural analysis of pavement around the world and in Bangladesh and presents the evolution of nondestructive deflection measurement methods. Previous studies regarding FWD are also presented in this chapter to identify the research gaps. Previous studies of deflection bowl parameters and corresponding threshold values of both US system and South Africa system are discussed in this chapter. The main drawbacks of nondestructive evaluation by FWD measurement are back calculation of in-situ layer properties. This chapter provides a comparison of different back calculation programs of recent times including some advanced back calculation alternatives.

Chapter three contains overall methodology in a sequence from simulation of FWD test using GAMES software up to development of machine learning models for prediction of different layer properties. The set of values obtained from the software are validated against the field values. Later, synthetic FWD data generation is carried out. Deflection values and deflection basin parameters are calculated out of these data. Models are developed from these data to find out relation of DBPs with layer modulus and thickness.

In Chapter Four prediction models are developed such as Random Forest (RF), Support Vector Regression (SVR) and Regression Model. In the process of developing models, the deflection at selected positions displays good correlation with the pavement structure. In this chapter, we also assess the accuracy of the models and compare those for the best supported one. In this chapter we also get the satisfactory answers to the research questions. Thus, this chapter provides satisfactory answer to the fulfillment of the study objectives.

Finally, Chapter Five presents the major conclusion of the study based on the model performance and suggestions for future studies.

CHAPTER 2: REVIEW OF THE LITERATURE

2.1 Introduction

For decreased serviceability of the pavement a maintenance program is set up to decide when and where to carry out maintenance works. The most difficult aspect is to determine the remaining life of the pavement. To determine the remaining life, the pavement should be analyzed structurally with material properties for each layer being elastic modulus, Poisson's ratio, and thickness.

The pavement structural capacity deteriorates with time (or traffic) due to the fatigue of pavement materials and other types of pavement distress. Deflection has the virtue of being much simpler to measure and would be expected to show a broad correlation with performance. The appropriate timing to carry out maintenance/ rehabilitation is crucial; if delayed, the road structure may fail beyond any scope of restoration (Reddy & Veeraragavan, 1997). Data obtained from in situ measurements can be used to validate and develop theoretical models (Arraigada et al., 2009) for layer properties.

Among nondestructive deflection measurement methods, commercially available devices are the Benkelman beam, Dynaflect, Road rater, and Falling weight deflectometer. In the last 15–20 years, the Benkelman beam and Dynaflect have been applied successfully to many projects all over the world (J.-R. Chang et al., 2002). However, structural evaluation of road pavements using the FWD remains an essential tool of Pavement Management System (PMS) for many agencies. To analyze flexible pavements, individual layers are characterized by their characteristic parameters (Rakesh et al., 2006). But flexible pavement layer thicknesses must also be known to get realistic results. Layer thicknesses can be obtained by coring the flexible pavement. On the contrary, nondestructive tests are carried out on flexible pavements for preventing it against potential damage.

The basic aim of nondestructive evaluation by FWD measurements is to estimate the in-situ layer characteristic parameters when the deflection profile is given this is called a back calculation problem. The problem of back calculation of layer moduli of asphalt pavement from FWD data is indeed a complex one (Sharma & Das, 2008). Unfortunately, the back calculated pavement layer properties lack the accuracy despite the existence of many back calculation programs employing different back calculation procedures and algorithms (Alkasawneh, 2007).

Pavement thickness is usually determined from direct testing such as core samples, NDT such as radar, or historical records such as pavement network database (Attoh-Okine & Roddis, 1998; J.-R. Chang et al., 2002). Pavement layer thickness variations result from various construction and maintenance details, even under specially controlled conditions. By considering the layer thicknesses as unknown parameters, layer thicknesses can also be back calculated as well as layer moduli (Wang & Lytton, 1993).

Knowledge discovery uses data mining and machine learning techniques that have evolved through a synergy in artificial intelligence, computer science, statistics, and other related fields. Although there are technical differences, the terms “machine learning (ML),” “data mining,” and “knowledge discovery and data mining (KDD)” are often used interchangeably (Bingru et al., 2009; Goodwin et al., 2003). It uses traditional analysis tools (like statistics and computer Figureics) plus those associated with artificial intelligence (Mastrogiannis et al., 2009).

In machine learning a theoretical generalization is automatically obtained from the data by means of induction, deriving empirical models and learning from examples. ML has been successfully applied to optimization problems. ML is especially appropriate to tackle the back calculation of flexible pavement layer thickness. Its advantage includes complete use of the ability to find the optimum solutions (Kusiak & Song, 2006; Lin et al., 2004; Parpinelli et al., 2002). ML methods were used to modeling back calculation of pavement layer moduli and Poisson’s ratio (Saltan et al., 2011; Saltan & Terzi, 2009). In this study, ML method is used in back calculating the pavement layer moduli and layer thickness from deflections measured on the surface of the flexible pavements.

2.2 Zones of the Deflection Bowl

When a flexible pavement deflects under the load of a heavy vehicle, the influence of the load will usually extend over an area 1 m to 2 m away from the point of loading, in three dimensions. This deflected area tends to form a circular, deflected indentation known as a deflection bowl. The size and shape of deflection bowls vary and depend on several factors, such as pavement composition and structural strength, size of the load contact area, load magnitude, duration of loading, the measuring device used, and temperature (Horak, 1987). Figure 2.1 shows how a deflection bowl measured under a loaded wheel can be described in terms of three distinct zones.

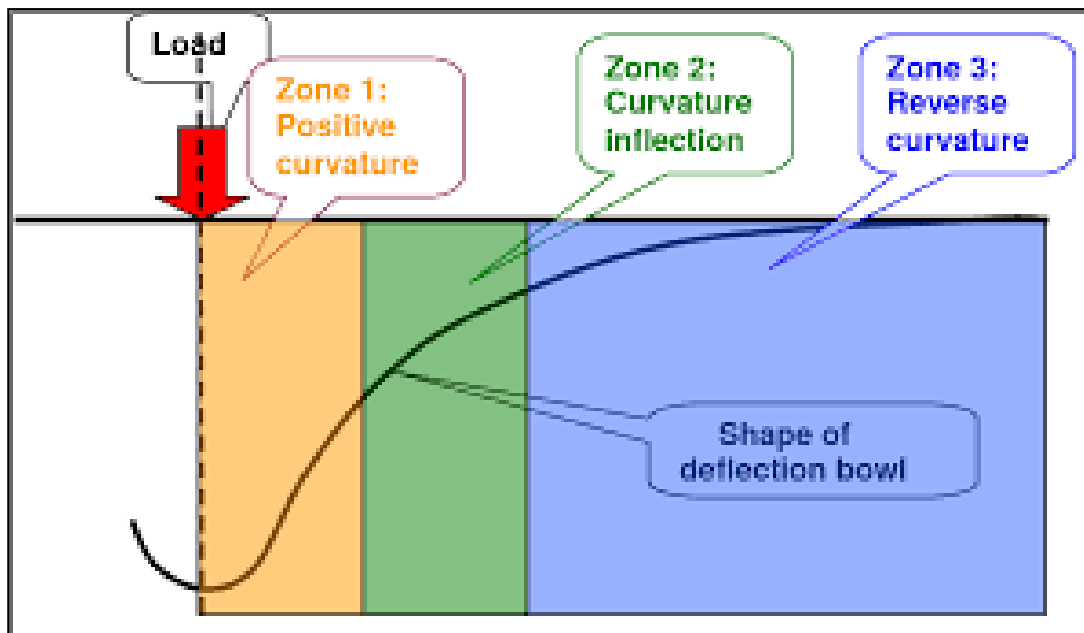


Figure 2.1: Curvature zones of a deflection bowl

2.3 Deflection Bowl Parameters.

The FWD became the deflection measuring tool of choice in the mid to late 1980s in the United States (Horak, 1987) and South Africa followed it. The FWD can simulate a moving wheel load and measure elastic response within the entire deflection bowl up to 1.8 m to 2.0 m away from the center point of loading. In table 2.1 a selected number of deflection bowl parameters and their formulae are summarized as linked to the deflection bowl zones and their formulae based on the measured deflection bowls. The radius of curvature (RoC) and the Base Layer Index (BLI) have been found to correlate well with zone 1 (mostly surface and base layers), the Middle Layer Index (MLI) correlates with zone 2 (mostly sub-base layer), and the Lower Layer Index (LLI) correlates with zone 3 (mostly selected and subgrade layers) (J.-R. Chang et al., 2002), as illustrated in figure 2.2. In table 2.1 the original names of some of these deflection bowl parameters are also indicated.

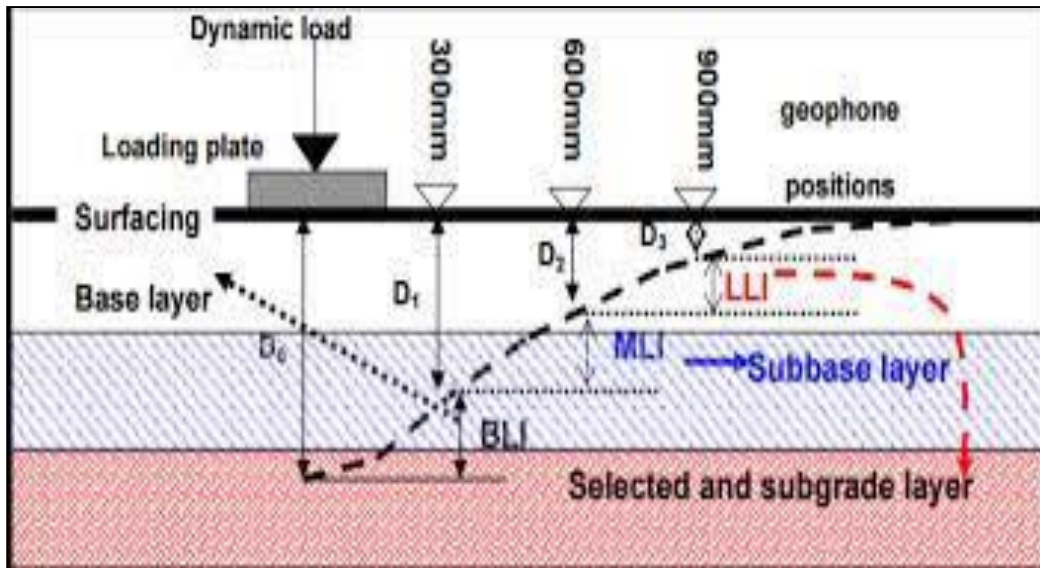


Figure 2.2: Deflection bowl parameters

Table 2.1: Summary of deflection bowl parameters

Parameters	Formula	Zone correlated to
Maximum deflection	Do as measured at point of loading	1,2 and 3
Radius of curvature (RoC)	$RoC = \frac{L^2}{2D_0(1-D_{200}/D_0)}$	1
	Where L = 127 mm in the original Dehlen (1961) curvature meter and 200 mm for the FWD	
Base layer index (BLI) (Previously referred to as surface curvature index, SCI)	BLI= $D_0 - D_{300}$	1
Middle layer index (MLI) (Previously referred to as base curvature index, BCI)	MLI= $D_{300} - D_{600}$	2
Lower layer index (LLI) (Previously referred to as base damage index, BDI)	LLI= $D_{600} - D_{900}$	3

2.4 Existing Deflection Bowl Parameter Correlations.

The BLI, MLI and LLI have been found to correlate well with the relevant pavement structural condition and with zones 1, 2 and 3 respectively of pavement layers of flexible pavements in South Africa (Horak, 1987). Basic correlations and tolerances for these deflection bowl parameters are included in Technical Recommendations for Highways (TRH 12) (Africa & For, 1997) that deals with the rehabilitation design and analysis methodology of flexible pavements. This behavior state classification of pavement was further expanded by Horak (Horak, 1987) to include the other deflection bowl parameters, which improved the representation of the entire deflection bowl. In table 2.2 such an example of behavior state classification for granular pavements is shown, as included in TRH 12 (Africa & For, 1997).

Table 2.2: DBPs and corresponding threshold values of pavements (CSRA 1997)

Behavior state	Traffic range (E80s) (000000)	Maximum deflection (mm)	BLI (mm)	MLI (mm)	LLI (mm)
Very stiff	12-15	<0,3	<0,08	<0,05	<0,04
Stiff	3- 8	0.3- 0.5	0.08- 0.25	0.05- 0.15	0.04- 0.08
Flexible	0.8-3	0.5- 0.75	0.25- 0.50	0.15- 0.20	0.08- 0.1
Very Flexible	<0.8	>0.75	>0.5	>0.20	>0.10

Table 2.3 & 2.4 list different DBPs, and corresponding threshold values as found in the literature. Table 2.3 lists the DBPs, and threshold levels commonly used in the US, whereas Table 2.4 lists DBPs and corresponding threshold values used in South Africa.

Table 2.3: Deflection bowl parameters and corresponding threshold values (C. Chang et al., 2014)

Performance indicator	Inference related to	Threshold ranges (mils)	Inference
Surface curvature index (SCI)	Asphalt layer	<4	Very good
		4-6	Good
		6-8	Fair
		8-10	Poor
		>10	Very poor
Base curvature index (BSI)	Base layer	<2	Very good
		2-3	Good
		3-4	Fair
		4-5	Poor
		>5	Very poor
Deflection of the sensor at 60 in offset (W_{60})	Subgrade layer	<1	Very good
		1-1.4	Good
		1.4-1.8	Fair
		1.8-2.2	Poor
		>2.2	Very poor

Table 2.4: Deflection bowl parameters and corresponding threshold values (Horak et al., 2015).

Performance indicator	Influence related to	Categorization based on structural condition.		
		Sound	Warning	Severe
$D_0(\mu\text{m})$	Entire pavement structure	<625	625-925	>925
Base Layer Index	Base layer	<250	250-475	>475
Middle Layer Index	Subbase layer	<115	115-225	>225
Lower Layer Index	Subbase/Subgrade layer	<65	65-120	>120

Again, different deflection bowl zones have strong associations with its pavement structure. For example, maximum central deflection is more related to the entire pavement structure and reflects the condition of the subgrade (Horak & Emery, 2006). High central deflection is usually associated with weak subgrade or poor drainage condition. The maximum central deflection is also being used to divide pavement sections into homogeneous or uniform sections based on their structural response reflected by the maximum deflection.

2.5 Interpretation of FWD Measurements

A typical deflection bowl obtained from the FWD loading is shown in Figure 2.3. The maximum deflection is obtained underneath the circular plate, and points that are away from the circular load application point have smaller deflections. When the FWD loading is applied, the load and the deflections due to the FWD loading are known. However, for the structural analysis, the material layers and thicknesses must be known. Nondestructive testing (NDT) enables the use of a mechanistic approach to pavement design and rehabilitation since the in-situ material properties can be back calculated (Huang, 2004; Yumin & Kang, 1998).

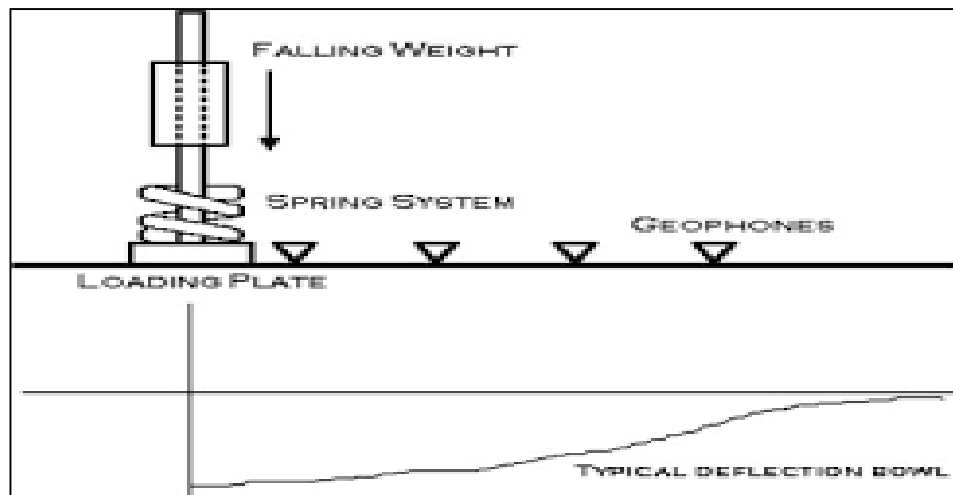


Figure 2.3: Typical deflection bowl obtained from a FWD loading

The main problems that any classical back calculation procedure faces are convergence, accuracy, and the number of layers in the back-calculation program. The selection of the seed values controls the convergence of the back-calculation procedure to pavement layer properties that minimizes the mean square error (objective function) between the measured deflection basin and the back-calculated deflection basin. On the other hand, the maximum number of layers that can be used in any back-calculation program does not exceed 5 layers with recommendations to use layers to reduce the error associated with the back-calculation process (Alkasawneh, 2007).

In pavement structural evaluation analysis previous approaches concentrated on statistical formulae mostly based on regression analysis to predict the performance. These equations illustrate the effects of various factors on the performance of pavements. These equations are valid only under certain conditions and should not be used if the actual conditions are different (Kaur & Chou, 1999).

A layered elastic model can compute stresses, strains, and deflections at any point in a pavement structure resulting from the application of a surface load. Layered elastic models assume that each pavement structural layer is homogeneous, isotropic, and linearly elastic. In other words, it is the same everywhere and will rebound to its original form once the load is removed. The origin of layered elastic theory is credited to V.J. Boussinesq who published his classic work in 1885. The layered elastic approach works with relatively simple mathematical models and thus, requires some basic assumptions. These assumptions are:

- a. Pavement layers extend infinitely in the horizontal direction.
- b. The bottom layer (usually the subgrade) extends infinitely downward.
- c. Materials are not stressed beyond their elastic ranges.

A layered elastic model requires a minimum number of inputs to adequately characterize a pavement structure and its response to loading. These inputs are material properties of each layer, pavement layer thicknesses and loading conditions. The outputs of a layered elastic model are the stresses, strains, and deflections in the pavement.

Back calculation programs based on multilayer elastic layer theory are generally used for asphalt pavements. Pavement geo-materials do not, however, follow linear type stress-strain behavior under repeated traffic loading. Pavement structural analysis programs that consider nonlinear geo-material characterization need to be employed to more

realistically predict pavement responses needed for mechanistic-based pavement design (Sharma & Das, 2008).

In recent years, one of the most important and promising research field has been ‘‘Heuristics from Nature,’’ an area utilizing some analogies with natural or social systems and using them to derive nondeterministic heuristic methods and to obtain very good results. Artificial neural network (ANN) and fuzzy logic approach (FLA) methods are among the heuristic methods. ANNs are valuable computational tools that are increasingly being used to solve resource intensive complex problems as an alternative to using more traditional techniques (Sharma & Das, 2008).

Meier and Rix (Meier & Rix, 1994) and Meier (Meier et al., 1997) firstly attempted to back calculate the pavement layer properties using ANN. Also, many other authors (Saltan et al., 2013; Saltan et al., 2002; Saltan & Terzi, 2004; Saltan & Terzi, 2005) used the ANN approach in back calculating pavement layer properties. Kaur and Chou (Kaur & Chou, 1999), applied the neuro-fuzzy techniques for modeling the highway pavement performance prediction. Also, Göktepe (Göktepe et al., 2005) used the Adaptive Neural-based Fuzzy Inference System (ANFIS) methodology for back calculating the mechanical properties of flexible pavements.

But the ML approach is highly efficient in modeling the complicated pavement behavior without using nonlinear formulations. Nowadays, the ML approach is increasingly used with paralleling new engineering technologies.

2.6 Recent Studies Comparing Different Back Calculation Programs

Many software packages have been developed and made available for use in the back calculation process. However, the back calculation process is highly dependent on program features and user influence. For the same pavement section, the results obtained differ from one program to another; consequently, one cannot use any program before verifying it using local or regional data. The assumptions, iteration techniques, back calculation schemes, or forward calculation schemes used within the programs are the main reasons for the variability in the results (Quintus et al., 2015). Moreover, the user has a significant effect on the results in terms of seed modulus values with which to start an analysis, the number of iterations to do, or the termination criterion (Rani, 2005).

Various back calculation programs produce different layer moduli for the same inputs (Tarefder & Ahmed, 2013). Therefore, many researchers have tried to compare different

back calculation programs' outputs and the correlation between these outputs and measured values to recommend the most appropriate candidate based on their local data. Von Quintus (Quintus et al., 2015) used data from four specific pavement study (SPS) test sections of the Long-Term Pavement Performance (LTPP) data to compare the laboratory-derived dynamic modulus with the back calculated asphalt concrete (AC) layer moduli (E_{AC}) based on FWD data. Witeczak's regression equation was used to calculate the dynamic modulus, while E_{AC} values were extracted from LTPP, which is back calculated using EVERCALC software. The results indicated good correlation with a slight bias at the lower values. Von Quintus (Quintus et al., 2015) recommended no adjustment factors for AC layer moduli to be converted to laboratory values. In other words, EVERCALC produced E_{AC} values that correlated well with dynamic modulus values predicted from Witeczak's equations.

The accuracy and consistency of three back calculation programs (EVERCALC, BAKFAA and MODULUS) were examined in another study by comparing the results with the laboratory derived values (Tarefder & Ahmed, 2013). FWD data from seven sections were used in the comparison. EVERCALC was recommended for the back calculation of airport pavement layer moduli for its higher accuracy and consistency (Tarefder & Ahmed, 2013).

Comparison of EVERCALC 5.0, ELMOD 5.0, and MODULUS 6.0 resulted in recommending MODULUS 6.0 as the most reliable program based on data from the Zanjan–Tabriz freeway, Eivanekey–Garmsar freeway, Garmsar–Semnan freeway, and Rafsanjan Airport in Iran (M. Ameri, N. Yavari, 2015).

Data from eight Strategic Highway Research Program (SHRP) test sections were used to compare ELMOD, MODULUS, EVERCALC, MODCOMP, and WESDEF programs for layer modulus back calculation. Six sections were flexible pavements with different combinations of layer properties. The other two sections were plain cement concrete (PCC) pavement overlaid with AC. Based on the results, EVERCALC was recommended for routine research use (William, 1999).

In addition to the fact that each study recommendation of the most accurate program is different, the back calculation process itself is laborious and time consuming. Therefore, other researchers tried to find other alternatives to the use of back calculation software.

2.7 Advanced Back Calculation Alternatives

The problems with the back calculation process, besides the discrepancies in results, led several researchers to try to find appropriate alternatives. Several researchers have used artificial neural networks (ANNs) to back calculate pavement layer and subgrade soil moduli. Meier and Rix (Meier & Rix, 1994) presented an ANN model for the back calculation of pavement layer moduli. This model was based on 10,000 hypothetical flexible pavement structures with only 3 layers (AC, granular base, and subgrade). A linear multilayer elastic program (WESLEA) was used to generate synthetic deflections. The ANN model consisted of input layers with nine neurons, two hidden layers, and an output layer. On the other hand, the output layer consisted of three neurons (AC, base, and subgrade moduli). The model predictions were excellent, with coefficients of determination (R^2) of 0.961, 0.918, and 0.995 for the AC, base, and subgrade moduli, respectively (Meier & Rix, 1994).

Saltan (Saltan et al., 2013) developed an ANN model to back calculate AC layer moduli, Poisson's ratio, and thickness. The authors used 114 theoretical 3-layer flexible pavements in their study. These sections were analyzed using the SDUFEM program to calculate surface deflections at 0, 30.5, 61, 91.5, 122, 152.5, and 183 cm (0, 12, 24, 36, 48, 60, and 72 in.). It is worth mentioning that the base properties (thickness, modulus, and Poisson's ratio) and subbase modulus were kept constant in all sections. The resulting R^2 was 0.994, 0.995, and 0.995 for the AC modulus, Poisson's ratio, and thickness, respectively.

Another procedure was developed by Noureldin (Noureldin, 1993) to back calculate in situ layer moduli of overall pavement.

Although the ANNs produced excellent results in terms of either layer moduli back calculation or AC layer property prediction, but their ability to predict modulus values is restricted to the ranges of the data utilized in the training phase.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter contains overall methodology of the study starting from the validation of the software, synthetic data generation and finally analysis and development of models.

3.2 Methodology

The study started with the simulation of FWD test using GAMES software and sequentially led to development of machine learning models for prediction of different layer properties. The set of values obtained from the software are validated against the field values. Later, synthetic FWD data generation is carried out. Deflection values and deflection basin parameters are calculated out of these data. Models are developed from these data to find out relation of DBPs with layer modulus and thickness. Figure 3.1 shows the sequential development of models for layer properties.

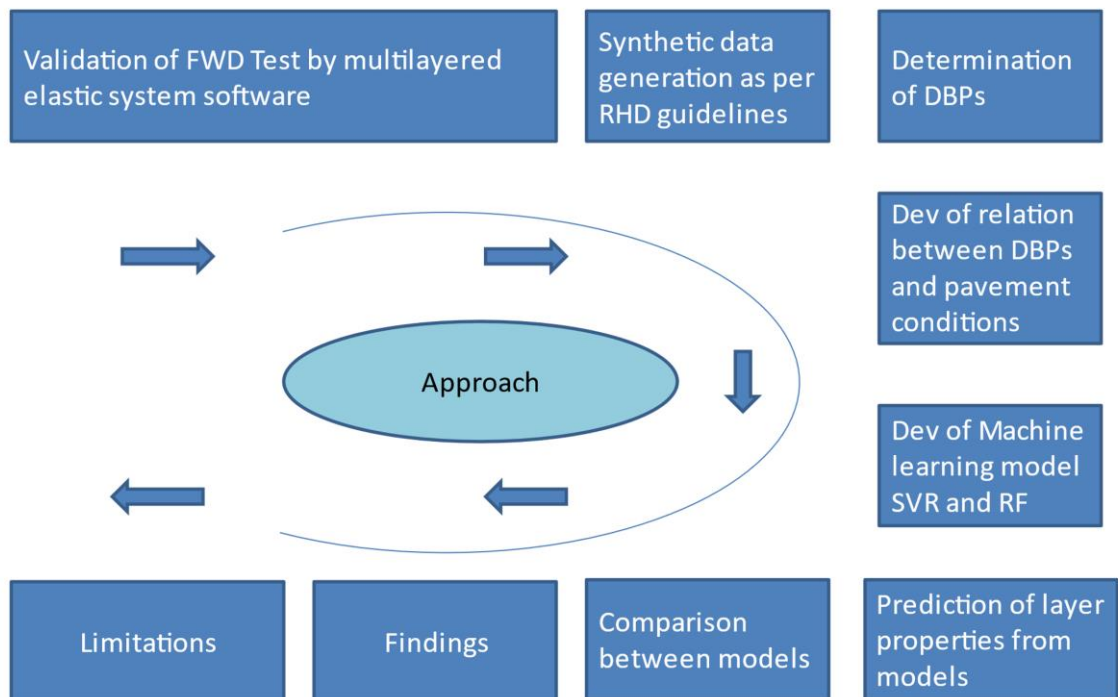


Figure 3.1: Sequence of model generation for layer properties

3.3 Field Test of FWD

A Falling Weight Deflectometer test shown in figure 3.2 was conducted on a section of I-40, New Mexico (Islam et al., 2013), and was validated later by numerical analysis. This pavement section was selected to transform it to be an instrumented section. Layer stiffness of the pavement was back calculated by ELMOD using the FWD test data. Commercial finite element software ABAQUS was used to develop the Finite Element Model (FEM) of this section. The Model (FEM) was developed in ABAQUS to validate this stiffness by field FWD test data. Pavement geometry and layer thickness were collected from field sampling. Resulting surface deflections at the predefined points from this analysis were compared with field FWD deflection values. It showed close agreement between these. Past FWD test data had also been analyzed and found the degradation pattern of the material for the loading and aging. So, the FWD test method was reliable for evaluating the existent stiffness of pavement material.

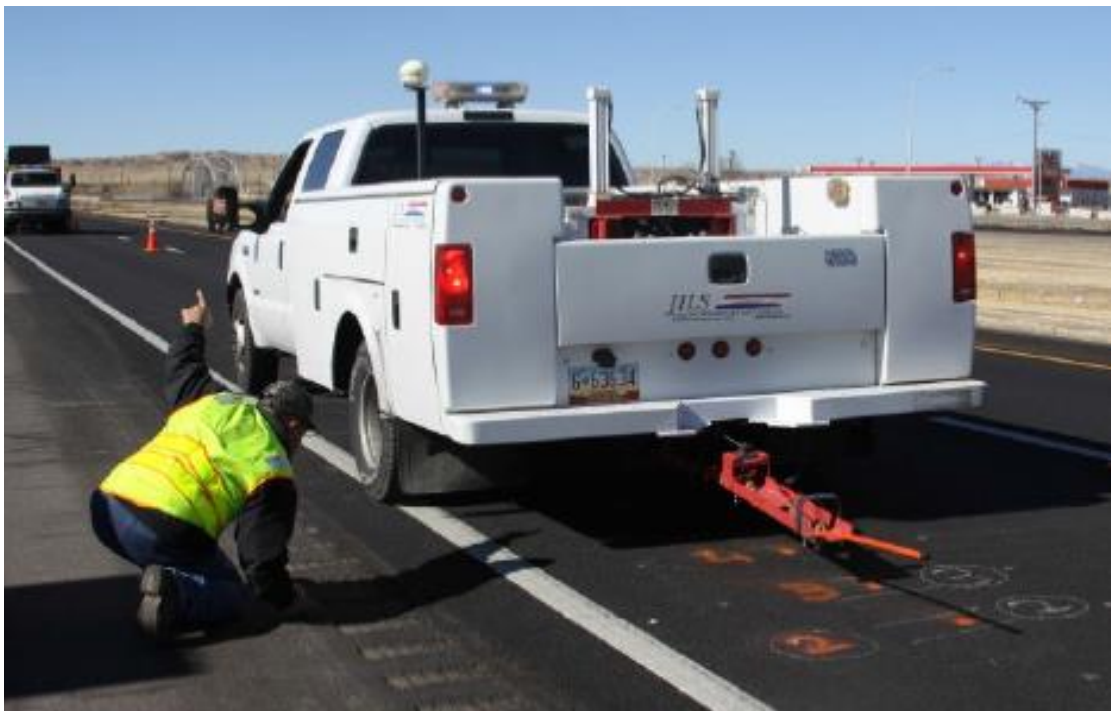


Figure 3.2: FWD test conducted in New Mexico

3.4 Simulation of FWD Test by GAMES Software

GAMES (General Analysis of Multilayered Elastic System) software was used to simulate the FWD test conducted on roadway section on Interstate 40 (I-40) New Mexico. The same field value of pavement layer properties was taken as input. Different layer thickness was also given as input like field value. The Poisson's ratio was assumed 0.35, 0.4 and 0.45 for surface, base, and subgrade respectively. Between layers, slip rate was taken as 0. Like the test value, a uniform pressure of 79.6 psi with an area of 6 inches (150 mm) radius was applied. The layers properties and load characteristics are depicted in Figure 3.3.

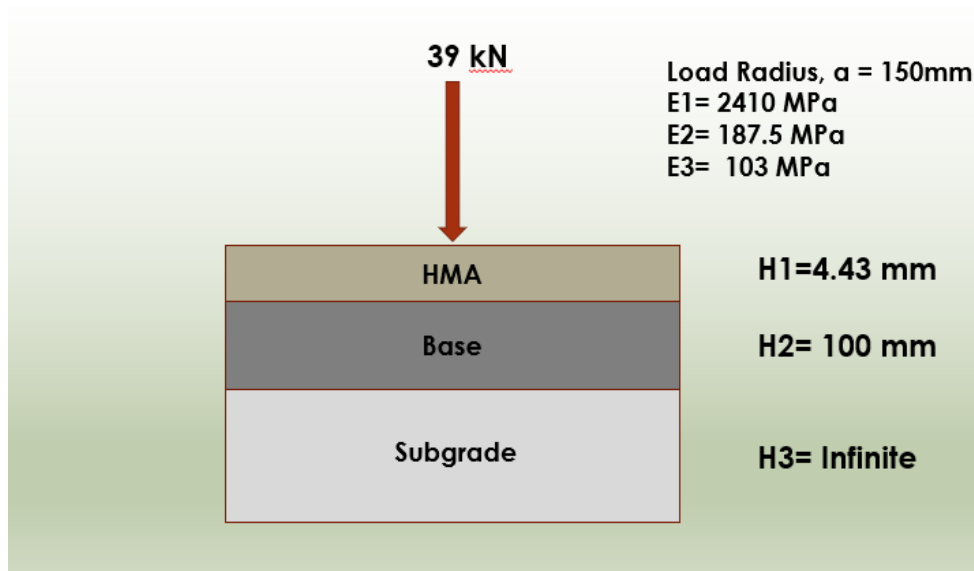


Figure 3.3: Layer properties and load characteristics of field test

3.5 FWD Field Test Values Versus Software Values Comparison

As we run the software, we get vertical compressive stress, horizontal stress, vertical strain, horizontal strain, and surface deflection at predefined points. These data are presented in figures 3.4, 3.5, 3.6, 3.7, 3.8 and in tables 3.1, 3.2, 3.3, 3.4, 3.5.

Table 3.1: Vertical compressive stress with respect to depth.

Depth (Inch)	Vertical Compressive Stress (psi)
0	79.75
3.94	65.105
7.88	35.38
11.82	16.385
15.76	5.742
19.7	2.2765
23.64	1.7545
27.58	1.479
31.52	1.2673

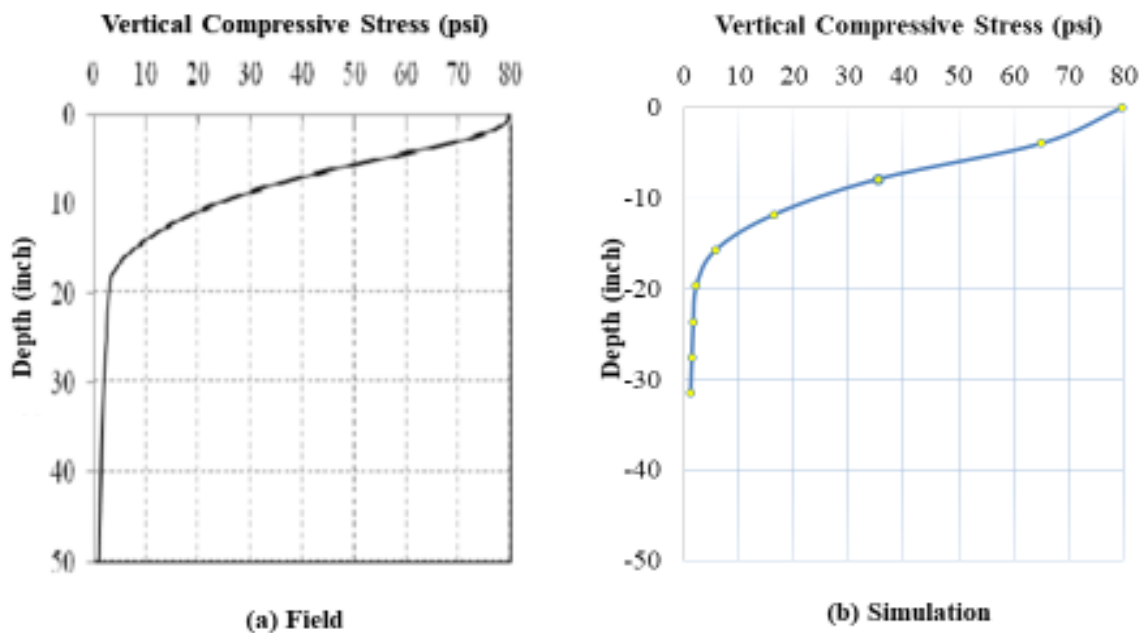


Figure 3.4: Depth versus vertical compressive stress (a) Field (left) (b) Simulation (right)

Table 3.2: Horizontal stress with respect to depth

Depth (inch)	Horizontal stress (psi)
0	-83.7317
5.0038	-14.9901
9.00684	-0.43751
10.0076	1.807715
10.638	3.14998
11.82	5.628465
13.79	9.981655
15.0114	13.03869
16.548	17.55515

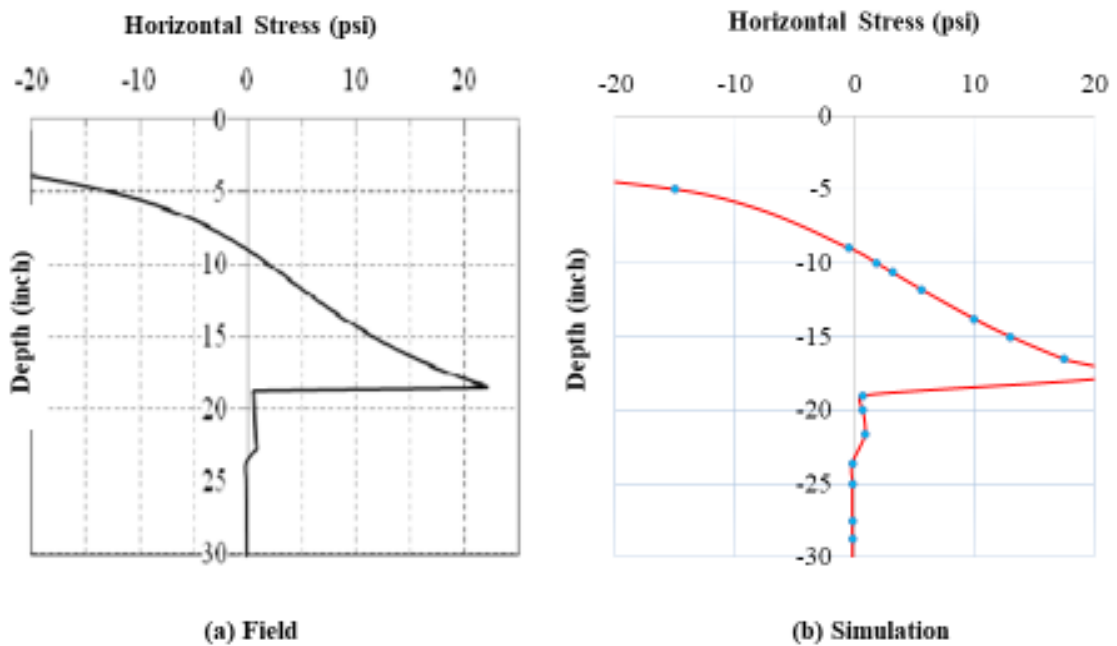
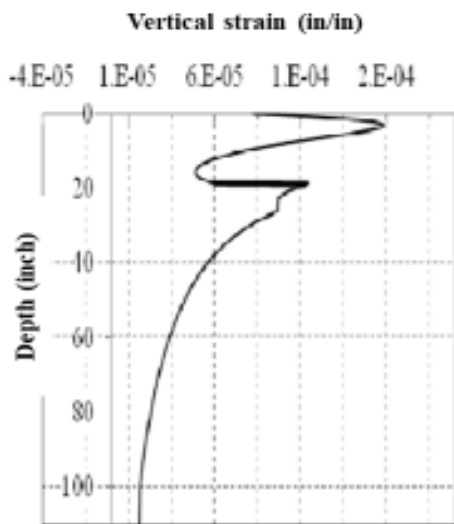


Figure 3.5: Depth versus horizontal compressive stress (a) Field (left) (b) Simulation (right)

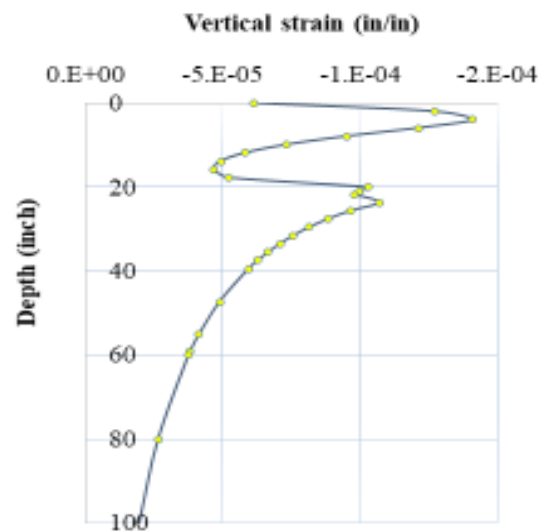
Table 3.3: Vertical strain with respect to depth

Depth (inch)	Vertical Strain (in/in)
0	-6.1E-05
1.97	-1.3E-04
3.94	-1.4E-04
5.91	-1.2E-04
7.88	-9.5E-05
9.85	-7.3E-05
11.82	-5.8E-05
13.79	-4.9E-05
15.76	-4.7E-05
17.73	-5.2E-05
20.02	-1.0E-04
20.88	-1.0E-04
21.67	-9.8E-05
23.64	-1.1E-04

Depth (inch)	Vertical Strain (in/in)
25.61	-9.7E-05
27.58	-8.8E-05
29.55	-8.2E-05
31.52	-7.6E-05
33.49	-7.1E-05
35.46	-6.7E-05
37.43	-6.3E-05
39.40	-5.9E-05
47.28	-4.9E-05
55.16	-4.1E-05
59.10	-3.8E-05
60.05	-3.7E-05
80.06	-2.6E-05
100.08	-2.0E-05



(a) Field



(b) Simulation

Figure 3.6: Depth versus vertical strain (a) Field (left) (b) Simulation (right)

Table 3.4: Horizontal strain with respect to depth

Depth (inch)	Horizontal Strain (in/in)
0	-7.60E-05
1.97	-9.40E-06
3.94	-2.31E-05
5.91	-3.06E-05
7.88	-2.95E-05
9.85	-2.74E-05
11.82	-2.69E-05
13.79	-2.88E-05
15.76	-3.39E-05
17.73	-4.35E-05
20.02	-4.87E-05
20.88	-4.81E-05
21.67	-4.82E-05

Depth (inch)	Horizontal Strain (in/in)
23.64	-4.64E-05
25.61	-4.17E-05
27.58	-3.81E-05
29.55	-3.51E-05
31.52	-3.26E-05
33.49	-3.04E-05
35.46	-2.86E-05
37.43	-2.70E-05
39.40	-2.56E-05
41.37	-2.11E-05
43.34	-1.79E-05
45.31	-1.66E-05
60.05	-1.63E-05

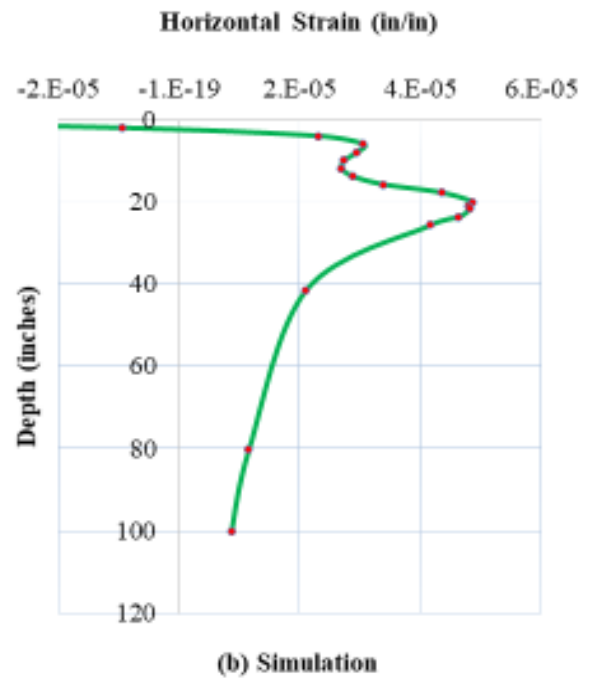
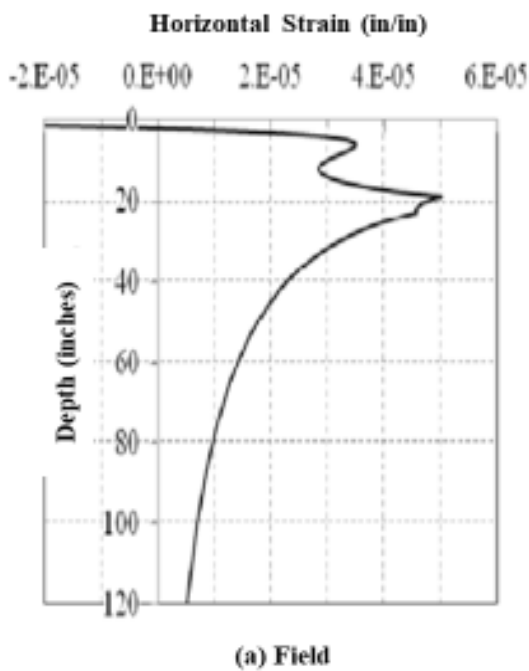


Figure 3.7: Depth versus horizontal strain (a) Field (left) (b) Simulation (right)

Table 3.5: Surface deflection with respect to sensor distance

Sensor Distance (inch)	Surface Deflection (mil)	Sensor Distance (inch)	Surface Deflection (mil)
0	7.863846	25.61	4.746124
1.97	7.787804	27.58	4.610588
3.94	7.539190	29.55	4.477810
5.91	6.926914	31.52	4.348578
7.88	6.332368	33.49	4.222104
9.85	6.041596	35.46	4.099176
11.82	5.826078	37.43	3.979006
13.79	5.643656	39.40	3.862461
15.76	5.478176	47.28	3.428746
17.73	5.322152	55.16	3.046329
20.01	5.148792	59.10	2.873442
20.88	5.084570	60.04	2.833687
21.67	5.027046	79.98	2.137332
23.64	4.884812	100.07	1.657479

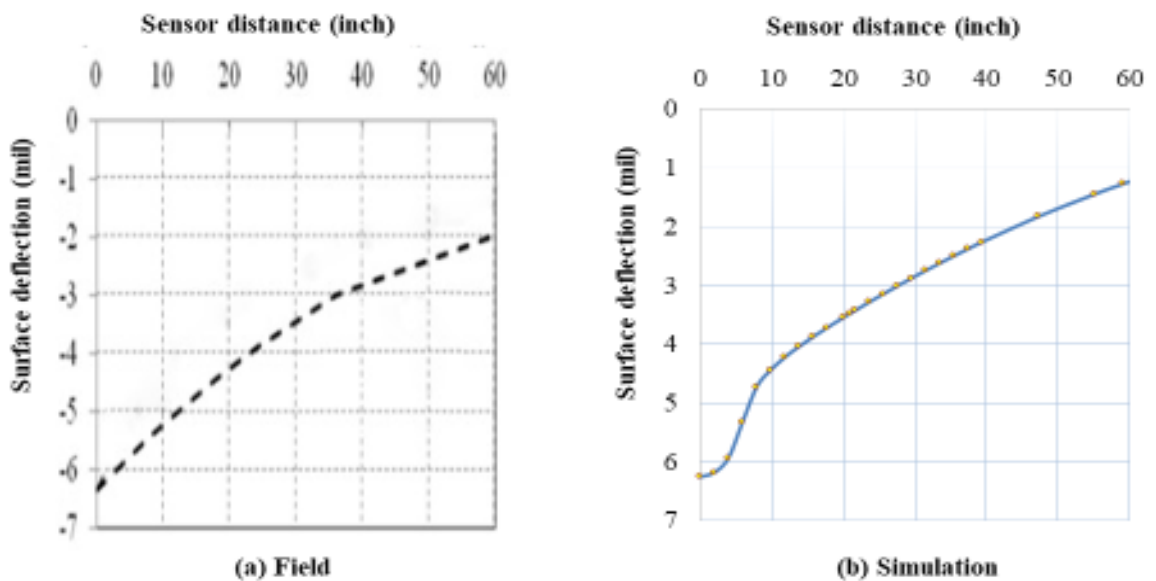


Figure 3.8: Surface deflection versus sensor distance (a) Field (left) (b) Simulation (right)

The above displayed Figures (Depth versus stress, depth versus strain and sensors distance versus surface deflections) offer a good identical comparison between software generated FWD values and field values of FWD. The accuracy of the Figures depends on number of data input in the software. From here, a conclusion can be drawn that GAMES software can simulate field value of FWD test.

3.6 Synthetic Data Generation; Seed Input Following RHD Specification

3.5.1 Seed Resilient Modulus of Layers

The RHD Pavement Design Guide has been prepared basing on two design standards, namely AASHTO Pavement Design Manual and the TRL Overseas Road Note 31, with a view to making the design of the road pavement as straight forward as possible and to adopt same standards for all RHD roads. The pavement is consisting of hot mixed asphalt layer as surface layer, base and sub-base as aggregate layers and sub grade as supporting and foundation layers.

Due to continuous loading and weather effect the HMA layer suffers from structural integrity deterioration. As a result, over the time the stiffness of HMA decreases. It has been seen that the modulus of HMA layer for a freshly constructed pavement can be as high as 4000 MPa while at terminal serviceability and distressed condition the value may fall around 700 MPa (Rabbi & Mishra, 2021).

Base, being the main load spreading and the subbase, being the secondary load spreading layer, are the granular layers in flexible pavement. From literature (IRC, 2018) it is learnt that resultant modulus of granular layers depends on few factors like aggregate quality, supporting layer property, porosity, and gradation. The Equation (3.1) (IRC, 2018) is used to convert the multiple aggregate layers into a single layer:

$$MR_{GRAN} = 0.2 (h)^{0.45*} MR_{SUPPORT} \quad (3.1)$$

Where,

h = thickness of granular layer in mm

MR_{GRAN}= resilient modulus of granular layer (MPa)

MR_{SUPPORT}= (effective) resilient modulus of supporting layer (MPa)

Range of subgrade modulus depends on underlying soil profile and bearing capacity of soil. This modulus changes abruptly due to seasonal change that causes heavy monsoon and water logging. For the simulation, considering the worst case, minimum subgrade soil modulus is considered as 62 MPa and for best condition it is considered as 103 MPa. The range of value is fixed considering use of improved subgrade layer where the resultant value will also remain in between this range. The modulus of improved subgrade and natural subgrade can be combined to convert a resultant effective resilient modulus for subgrade. Following equation (IRC, 2018) can be used in this case:

For an equivalent single layer system, the modulus value of the single layer which will produce the same surface deflection of 1.41 mm for the same load and for a Poisson's ratio of 0.35 as describe in Equation (3.2).

$$= [2(1-\mu) pa] / \delta \quad (3.2)$$

Here,

μ = Poisson's ratio of 0.35 for the layers.

p = contact pressure taken as 0.56 MPa.

a = Radius of circular contact area taken as 150.8 mm.

δ = surface deflection 1.41 mm

3.5.2 Seed Thicknesses Value of Layers

According to the design guide of RHD 2005, the design of road pavement is influenced by cumulative number of heavy axle load, design life, growth factor etc. It also depends on the category of roads. RHD guideline marks maximum thickness for HMA layer including surfacing and asphalt base as 200 mm for 60M to 80M ESA. Range of HMA thickness is instrumented between 140mm to 210 mm considering national highways for the analysis.

For national highway, RHD design chart includes base type I, base type II, and sub-base for granular layer. The basic guideline for the base thickness ranges around 550mm for 60M to 80M ESA. For practical view point it is around 700 mm. For our analysis, it is taken between 600mm and 700 mm.

As per RHD design guideline a minimum subgrade strength is considered. In most of the cases, roads are constructed on embankment that will have a minimum requirement of

subgrade strength. In this case, an improved subgrade layer should be provided. In extreme case, subgrade layer should be removed and replaced with fill material complying with Section 2.6 of the RHD specification. For our analysis, we have considered the subgrade layer thickness as infinite, for large range of resilient modulus value. Figure 3.9 shows layer properties for the analysis.

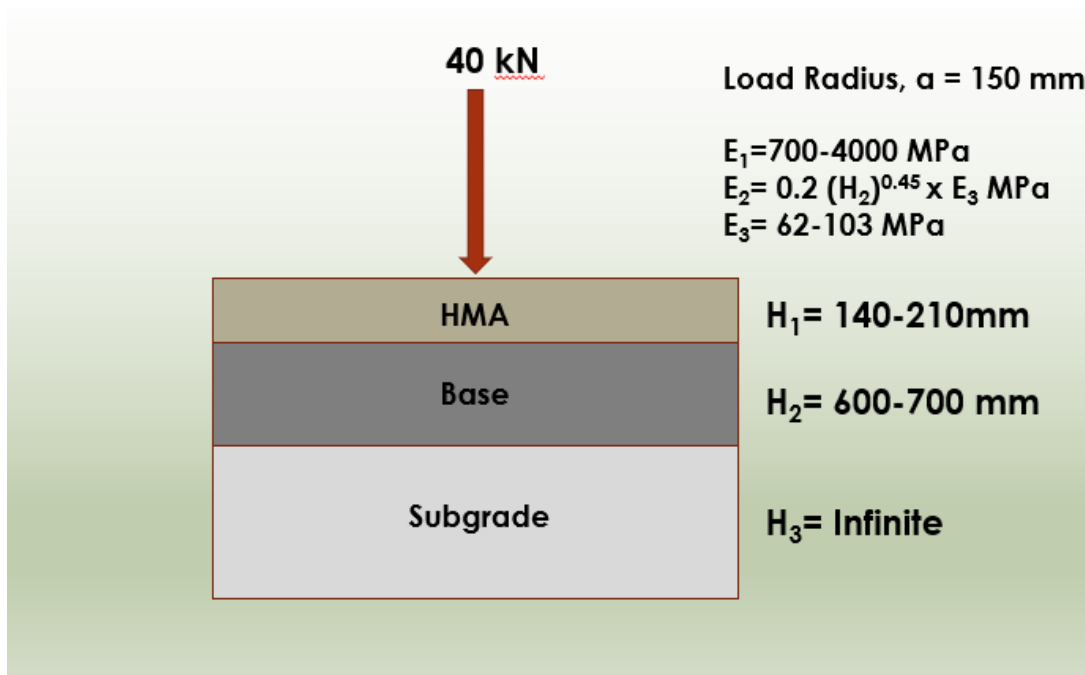


Figure 3.9: Layer properties for the analysis

3.7 Generation of Unbiased and Natural Variables between Fixed Ranges

We need to generate a set of unbiased natural variables that will simulate nearly possible condition on ground. But it is nearly impossible to find out the exact combination of aforesaid variables throughout the length of a roadway. So, what can be done is to fix a range of variables from design guideline and from experience.

A “RANDBETWEEN” function in Microsoft excel worksheet can be used to generate such natural data. We put the upper limit and lower limit of our previously discussed variables and then generate 2000 data for each case of HMA, granular and subgrade layer. The value of these columns is fixed and not changed every time. This function generated data has the repetition and thus different variable set combinations are generated to

simulate the actual field condition. This ensured the combination of weaker subgrade with high thickness of upper layer system and low thickness of layered system with higher modulus value of subgrade.

3.8 Deflection and DBP Values

For the GAMES software, we put 2000 synthetic data combination. The FWD surface deflection denoted as D_0 , D_{200} , D_{300} , D_{450} , D_{600} , D_{900} , D_{1200} and D_{1500} were as per the FWD point of interest. The software provides the corresponding deflection of similar load to FWD. From software we also could find out the Deflection Basin Parameter value BLI, MLI and LLI. The seed values, corresponding deflections, DBPs are listed as in Annexure A. Annexure B is composed of Actual vs Predicted layer properties obtained from deflection values of test data. Annexure C is composed of Actual versus predicted Layer properties obtained from DBPs.

CHAPTER 4: DEVELOPMENT OF MODELS

4.1 Introduction

Previous chapter offers us deflection values at different points simulating FWD on ground for varying conditions. These deflection values depend on the seed values of the layer properties. In this chapter prediction models are developed such as RF, SVR and Regression. In the process of developing models, the deflection at selected positions displays good correlation with the pavement structure.

In this chapter, we also assessed the accuracy of the models and compared those for the best supported one. From models, it is found that basin parameters obtained from the synthetic data conform to the existing pavement rating. In this chapter we also get the satisfactory answers to the research questions (1) Can we predict pavement layer thickness from DBPs? (2) Can we predict Modulus of Resilient of pavement layer from DBPs? (3) Can we establish correlations between DBPs and pavement performances? Thus, this chapter provides satisfactory answer to the fulfillment of the study objectives.

4.2 Modulus versus D_0 , D_{1500} and RoC

Deflection under the load plate (often expressed as W_0 or D_0) can be used as an indicator for the overall structural condition of the entire pavement structure with about 70% contribution by subgrade (Rabbi & Mishra, 2021; Naughton & Hall, 2019). Maximum deflection alone is a blunt instrument as other pavement layers often filter this maximum deflection value. It does not facilitate pinpointing the layers of the structural deficiency in the total pavement structure. From Horak (Horak, 2008) we get the threshold values of D_0 . The upper limit for sound road condition in terms of D_0 is 400 μm , warning condition range is 400-750 μm and the lower limit is 750 μm for severe road condition.

From literature (Rabbi & Mishra, 2021) we know the nature of stress distribution in flexible pavement, where upper layers in the pavement structure affect the surface deflection at locations relatively close to the point of load application. In the figure 4.1 we see a good correlation between the modulus of layers and D_0 . In general, as modulus decreases D_0 increases. It confirms the existing practices.

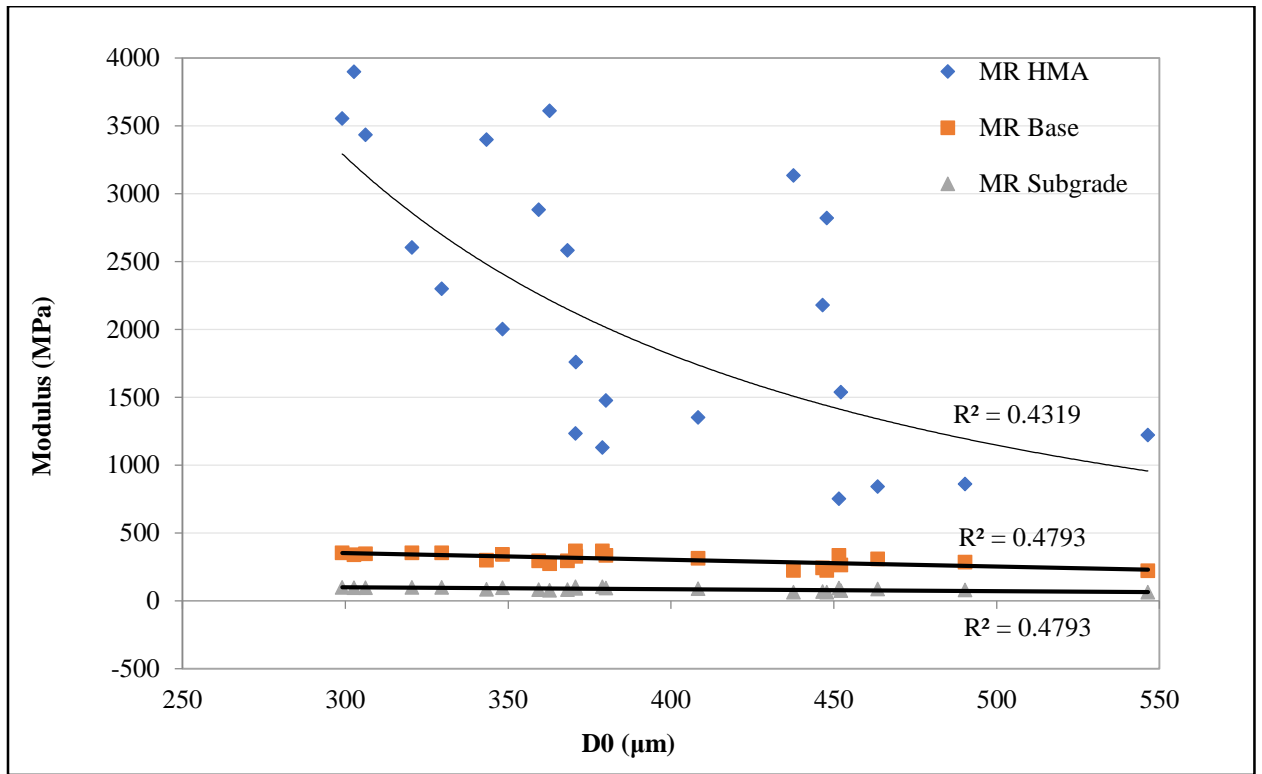


Figure 4.1: Pavement layer moduli versus D₀

According to US system deflection under 7th sensor, often denoted by W_{60} or D_{60} (in South Africa it is D_{1500}) can be used as an indicator of subgrade condition. Moving radially away from the load, the surface deflection is governed to a large extent by properties of the subgrade layer (Rabbi & Mishra, 2021). It is therefore a common practice to use the surface deflection recorded by the D_{1500} sensor as an indicator of the structural condition of subgrade layer. In the figure 4.2 below, we see a good correlation between subgrade modulus and the D_{1500} . Here, deflection at D_{1500} increases as modulus of base and subgrade decrease.

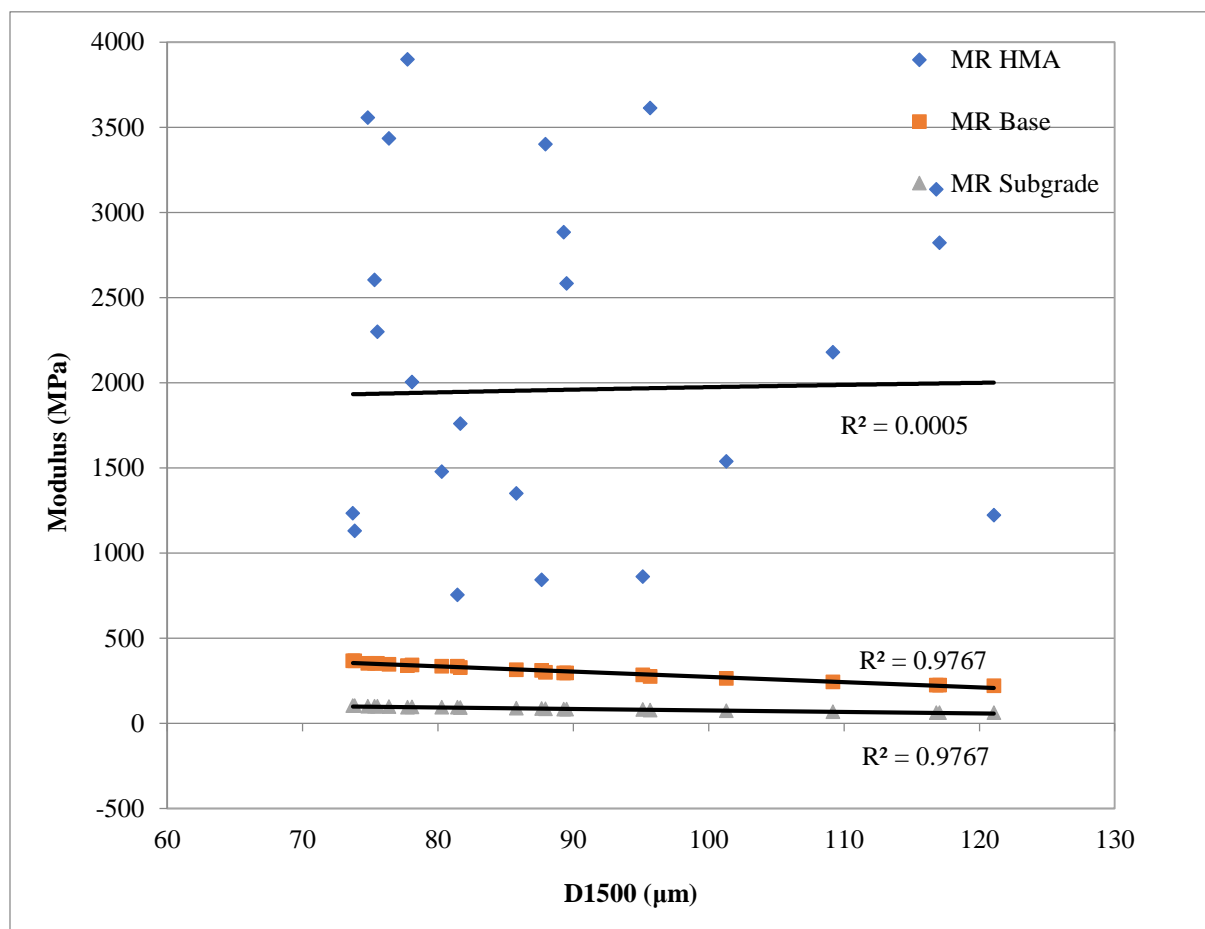


Figure 4.2: Pavement layer moduli versus D_{1500}

Radius of Curvature (RoC) and BLI have been found to correlate well with surface and base layers (Horak, 2008). Due to the closeness of the geophone at 200 mm to the edge of the loading plate and associated surface disturbances observed, RoC is used with less confidence, especially if the pavement structural problem is just below these layers. BLI is used with more confidence to describe zone 1 of deflection bowl. BLI value indicates the structural condition of the upper layers of pavement structure, which in turn is related to the nature of stress dissipation by upper layers (Rabbi & Mishra, 2021). In the figure 4.3, it is seen that the HMA modulus has good correlation with BLI.

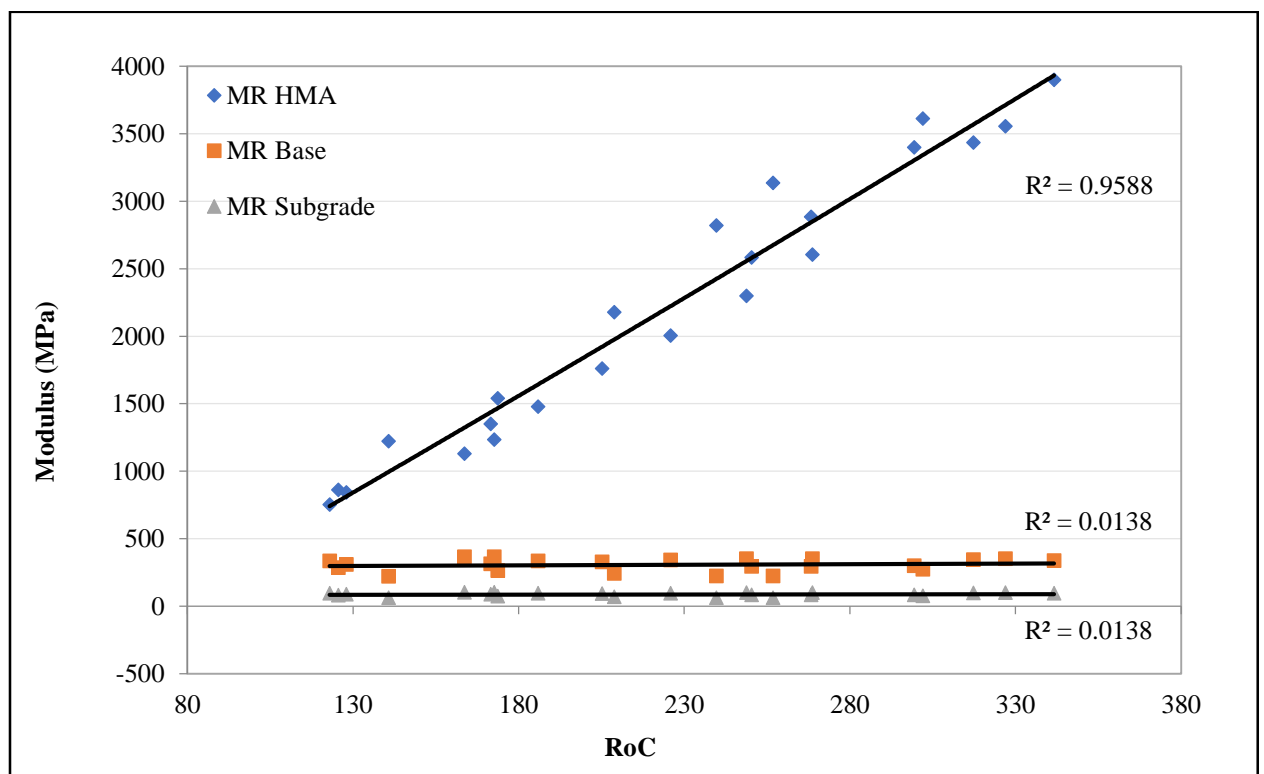


Figure 4.3: Pavement layer moduli versus RoC

4.3 Basin Parameters versus Modulus

DBP values calculated for the different pavement configurations were compared against threshold values specified in the literature, and inferences were drawn regarding the validity of the results. The modulus values for the surface, base, and subgrade layers were varied against individual DBP value. It shows the effects of each layer on the calculated DBP values. Results from this parametric analysis effort have been presented in Figure 4.4, Figure 4.5, and Figure 4.6. DBP values were calculated for each modulus value (represented by a line on the plot). It is observed that for very low modulus values, the deflections are considerably high.

Fazle Rabbi (Rabbi & Mishra, 2021) established that variation in layer modulus values affects the deflection basin shape significantly. Changes in the subgrade layer modulus has the most significant effect on the deflection recorded by the farthest sensor. On the other hand, changing the surface layer modulus primarily affects the central deflection values. BLI value is significantly influenced by the Base and Subgrade conditions (besides being governed by the HMA layer modulus). Therefore, the BLI value is not solely dependent on the surface layer modulus and can be affected by structural condition of the underlying layers.

Figure 4.4 - 4.6 shows the effects of individual layer modulus values on different DBPs. For example, Figure 4.4 shows the change in layer modulus and its effect on BLI. HMA layer modulus was varied from one extreme to the other. As seen from the Figure, changing the Base and Subgrade layer modulus did not have any significant effect on the BLI values. An 81% decrease in HMA modulus (3700 MPa to 700 MPa) caused a 120% increase in the BLI value (increase from 100 to 220 μm). The most successful accuracy coefficient R^2 value is associated with MR of HMA line. Horak (Horak & Emery, 2006) also describes that BLI has more correlation with surface and base layer (Zone 1).

Similar results were found for change in layer modulus and its effect on MLI (Figure 4.5). Here, we find good correlation between Base modulus and MLI and Subgrade Modulus and MLI. Existing practice (Horak, 2008) also supports these results.

Varying the base and subgrade layer modulus, on the other hand, resulted in significant variations in the LLI value (Figure 4.6). Change in MR of HMA has no correlation with LLI. Neglecting other influential factors, the LLI value can be used as a reasonably accurate indicator of subgrade quality.

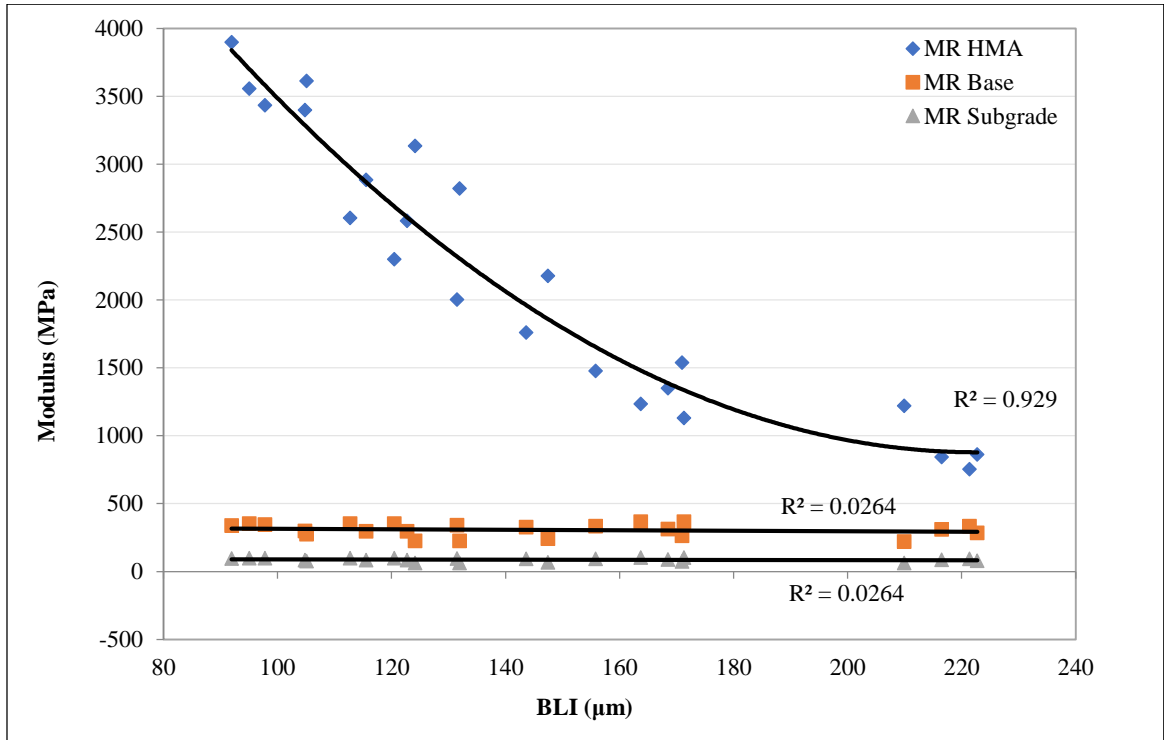


Figure 4.4: Basin parameters (BLI) versus pavement layer moduli

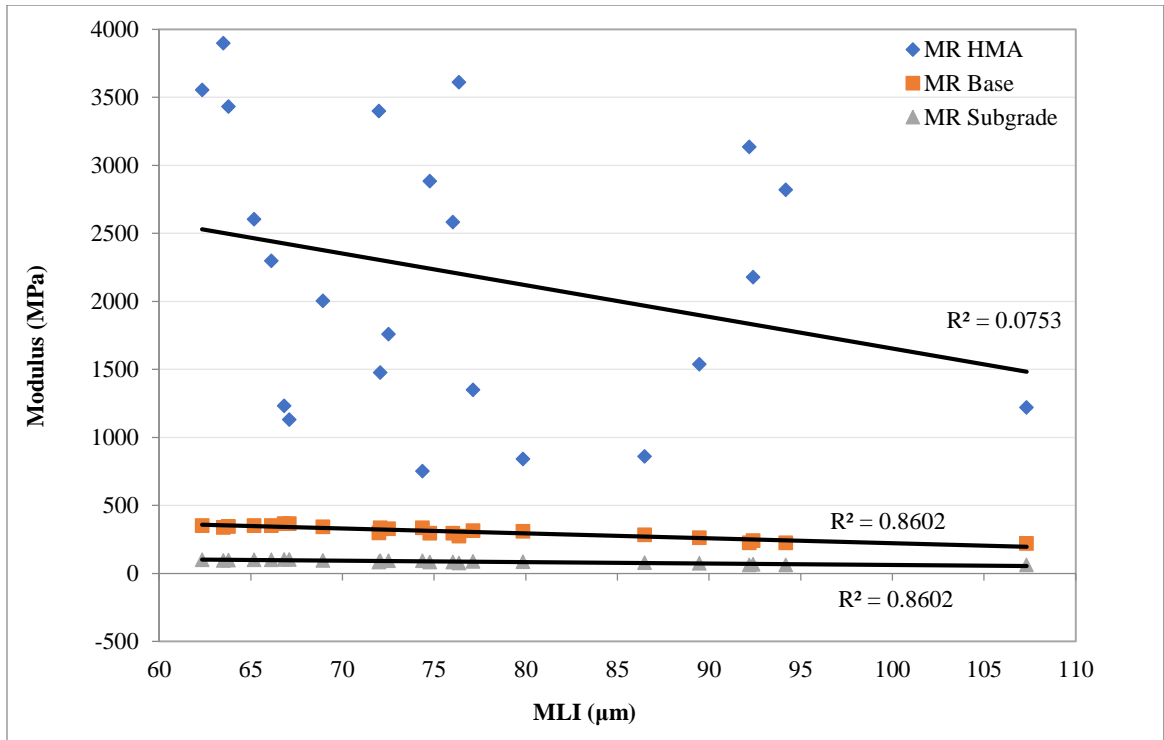


Figure 4.5: Basin parameters (MLI) versus pavement layer moduli

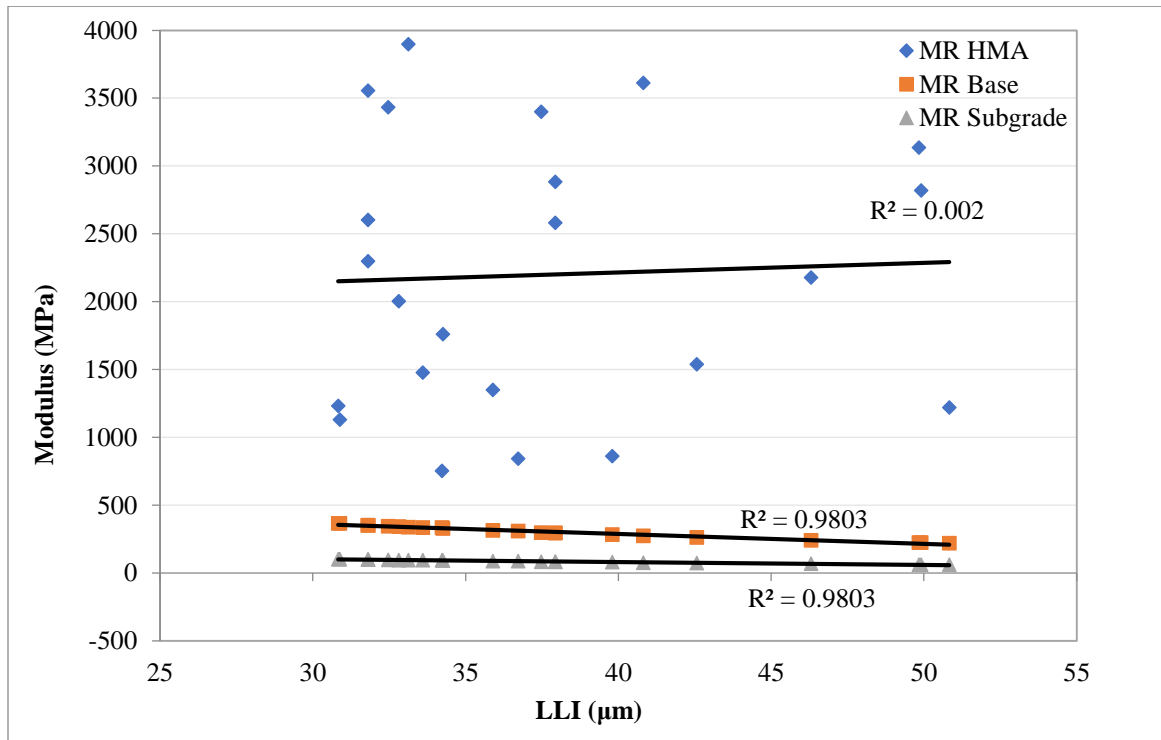


Figure 4.6: Basin parameters (LLI) versus pavement layer moduli

4.4 Correlation between Basin Parameters, Modulus and Road condition

From literature, we know the corresponding threshold values of DBP (BLI, MLI and LLI) has good correlation with performance indicator of road conditions (Severe, warning and sound). Generally, subgrade layer modulus values less than 69 MPa are considered as bad subgrade and above 137 MPa are considered as good (Rabbi & Mishra, 2021). Figure 4.9 shows that for subgrade modulus values lower than 62 MPa, the value of LLI increases from 50 μm to 55 μm (below 65 μm , which is upper limit of Warning Zone).

Similar trends can be observed from figure 4.8 for the MLI parameter. MLI values lower than 100 μm correspond to base modulus values higher than 220 MPa while MLI values higher than 100 μm represents base modulus values lower than 220 MPa. Upper threshold value for MLI is 115 (South Africa suggested value) for sound road condition.

Similarly, from figure 4.7 we get correlation between BLI, HMA modulus and road condition. South Africa suggested upper limit of BLI for sound road condition is 250 μm . Here, the upper limit of BLI for the sound road condition is 200 μm . In our investigation, for all the figures here, the accuracy coefficient R^2 has good values.

On the other hand, the definition of good and bad surface layer (HMA) cannot be defined based on its modulus value alone. Because depending on the environmental temperature's variation on a particular region, a high modulus HMA layer can cause significant surface cracking and a low module can cause considerable rutting. According to the Mehta and Roque (Mehta & Roque, 2003), ninety-five percent of the deflection measured on the surface of the pavement due to the load is case of subgrade condition and remaining five percent are the attribution of pavement system above subgrade. Hence, BLI thresholds as a performance indicator of HMA layer always may not be indicative of the true condition of HMA layer.

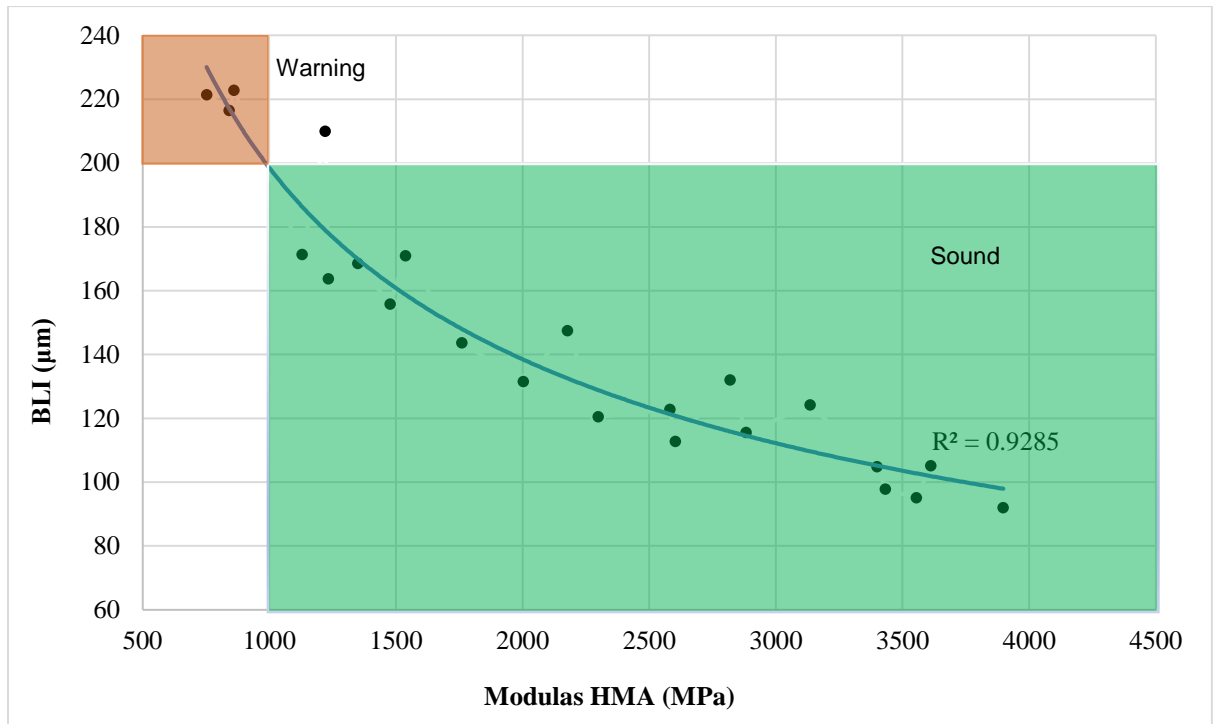


Figure 4.7: Correlation between basin parameters, modulus of HMA and road condition

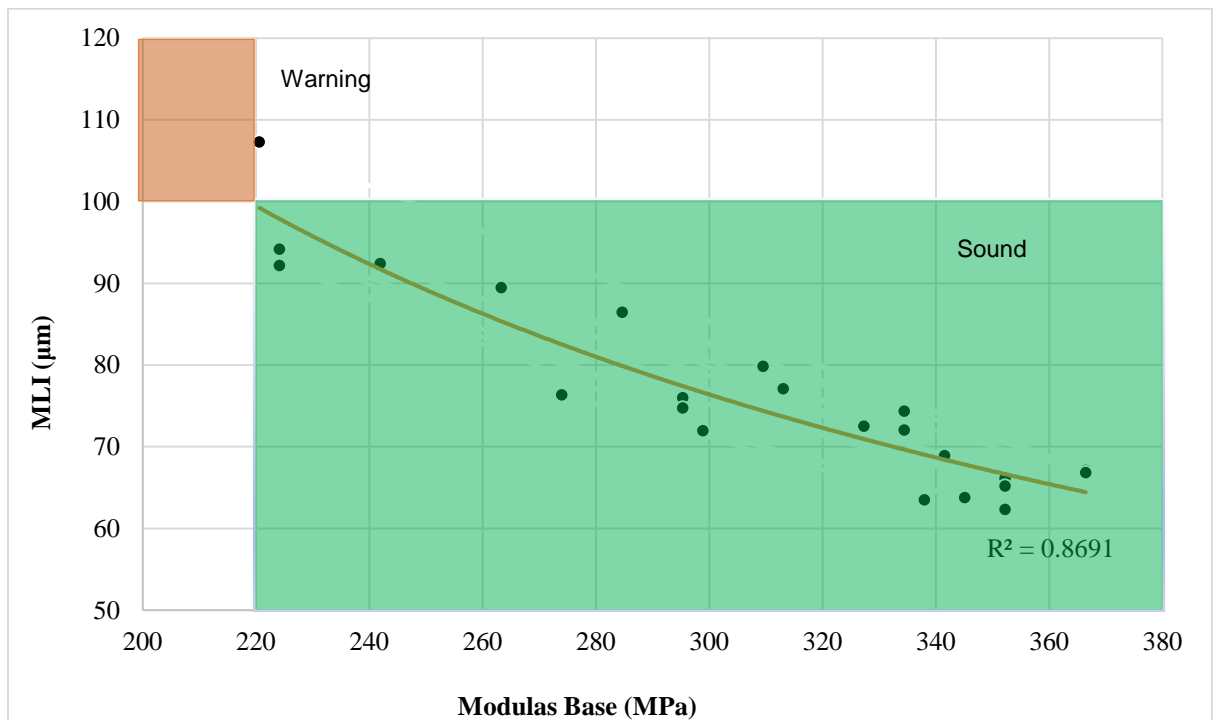


Figure 4.8: Correlation between basin parameters, modulus of base and road condition

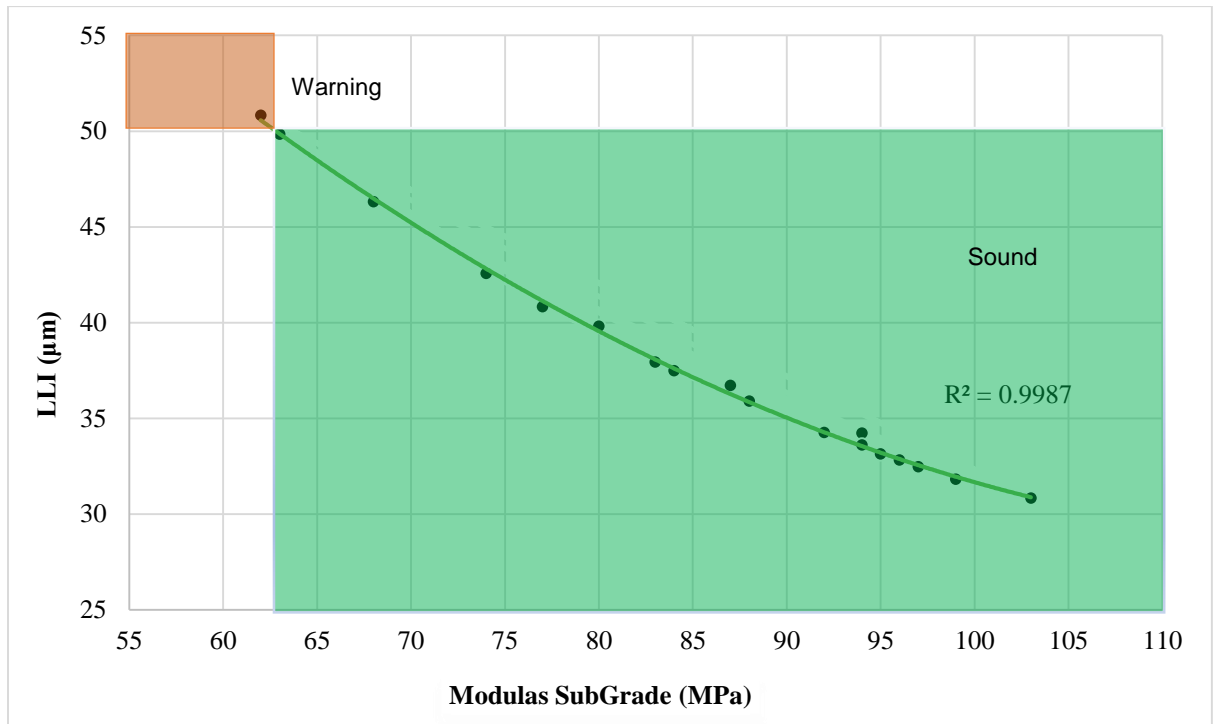


Figure 4.9: Correlation between basin parameters, modulus of sub-grade and road condition

4.5 Machine Learning Model: Random Forest

The random forest (RF) is a supervised machine learning (ML) method which is comprised of a combination of multiple decision trees. The tree classifiers are selected randomly from the given input features which are then used to construct decision trees generated using the bootstrap method from the training dataset with replacement. The RF algorithm works in two stages: the RF is created in the first stage and prediction is performed in the second stage based on the classifier created at the first stage. There exists a positive relation between accuracy and the number of trees in the forest, meaning that by increasing the number of trees in the forest, more accurate results can be achieved. The best solution is achieved by voting. RF is considered better than a single decision tree as it reduces the problem of over fitting. The final model predicted output is obtained by averaging the results of individual decision trees by following Equation (4.1) where each of the individual decision trees are denoted.

Each of the individual decision trees are denoted by Y_b , which is trained on X' unknown instances. The symbol B in the equation denotes the total number of the decision trees.

$$Y = \frac{1}{B} \sum_{j=1}^B Y_b (X') \quad (4.1)$$

The working process of this algorithm begins with selecting a number for the samples and a decision tree is constructed for each of the samples. Next, each decision tree predicts the outcome from the given input parameters, and then for selecting the best one from all the predicted results, voting is performed. Finally, based on majority voting, the final prediction result is chosen. Approximately 1/3rd of the database is not selected during the bootstrap method of selection as this data is referred to as the out of bag data. This out of bag data is then used by the trees to validate the states internally, thereby increasing accuracy and improving the performance of the RF. A flow chart the RF model is shown in figure 4.10

For the best output, 10-fold cross-validation is applied for our model. The model is developed using the Python programming language. Prediction goodness of model is indicated by lower values of RMSE and MAE and R^2 value closer to 1.00. The performance measures for both train and test sets evaluated using 65%-35%.

Figures 4.11, 4.12 and 4.13 describe the actual versus predicted modulus of HMA, Base and Subgrade respectively. The accuracy coefficient MAE, RMSE and R^2 values are

55.86, 213.63 and 0.95 for HMA (figure 4.11), 0.15, 0.59 and 0.99 for Base (figure 4.12) and 0.15, 0.59 and 0.99 for Subgrade (figure 4.13) modulus respectively.

From these models we also get feature importance that means the effective role-playing modulus on the associated deflections. For example, from figure 4.11, we see that D_0 has got the closest relation with HMA modulus. Similarly, figure 4.12 and figure 4.13 explain the close relation of D_{1500} with base and subgrade modulus respectively.

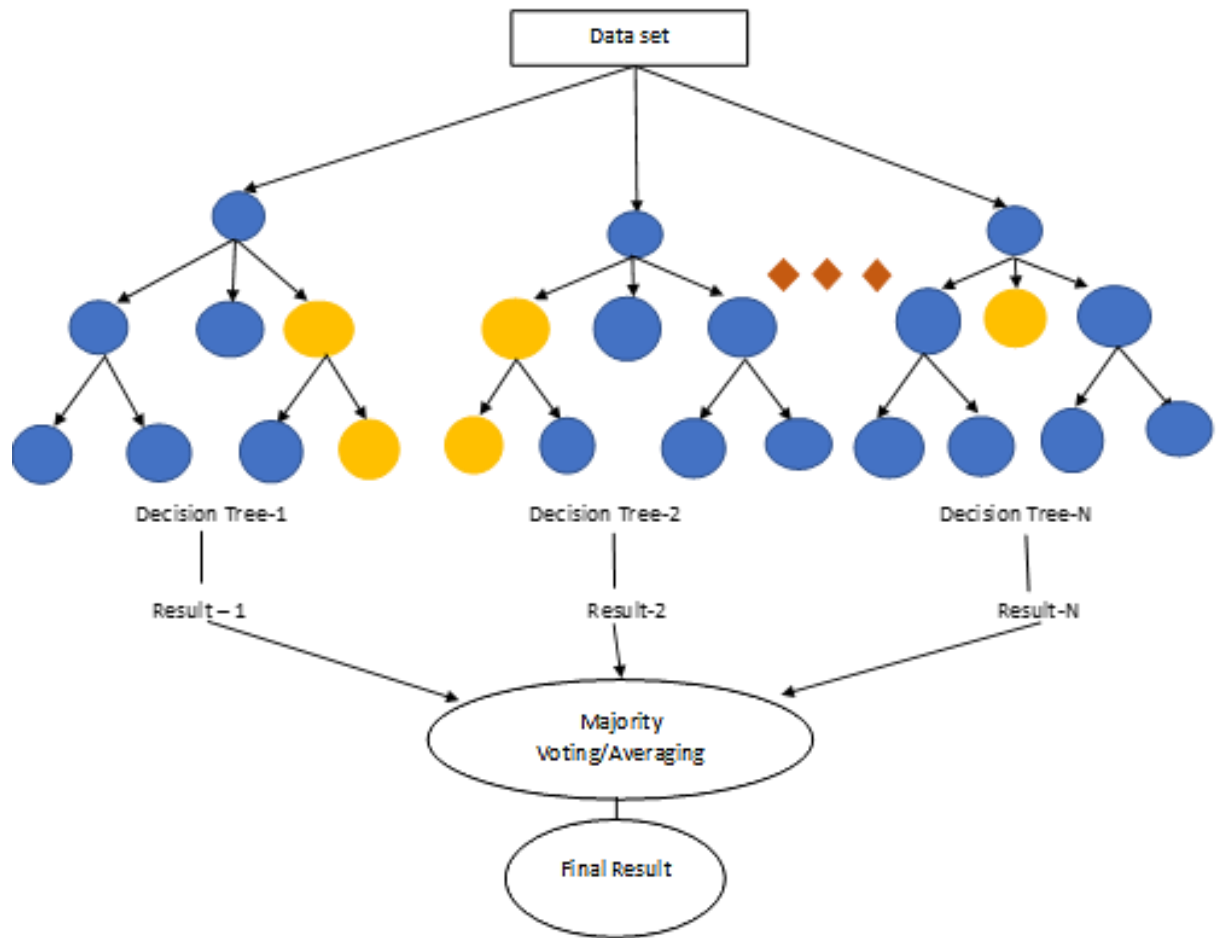


Figure 4.10: Flow chart of RF model

RF_MR_HMA

MAE: 55.86; RMSE: 213.63; R² Value: 0.95

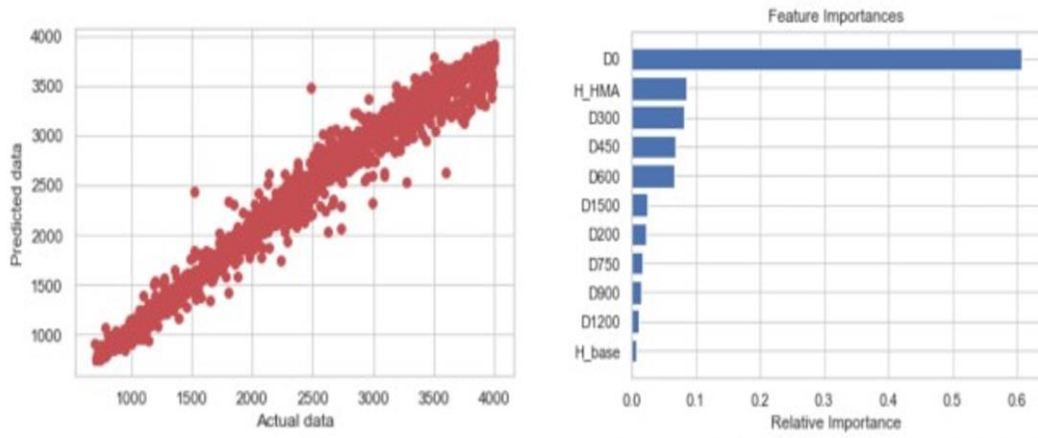


Figure 4.11: Predicted versus actual HMA resilient modulus by RF

RF_MR_Base

MAE: 0.15; RMSE: 0.59; R² Value: 0.99

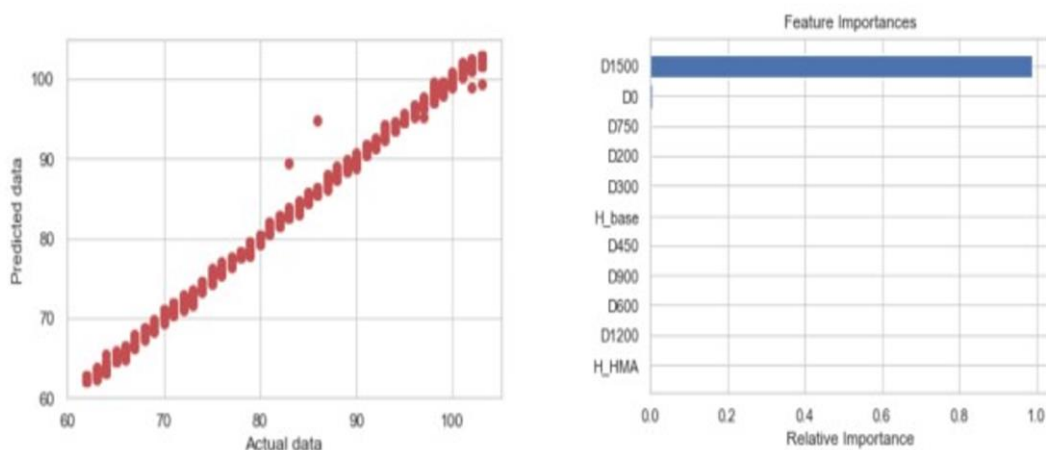


Figure 4.12: Predicted vs. Actual Base Resilient Modulus by RF

RF_MR_SG

MAE: 0.15; RMSE: 0.59; R² Value: 0.99

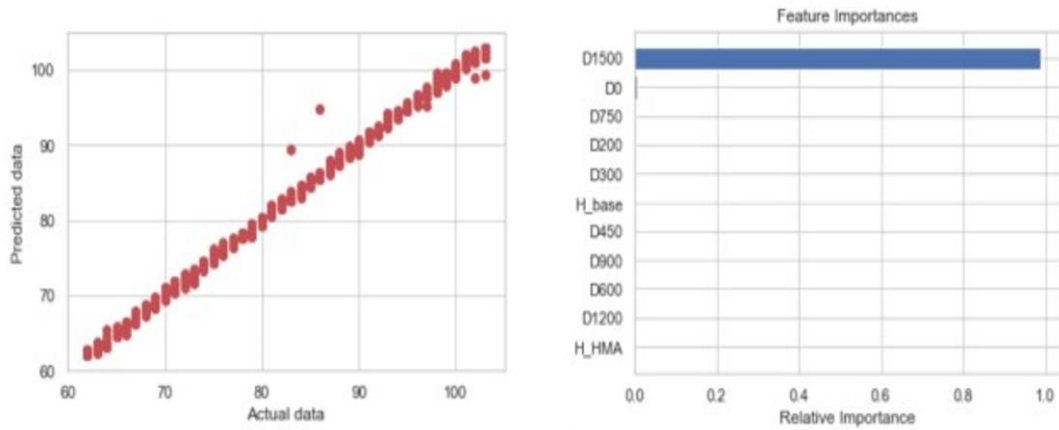


Figure 4.13: Predicted versus actual sub-grade resilient modulus by RF

Figures 4.14 and 4.15 describe the actual versus predicted thickness of HMA and Base layer respectively. The accuracy coefficient MAE, RMSE and R² values are 0.39, 1.34 and 0.65 for HMA (figure 4.14), 4.62, 15.92 and 0.74 for base (figure 4.15) thickness respectively.

From these models we also get feature importance that means the effective role-playing layer thickness on the associated deflections. For example, from figure 4.14, we see that D₀, D₂₀₀, D₃₀₀ and D₁₅₀₀ has got the close relation with HMA thickness. Similarly, figure 4.15 explain the close relation of D₁₅₀₀, D₇₅₀ and D₆₀₀ with base thickness.

RF_H_HMA

MAE: 0.39; RMSE: 1.34; R² Value: 0.65

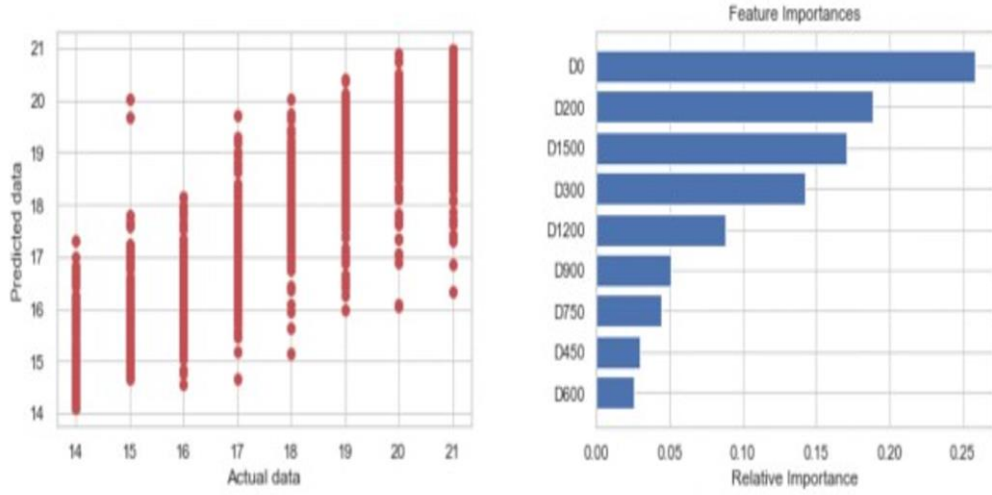


Figure 4.14: Predicted versus actual HMA thickness by RF

RF_H_Base

MAE: 4.92; RMSE: 15.92; R² Value: 0.74

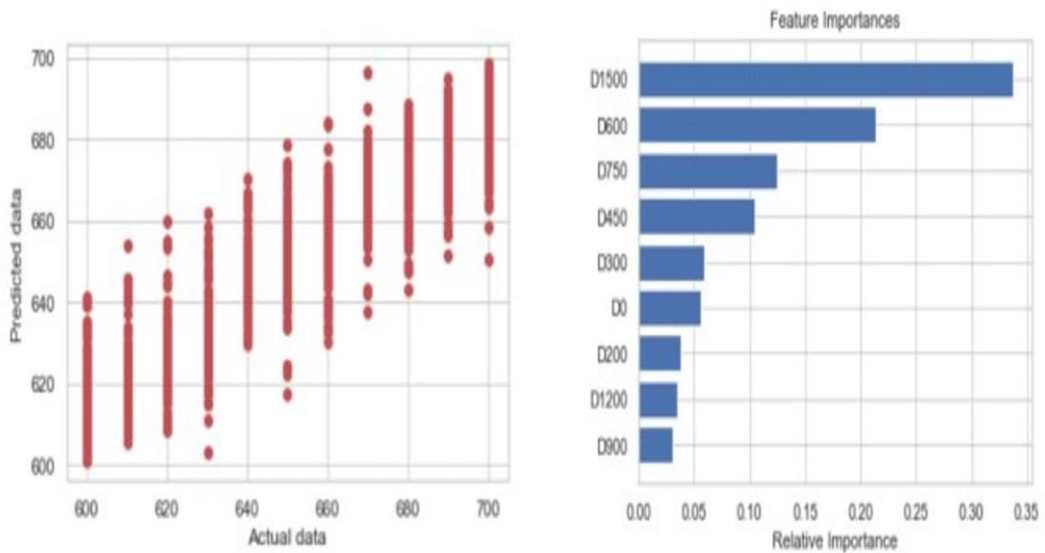


Figure 4.15: Predicted versus actual base thickness by RF

4.6 Machine Learning Model: Support Vector Regression

The support vector regression (SVR) algorithm generates a model using the training data to assign new data to a class by using hyper-plane which is at a maximum distance from the labeled classes to minimize generalization error. In this algorithm, the margin is calculated as the sum of distances of the hyper-plane from the nearest point of labeled classes. Radial Kernel function is utilized to map the lower-dimensional data into higher ones. The SVR model, shown in figure 4.16 is constructed by setting the degree of the function as 3 and by keeping the value of the regularization parameter as 21.

For the best output, 10-fold cross-validation is applied for the model. The model is developed using the Python programming language. Prediction goodness of model is indicated by lower values of RMSE and MAE and R^2 value closer to 1.00. The performance measures for both train and test sets evaluated using 65%-35%.

Figures 4.17, 4.18 and 4.19 describe the actual versus predicted modulus of HMA, base and subgrade respectively. The accuracy coefficient MAE, RMSE and R^2 values are 250.66, 345.83 and 0.87 for HMA (figure 4.17), 0.05, 0.29 and 0.99 for base (figure 4.18) and 0.49, 0.29 and 0.99 for Subgrade (figure 4.19) modulus respectively.

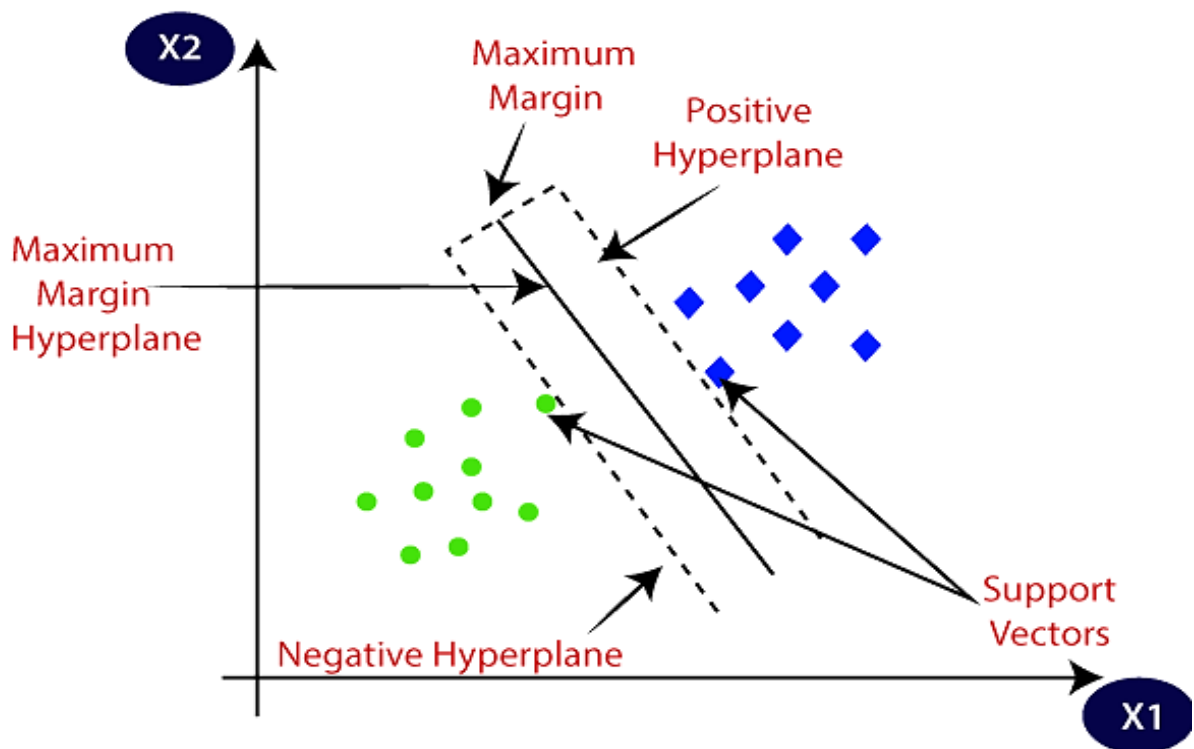


Figure 4.16: SVR model

SVR_MR_HMA

MAE: 250.66; RMSE: 345.83; R² Value: 0.87

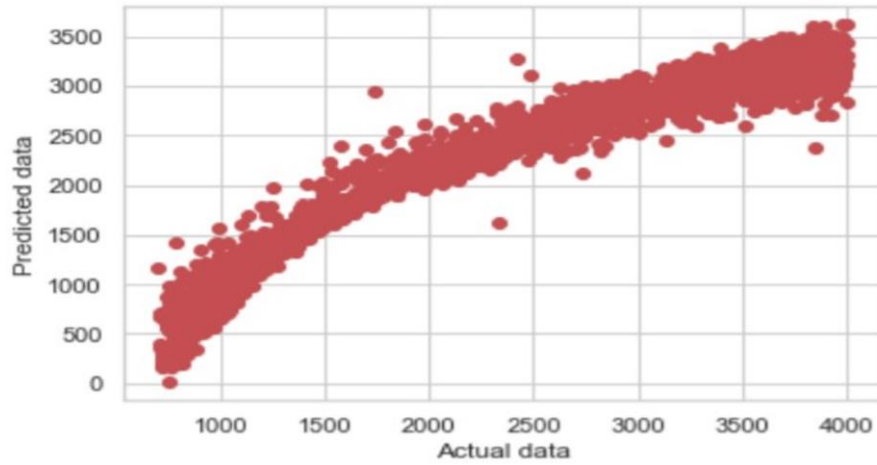


Figure 4.17: Predicted versus actual HMA resilient modulus by SVR

SVR_MR_Base

MAE: 0.05; RMSE: 0.29; R² Value: 0.99

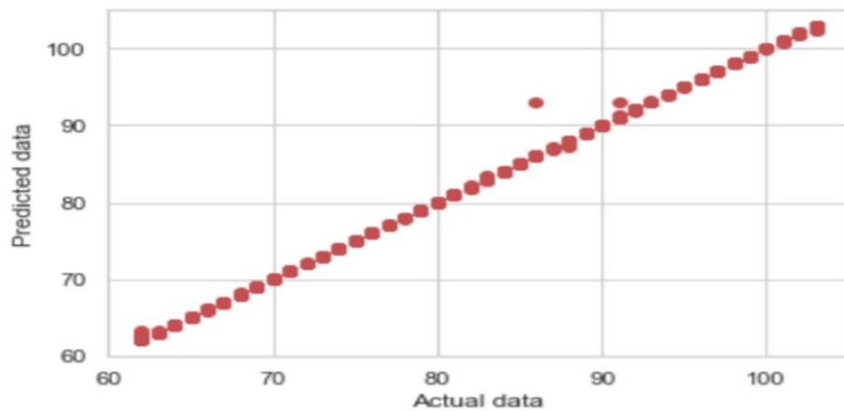


Figure 4.18: Predicted versus actual base resilient modulus by SVR

SVR_MR_SG

MAE: 0.49; RMSE: 0.29; R² Value: 0.99

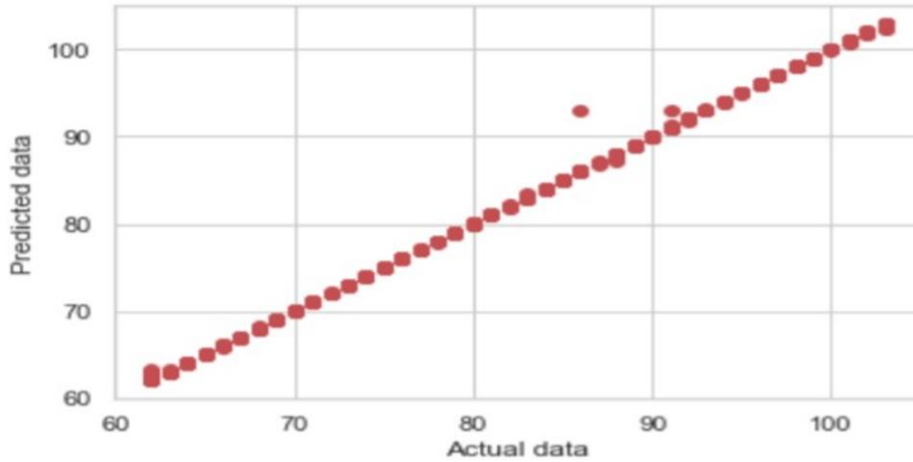


Figure 4.19: Predicted versus actual sub-grade resilient modulus by SVR

Figures 4.20 and 4.21 describe the actual versus predicted thickness of HMA and base layer respectively. The accuracy coefficient MAE, RMSE and R² values are 0.12, 0.32 and 0.98 for HMA (figure 4.20), 4.58, 9.90 and 0.89 for base (figure 4.21) thickness respectively.

SVR_H_HMA

MAE: 0.12; RMSE: 0.32; R² Value: 0.98

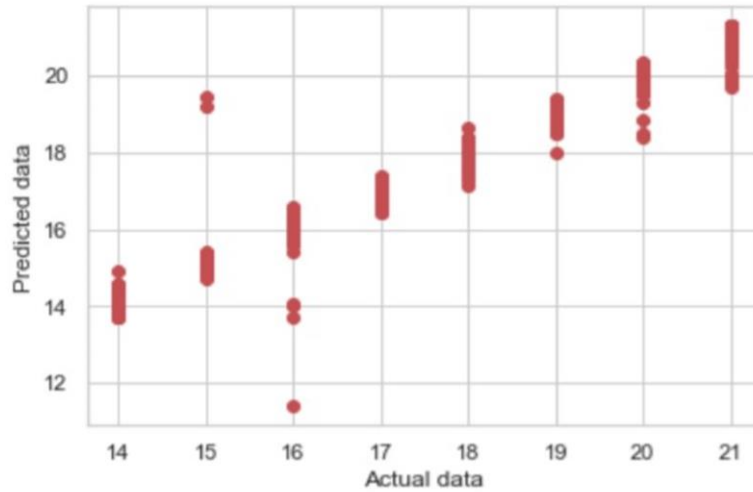


Figure 4.20: Predicted versus actual HMA thickness by SVR

SVR_H_Base

MAE: 4.58; RMSE: 9.90; R² Value: 0.89

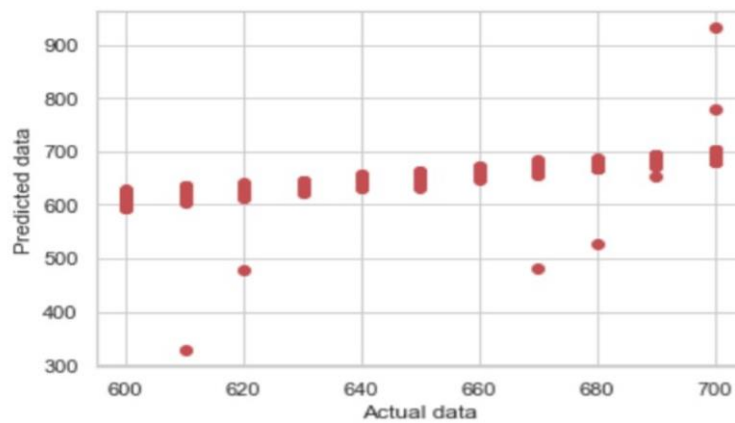


Figure 4.21: Predicted versus actual base thickness by SVR

4.7 Multi-Linear Regression Model

Multi-Linear Regression Model (MLRM) is a well-known method of mathematical modeling of the relationship between a dependent variable and one or more independent variables. With the help of linear regression, we can check the relationship between layer properties with the deflection values due to load application. Regression uses the existing or known values to forecast the required parameters. Here resilient modulus and thickness of the layers are the output response, and the deflection and deflection basin parameters are the variables. Regression models are developed from 65% data (1300 data of 2000 data). Layer properties are predicted against actual data using rest 35% data (700 data of 2000 data).

4.8 Resilient Modulus & Thickness of Pavement Layers (Thickness) from Deflection Values of Regression Model

Instead of complex techniques, here in its simplest case regression employs standard statistical techniques that is linear regression. Deflection are the independent variables and resilient modulus, or thickness are the dependent variables. Taking the deflection values as x variables the regression statistics of dependent variables (resilient modulus or thickness) as y can be found out from Microsoft Excel.

From the regression statistics we can find intercept of the corresponding deflection values. We can avoid the intercept values that has much higher p values. As these have insignificant influence on the regression. From the regression statistics Equation (4.2), (4.3), (4.4), (4.5) and (4.6) are developed which can be used respectively to find the modulus of HMA, base and subgrade layer; thickness of HMA and base layer.

Table 4.1, table 4.2, and table 4.3 represent regression statistics of resilient modulus of HMA, base and subgrade respectively and associated models. Figure 4.22, figure 4.23, and figure 4.24 represent predicted versus actual resilient modulus of HMA, base and subgrade respectively along with MAE (Mean Absolute Error) and RMSE (Root Mean Square Error) values for necessary justification.

Table 4.4 and table 4.5 represent regression statistics of thickness of HMA and base respectively. Figure 4.25 and figure 4.26 represent predicted versus actual thickness of HMA and base respectively along with MAE and RMSE values.

Table 4.1: Regression statistics of resilient modulus of HMA by MLRM

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.935425036							
R Square	0.875019998							
Adjusted R Square	0.874148045							
Standard Error	346.7832677							
Observations	1300							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	9	1086134056	120681561.8	1003.516812	0			
Residual	1290	155133638.9	120258.6348					
Total	1299	1241267695						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4049.509547	66.68746667	60.72369741	0	3918.681765	4180.33733	3918.681765	4180.33733
D0 (micro m)	-216.8121733	15.29277907	-14.1774214	1.64812E-42	-246.8136184	-186.8107282	-246.8136184	-186.8107282
D200 (micro m)	1827.780783	160.5955249	11.38126846	1.14716E-28	1512.723735	2142.83783	1512.723735	2142.83783
D300 (micro m)	-3929.070348	408.6070206	-9.615768085	3.45287E-21	-4730.677502	-3127.463194	-4730.677502	-3127.463194
D450 (micro m)	4516.765665	639.7011674	7.060743196	2.69904E-12	3261.796939	5771.734391	3261.796939	5771.734391
D600 (micro m)	-3031.950972	641.6594772	-4.72517134	2.55107E-06	-4290.761519	-1773.140425	-4290.761519	-1773.140425
D750 (micro m)	2530.205792	751.3340032	3.367617838	0.000780552	1056.235249	4004.176334	1056.235249	4004.176334
D900 (micro m)	-3210.077279	1020.338845	-3.146089452	0.001692529	-5211.782773	-1208.371786	-5211.782773	-1208.371786
D1200 (micro m)	2262.109767	956.4876456	2.365017235	0.018176545	385.6678541	4138.551679	385.6678541	4138.551679
D1500 (micro m)	-758.8149134	464.9593457	-1.632002713	0.10292298	-1670.974321	153.3444939	-1670.974321	153.3444939

$$\begin{aligned}
 \text{Equation (MR HMA)} = & 4049.51 - 216.81 \cdot D_0 + 1827.78 \cdot D_{200} - 3929.07 \cdot D_{300} \\
 & + 4516.77 \cdot D_{450} - 3031.95 \cdot D_{600} + 2530.21 \cdot D_{750} - 3210.08 \cdot D_{900} + \\
 & 2262.11 \cdot D_{1200} - 758.81 \cdot D_{1500}
 \end{aligned}
 \tag{4.2}$$

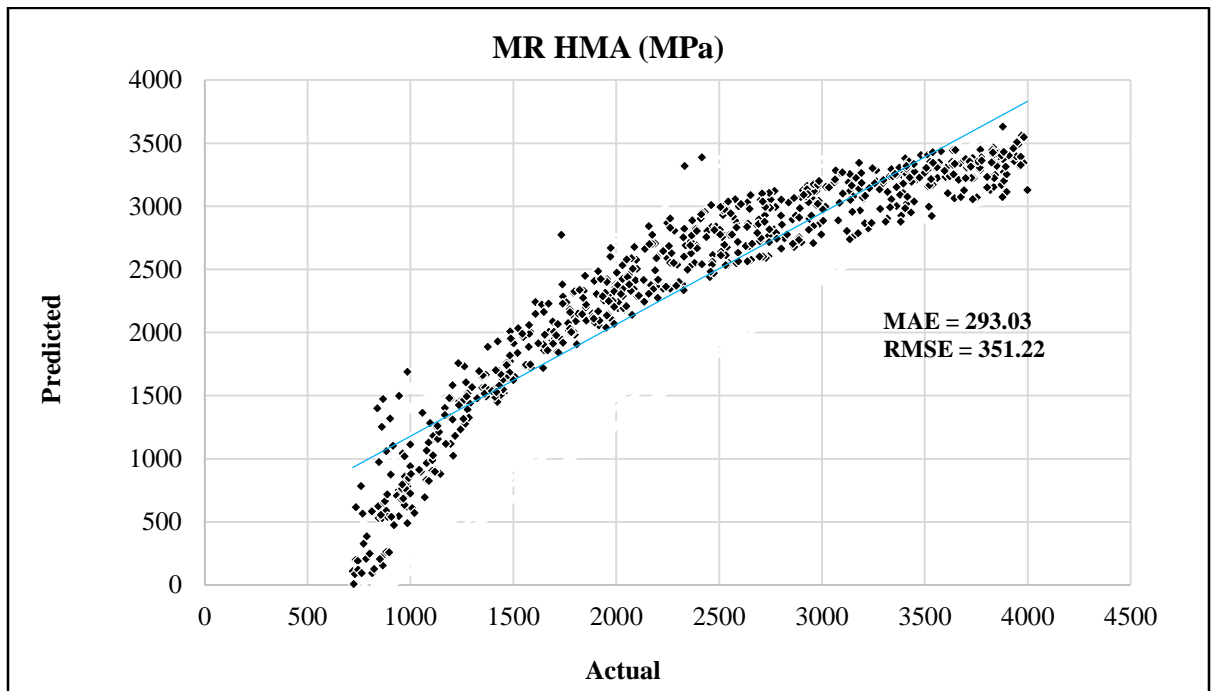


Figure 4.22: Predicted versus actual HMA resilient modulus by MLRM

Table 4.2: Regression statistics of resilient modulus of base by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.990476412							
R Square	0.981043523							
Adjusted R Square	0.980911269							
Standard Error	6.280097013							
Observations	1300							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	9	2633013.381	292557.0423	7417.84666	0			
Residual	1290	50877.10785	39.43961849					
Total	1299	2683890.488						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	598.9646054	1.207681566	495.9623646	0	596.5953701	601.3338407	596.5953701	601.3338407
D0 (micro m)	-0.633545322	0.276945704	-2.287615633	0.022321158	-1.176858692	-0.090231952	-1.176858692	-0.090231952
D200 (micro m)	6.187421403	2.908316433	2.127492501	0.033568421	0.481872695	11.89297011	0.481872695	11.89297011
D300 (micro m)	-12.56205052	7.399698799	-1.697643494	0.08981626	-27.07881405	1.954713003	-27.07881405	1.954713003
D450 (micro m)	12.22719856	11.58471519	1.055459574	0.291412817	-10.4997496	34.95414672	-10.4997496	34.95414672
D600 (micro m)	-4.986259311	11.62017935	-0.429103473	0.667919576	-27.78278121	17.81026259	-27.78278121	17.81026259
D750 (micro m)	9.06615399	13.60633822	0.666318435	0.505326726	-17.62682362	35.7591316	-17.62682362	35.7591316
D900 (micro m)	-31.27243933	18.47790113	-1.692423782	0.09080668	-67.52247172	4.97759307	-67.52247172	4.97759307
D1200 (micro m)	37.64173232	17.32158315	2.173111545	0.029953399	3.660169927	71.62329471	3.660169927	71.62329471
D1500 (micro m)	-18.15916465	8.420215362	-2.156615226	0.031219966	-34.67798232	-1.640346989	-34.67798232	-1.640346989

$$\text{Equation (MR Base)} = 598.96 - 0.63 \cdot D_0 + 6.18 \cdot D_{200} - 12.56 \cdot D_{300} + 12.23 \cdot D_{450} - 4.68 \cdot D_{600} + 9.07 \cdot D_{750} - 31.27 \cdot D_{900} + 37.64 \cdot D_{1200} - 18.16 \cdot D_{1500} \quad (4.3)$$

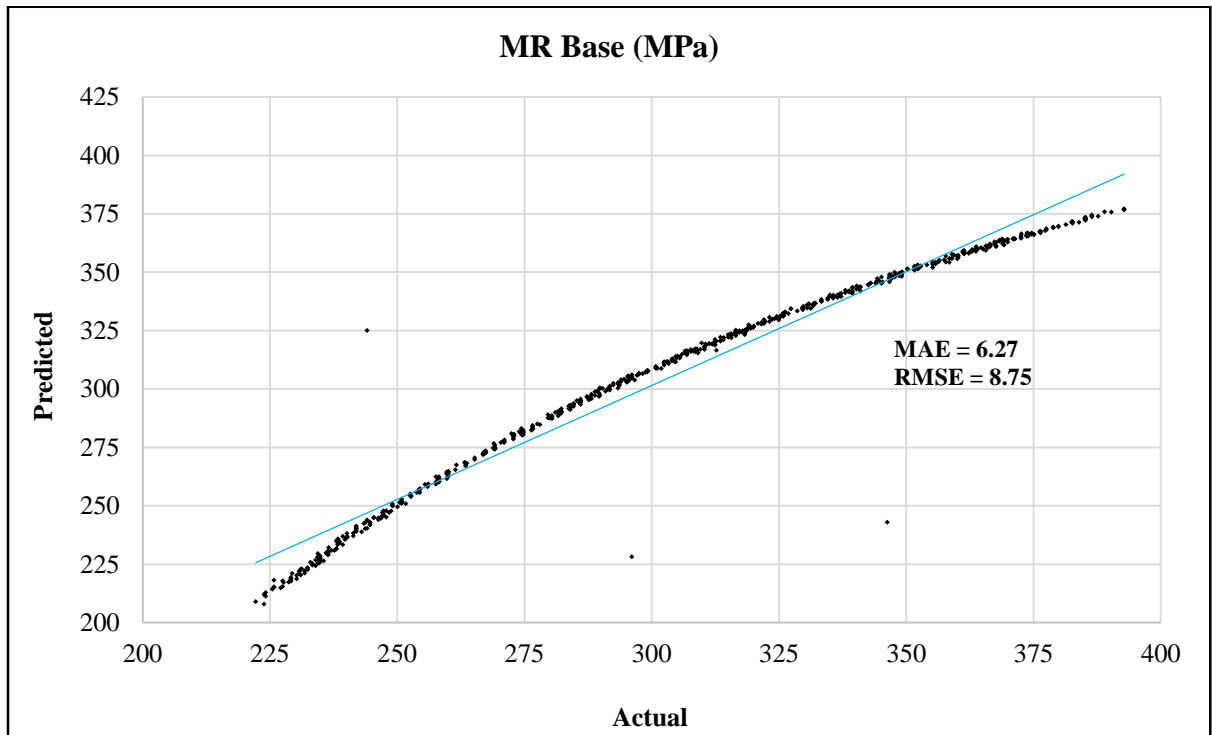


Figure 4.23: Predicted versus actual base resilient modulus by MLRM

Table 4.3: Regression statistics of resilient modulus of subgrade by MLRM

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.991400945							
R Square	0.982875834							
Adjusted R Square	0.982756363							
Standard Error	1.596664974							
Observations	1300							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	9	188758.5096	20973.16773	8226.904076	0			
Residual	1290	3288.64736	2.549339039					
Total	1299	192047.1569						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	162.6165449	0.307043482	529.6205731	0	162.0141856	163.2189043	162.0141856	163.2189043
D0 (micro m)	-0.007833993	0.070411254	-0.11126052	0.911427069	-0.145967118	0.130299133	-0.145967118	0.130299133
D200 (micro m)	0.18141304	0.739416441	0.245346235	0.80622738	-1.269177574	1.632003653	-1.269177574	1.632003653
D300 (micro m)	-0.749683708	1.881314869	-0.398489227	0.690335543	-4.44045597	2.941088554	-4.44045597	2.941088554
D450 (micro m)	1.441492419	2.945322173	0.489417569	0.624629307	-4.336654321	7.21963916	-4.336654321	7.21963916
D600 (micro m)	-0.173332784	2.954338654	-0.058670587	0.953223574	-5.969168098	5.622502531	-5.969168098	5.622502531
D750 (micro m)	-1.87083586	3.459303831	-0.54081282	0.588729973	-8.657314208	4.915642488	-8.657314208	4.915642488
D900 (micro m)	-2.609121877	4.697860156	-0.555385173	0.578727528	-11.82540578	6.607162029	-11.82540578	6.607162029
D1200 (micro m)	11.03875484	4.403875457	2.506600142	0.012312081	2.399211487	19.6782982	2.399211487	19.6782982
D1500 (micro m)	-8.549776537	2.14077313	-3.993779825	6.86994E-05	-12.74955522	-4.349997852	-12.74955522	-4.349997852

$$\text{Equation (MR Subgrade)} = 162.62 - 0.0078 * D_0 + 0.18 * D_{200} - 0.75 * D_{300} + 1.44 * D_{450} - 0.17 * D_{600} - 1.87 * D_{750} - 2.61 * D_{900} + 11.04 * D_{1200} - 8.55 * D_{1500} \quad (4.4)$$

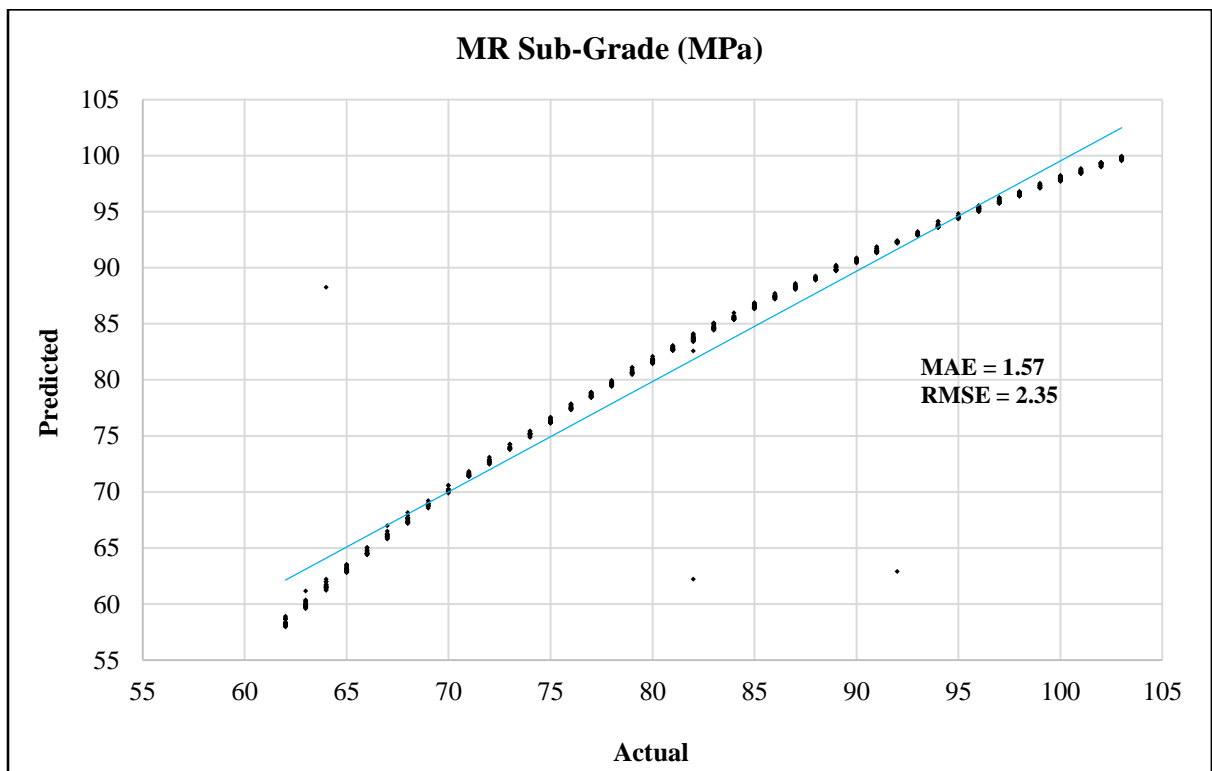


Figure 4.24: Predicted versus actual subgrade resilient modulus by MLRM

Table 4.4: Regression statistics of thickness of HMA by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.951505683							
R Square	0.905363065							
Adjusted R Square	0.904702808							
Standard Error	0.713273018							
Observations	1300							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	9	6278.60859	697.6231767	1371.226854	0			
Residual	1290	656.2983328	0.508758398					
Total	1299	6934.906923						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	18.00858575	0.137164549	131.2918378	0	17.7394957	18.2776758	17.7394957	18.2776758
D0 (micro m)	0.640307018	0.031454593	20.35655049	4.1794E-80	0.57859925	0.702014786	0.57859925	0.702014786
D200 (micro m)	-5.25316101	0.330317133	-15.90338644	3.86213E-52	-5.901178697	-4.605143322	-5.901178697	-4.605143322
D300 (micro m)	10.09628749	0.840433751	12.01318661	1.36957E-31	8.447520642	11.74505433	8.447520642	11.74505433
D450 (micro m)	-10.16013795	1.315754318	-7.721911156	2.28693E-14	-12.74139089	-7.578885006	-12.74139089	-7.578885006
D600 (micro m)	7.168951219	1.319782222	5.431919828	6.65691E-08	4.579796317	9.758106121	4.579796317	9.758106121
D750 (micro m)	-10.53691187	1.545363694	-6.818402626	1.41038E-11	-13.56861355	-7.505210185	-13.56861355	-7.505210185
D900 (micro m)	14.82336111	2.098659984	7.063250464	2.65255E-12	10.70620019	18.94052203	10.70620019	18.94052203
D1200 (micro m)	-10.21063975	1.967329144	-5.190102419	2.43919E-07	-14.07015522	-6.351124283	-14.07015522	-6.351124283
D1500 (micro m)	3.53346622	0.956340707	3.694777596	0.000229292	1.657312571	5.409619868	1.657312571	5.409619868

$$\text{Equation (H HMA)} = 18.01 + 0.64 \cdot D_0 - 5.25 \cdot D_{200} + 10.09 \cdot D_{300} - 10.16 \cdot D_{450} + 7.17 \cdot D_{600} - 10.53 \cdot D_{750} + 14.52 \cdot D_{900} - 10.21 \cdot D_{1200} + 3.53 \cdot D_{1500} \quad (4.5)$$

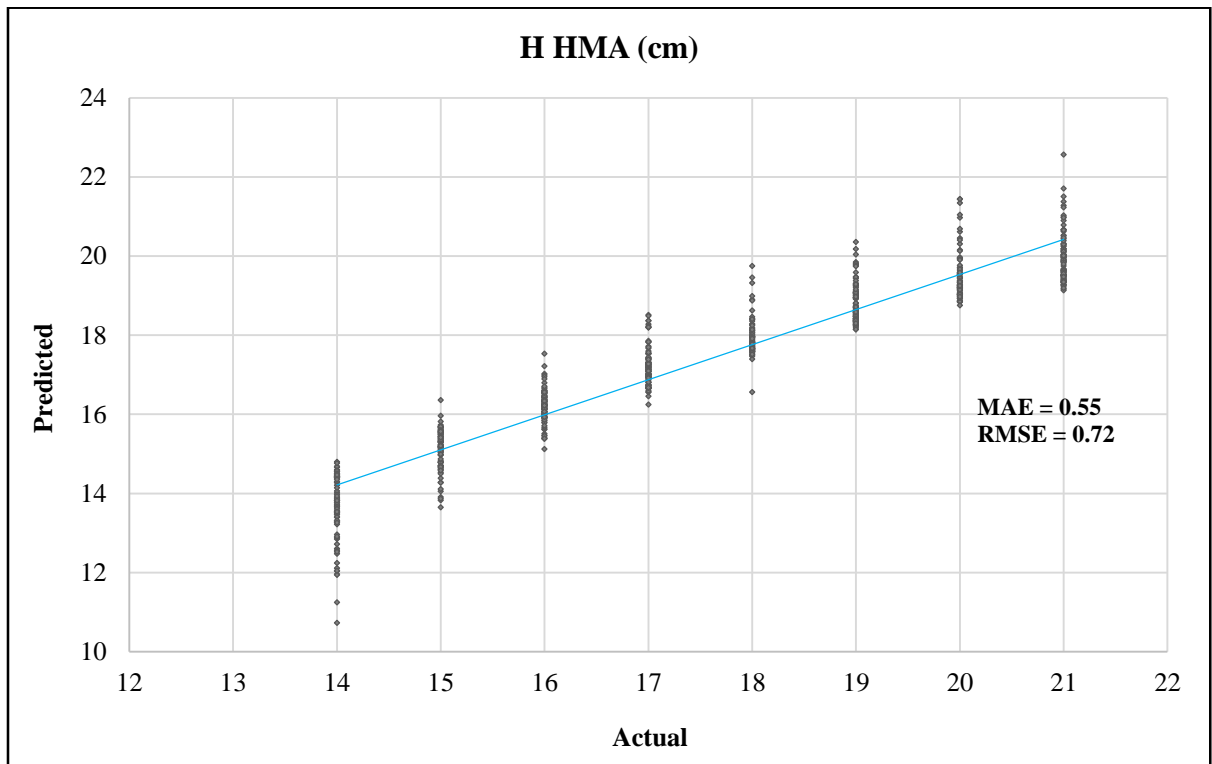


Figure 4.25: Predicted versus actual HMA thickness by MLRM

Table 4.5: Regression statistics of thickness of base by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.982039799							
R Square	0.964402167							
Adjusted R Square	0.96415381							
Standard Error	0.591364079							
Observations	1300							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	9	12221.77297	1357.974774	3883.129021	0			
Residual	1290	451.1278017	0.349711474					
Total	1299	12672.90077						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	64.63917116	0.113721093	568.4008946	0	64.41607259	64.86226973	64.41607259	64.86226973
D0 (micro m)	-0.21299545	0.026078537	-8.167461666	7.4337E-16	-0.264156445	-0.161834455	-0.264156445	-0.161834455
D200 (micro m)	1.865090811	0.273861035	6.810354782	1.48868E-11	1.327828958	2.402352664	1.327828958	2.402352664
D300 (micro m)	-2.707258126	0.696791157	-3.885322161	0.000107382	-4.07422626	-1.340289992	-4.07422626	-1.340289992
D450 (micro m)	0.436146933	1.090872389	0.399814806	0.689359115	-1.703931595	2.57622546	-1.703931595	2.57622546
D600 (micro m)	0.071295106	1.094211864	0.065156583	0.948059425	-2.07533482	2.217925031	-2.07533482	2.217925031
D750 (micro m)	6.151972591	1.281238117	4.801584116	1.7581E-06	3.638433693	8.665511489	3.638433693	8.665511489
D900 (micro m)	-6.673540986	1.739967865	-3.835439218	0.000131394	-10.08701804	-3.260063935	-10.08701804	-3.260063935
D1200 (micro m)	-7.490116136	1.631083413	-4.592111033	4.81655E-06	-10.68998316	-4.29024911	-10.68998316	-4.29024911
D1500 (micro m)	9.744276828	0.792887896	12.2896022	6.59111E-33	8.188785667	11.29976799	8.188785667	11.29976799

$$\text{Equation (H Base)} = 64.64 - 0.21 * D_0 + 1.87 * D_{200} - 2.71 * D_{300} + 0.44 * D_{450} + 0.07 * D_{600} + 6.15 * D_{750} - 6.67 * D_{900} - 7.49 * D_{1200} + 9.74 * D_{1500} \quad (4.6)$$

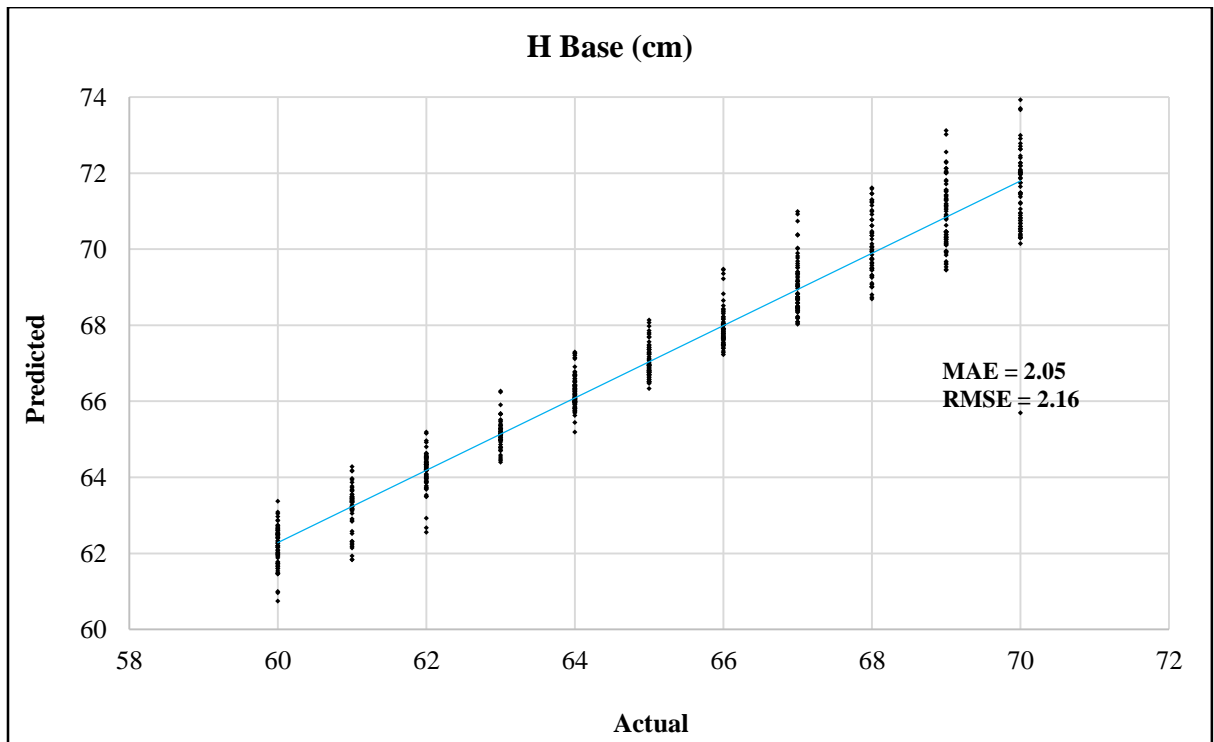


Figure 4.26: Predicted versus actual base thickness by MLRM

4.9 Resilient Modulus & Thickness of Pavement Layers from Deflection Basin

Parameters of Regression Model

Here, taking the deflection basin parameter values as x variables the regression statistics of dependent variables (resilient modulus or thickness) as y can be found out from Microsoft Excel.

From the regression statistics we can find intercept of the corresponding deflection basin parameter values. We can avoid the intercept values that has much higher p values. As these have insignificant influence on the regression. Again, from the regression statistics Equation (4.7), (4.8), (4.9), (4.10) and (4.11) are developed which can be used respectively to find the modulus of HMA, base and subgrade layer; thickness of HMA and base layer.

Table 4.6, table 4.7, and table 4.8 represent regression statistics of resilient modulus of HMA, base and subgrade respectively and associated models. Figure 4.27, figure 4.28, and figure 4.29 represent predicted versus actual resilient modulus HMA, base and subgrade respectively along with MAE and RMSE values for necessary justification.

Table 4.9 and table 4.10 represent regression statistics of thickness of HMA and base respectively. Figure 4.30 and figure 4.31 represent predicted versus actual thickness of HMA and base and respectively along with MAE and RMSE values.

Table 4.6: Regression statistics of resilient modulus of HMA from DBPs by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.899529903							
R Square	0.809154046							
Adjusted R Square	0.808711932							
Standard Error	427.3822295							
Observations	1299							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	1002884552	334294850.8	1830.19248	0			
Residual	1295	236538963.2	182655.5701					
Total	1298	1239423516						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3850.119353	77.97709133	49.37500601	5.4123E-300	3697.144087	4003.094619	3697.144087	4003.094619
62.65	-28.01783812	0.6781602	-41.31448308	1.1219E-238	-29.34825113	-26.68742511	-29.34825113	-26.68742511
48.6	36.07656216	3.840067755	9.394772296	2.49806E-20	28.54312669	43.60999763	28.54312669	43.60999763
32.23	-17.51222313	5.994047623	-2.921602268	0.003542752	-29.271331	-5.753115256	-29.271331	-5.753115256

$$\text{Equation (MR HMA)} = 3850.12 - 28.02 \cdot \text{BLI} + 36.08 \cdot \text{MLI} - 17.51 \cdot \text{LLI}$$

(4.7)

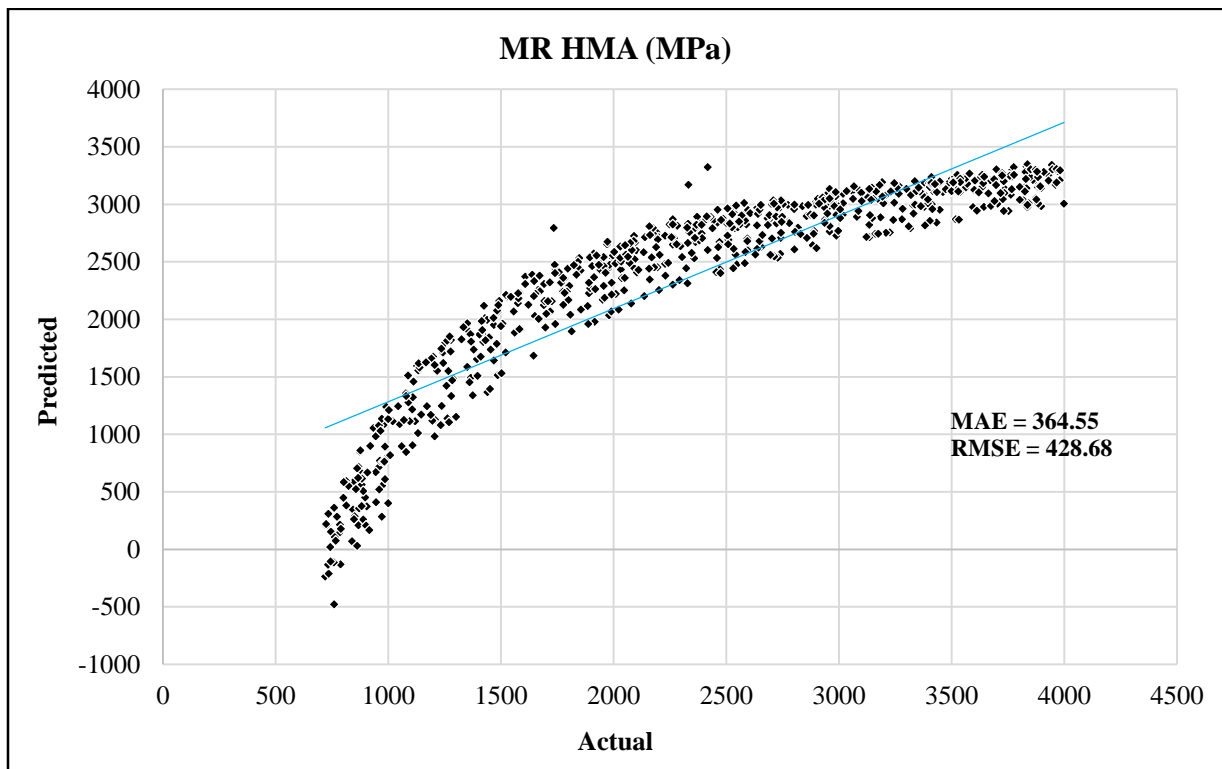


Figure 4.27: Predicted versus actual HMA resilient modulus from DBPs by MLRM

Table 4.7: Regression statistics of resilient modulus of base from DBPs by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.976810063							
R Square	0.954157898							
Adjusted R Square	0.954051701							
Standard Error	9.747089219							
Observations	1299							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	2560798.356	853599.4519	8984.713742	0			
Residual	1295	123032.444	95.00574825					
Total	1298	2683830.8						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	584.3459344	1.778383877	328.5825641	0	580.8571053	587.8347635	580.8571053	587.8347635
62.65	-0.237425315	0.015466455	-15.35098487	5.4605E-49	-0.267767368	-0.207083262	-0.267767368	-0.207083262
48.6	2.54695054	0.087578473	29.08192453	1.5812E-143	2.375139308	2.718761773	2.375139308	2.718761773
32.23	-11.9883534	0.136703197	-87.69621848	0	-12.2565374	-11.72016941	-12.2565374	-11.72016941

$$\text{Equation (MR Base)} = 584.35 - 0.23 \cdot \text{BLI} - 2.55 \cdot \text{MLI} - 11.99 \cdot \text{LLI} \quad (4.8)$$

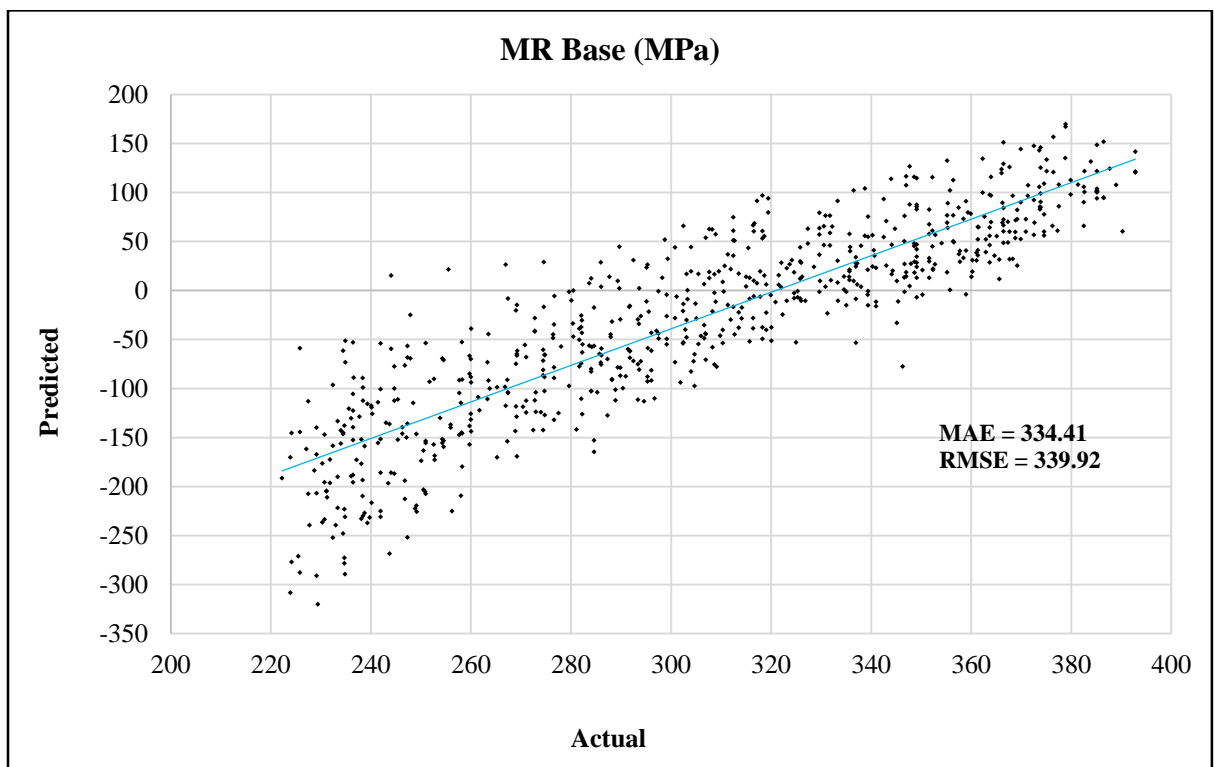


Figure 4.28: Predicted versus actual base resilient modulus from DBPs by MLRM

Table 4.8: Regression statistics of resilient modulus of subgrade from DBPs by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.94747279							
R Square	0.897704687							
Adjusted R Square	0.897467709							
Standard Error	3.894904818							
Observations	1299							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	172401.5729	57467.19096	3788.142181	0			
Residual	1295	19645.51718	15.17028354					
Total	1298	192047.0901						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	155.2341386	0.710636353	218.4438469	0	153.840014	156.6282633	153.840014	156.6282633
62.65	-0.056636966	0.006180345	-9.164046724	1.90255E-19	-0.068761551	-0.044512381	-0.068761551	-0.044512381
48.6	0.623701102	0.03499607	17.82203266	1.03278E-63	0.555045898	0.692356306	0.555045898	0.692356306
32.23	-3.059422643	0.054626148	-56.00656003	0	-3.166588086	-2.9522572	-3.166588086	-2.9522572

$$\text{Equation (MR Sub-Grade)} = 155.23 - 0.06 * \text{BLI} + 0.62 * \text{MLI} - 3.06 * \text{LLI} \quad (4.9)$$

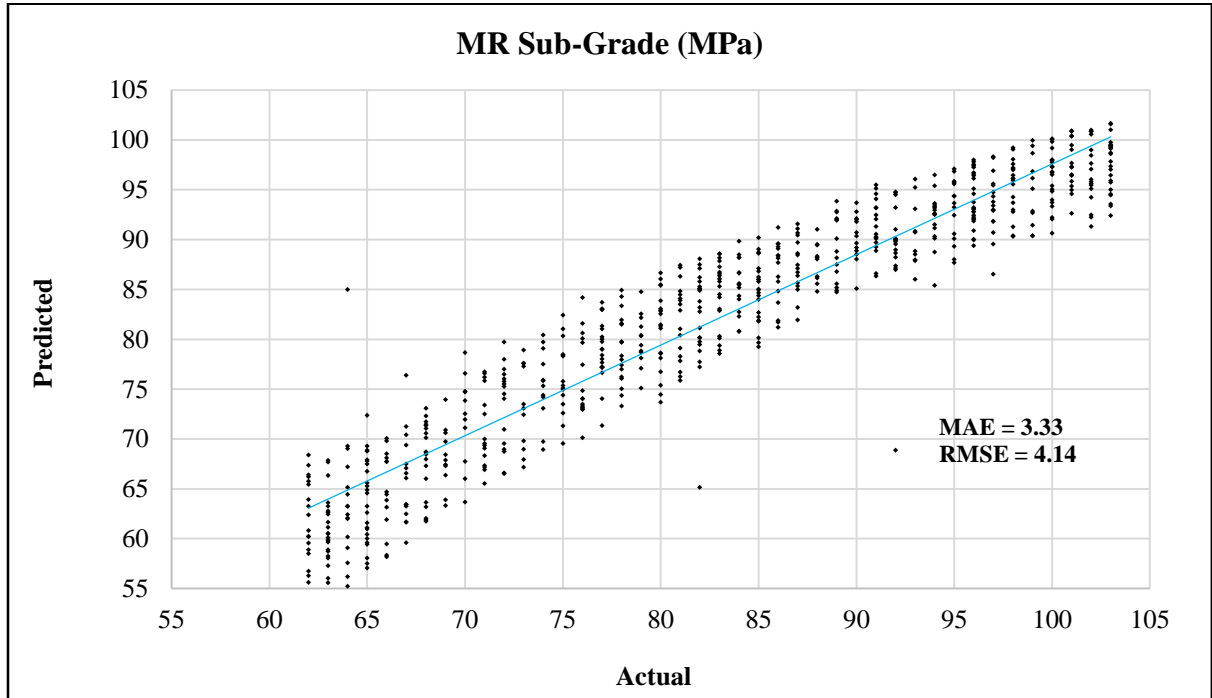


Figure 4.29: Predicted versus actual subgrade resilient modulus from DBPs by MLRM

Table 4.9: Regression statistics of thickness of HMA from DBPs by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.848782374							
R Square	0.720431518							
Adjusted R Square	0.71978387							
Standard Error	1.222495264							
Observations	1299							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	4987.336098	1662.445366	1112.379588	0			
Residual	1295	1935.370599	1.494494671					
Total	1298	6922.706697						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	19.17131087	0.223047704	85.95161732	0	18.73373644	19.60888531	18.73373644	19.60888531
62.65	0.072123772	0.001939827	37.18051559	1.7388E-206	0.068318224	0.07592932	0.068318224	0.07592932
48.6	-0.573811871	0.01098423	-52.23960879	0	-0.595360706	-0.552263036	-0.595360706	-0.552263036
32.23	0.790852007	0.01714553	46.12584197	1.4073E-275	0.757215948	0.824488065	0.757215948	0.824488065

$$\text{Equation (H HMA)} = 19.71 + 0.07 \cdot \text{BLI} - 0.57 \cdot \text{MLI} + 0.79 \cdot \text{LLI} \quad (4.10)$$

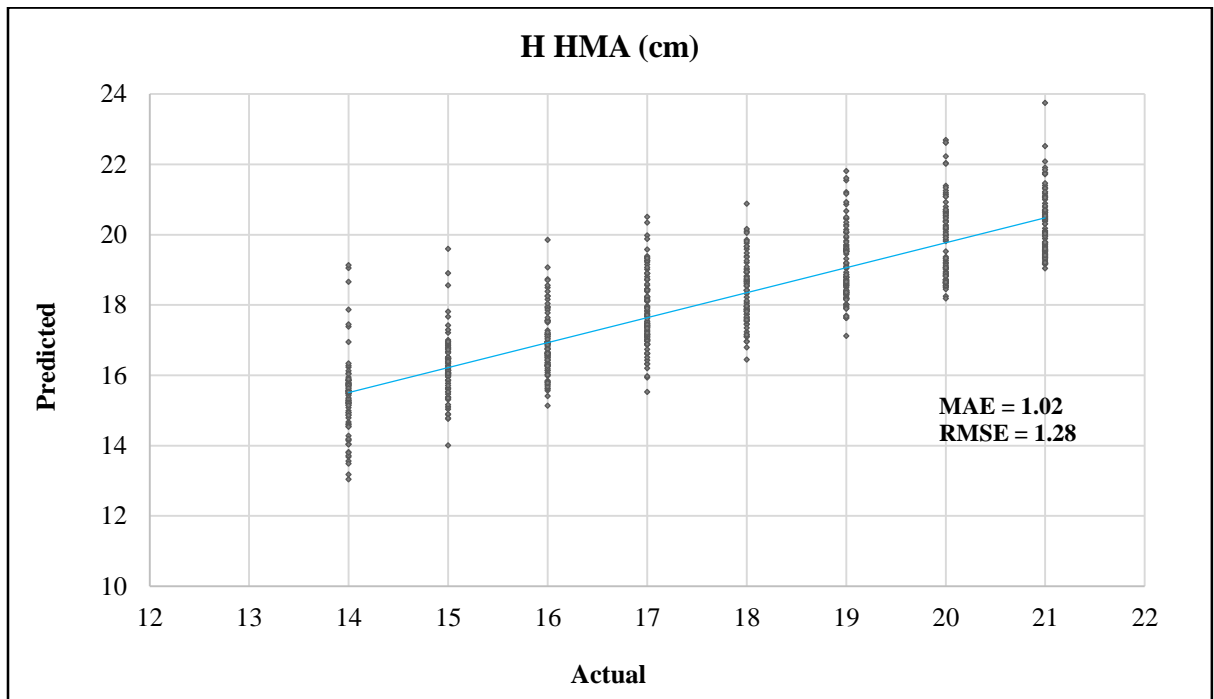


Figure 4.30: Predicted versus actual HMA thickness from DBPs by MLRM

Table 4.10: Regression statistics of thickness of base from DBPs by MLRM

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.306345297							
R Square	0.093847441							
Adjusted R Square	0.091748246							
Standard Error	2.975921597							
Observations	1299							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	1187.774106	395.9247021	44.70639265	1.72025E-27			
Residual	1295	11468.66161	8.856109354					
Total	1298	12656.43572						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	70.72193456	0.542965276	130.2513028	0	69.65674662	71.7871225	69.65674662	71.7871225
62.65	-0.013853063	0.004722123	-2.933651312	0.003408982	-0.023116913	-0.004589213	-0.023116913	-0.004589213
48.6	0.122289651	0.026738923	4.573469576	5.25643E-06	0.069833298	0.174746005	0.069833298	0.174746005
32.23	-0.345888237	0.041737383	-8.287252637	2.8656E-16	-0.427768532	-0.264007942	-0.427768532	-0.264007942

$$\text{Equation (H Base)} = 70.72 - 0.01 * \text{BLI} + 0.12 * \text{MLI} - 0.34 * \text{LLI} \quad (4.11)$$

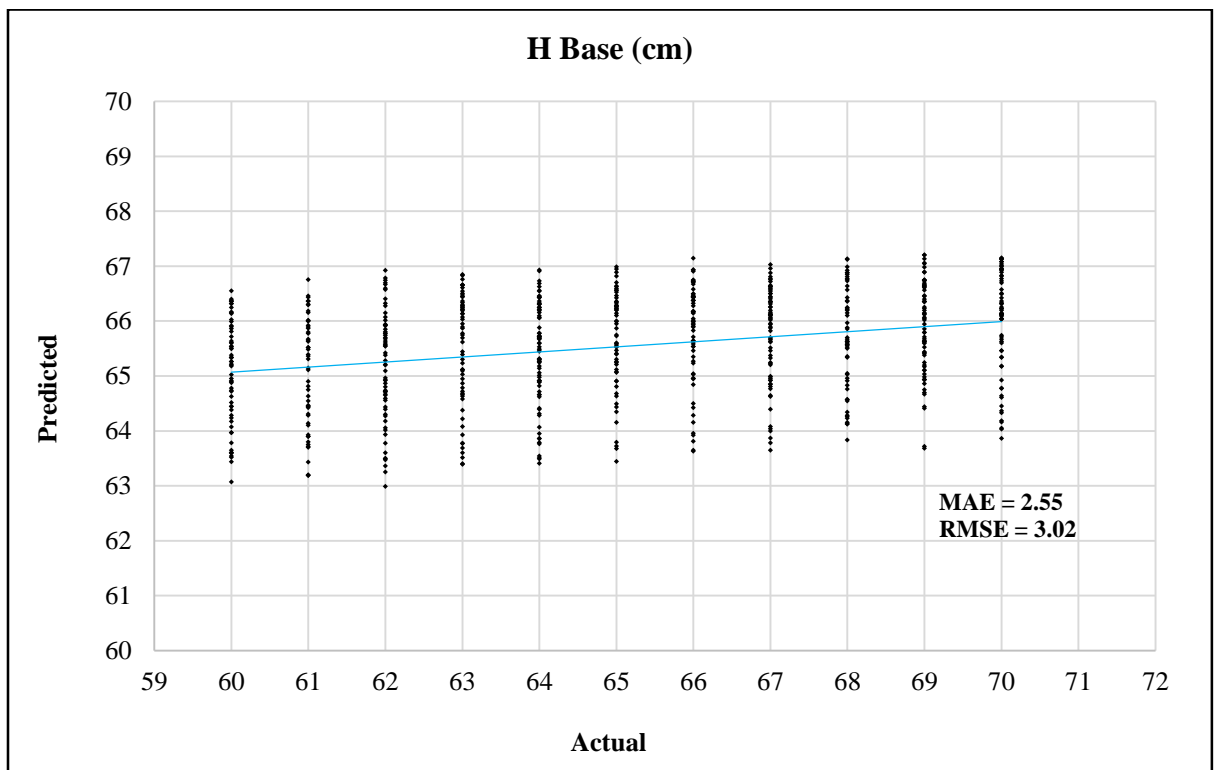


Figure 4.31: Predicted versus actual base thickness from DBPs by MLRM

4.10 Evaluation and Comparison of the Models

Thickness and modulus were predicted with reasonable accuracy by all three methods. RF, SVR and MLRM models establish good relationship between FWD deflection data, DBPs and layer properties. From the table 4.11, 4.12 and 4.13 the accuracy co-efficient MAE, RMSE and R^2 show how well the proposed formulation can estimate the experimented data. R^2 varies from 65% to 99% in RF, 87% to 99% in SVR and 87% to 98% in Regression. However, R^2 shows lower accuracy for Regression Model obtained from DBPs. SVR method predicts layer parameter with lowest MAE and RMSE values. The results indicate that the ability of the SVR classification produce more accurate results than Random Forest.

Table 4.11: Comparison of MAE of models

Models		RF	SVR	Regression (Deflection Based)	Regression (DBP Based)
HMA	Thickness	0.39	0.12	0.55	1.02
	Modulus	55.86	250.66	293.03	364.55
Base	Thickness	4.62	4.58	2.05	2.55
	Modulus	0.15	0.05	6.27	334.41
Sub-Grade	Modulus	0.15	0.49	1.57	3.33

Table 4.12: Comparison of RMSE of models

Models		RF	SVR	Regression (Deflection Based)	Regression (DBP Based)
HMA	Thickness	1.34	0.32	0.72	1.28
	Modulus	213.63	345.83	351.22	428.68
Base	Thickness	15.92	9.90	2.16	3.02
	Modulus	0.59	0.29	8.75	339.92
Sub-Grade	Modulus	0.59	0.29	2.35	4.14

Table 4.13: Comparison of R² of models

Models		RF	SVR	Regression (Deflection Based)	Regression (DBP Based)
HMA	Thickness	0.65	0.98	0.91	0.72
	Modulus	0.95	0.87	0.87	0.81
Base	Thickness	0.74	0.89	0.96	0.09
	Modulus	0.99	0.99	0.98	0.95
Sub-Grade	Modulus	0.99	0.99	0.98	0.90

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study aims at predicting pavement layer thickness and modulus through developing machine learning models. Due to manifold limitations of laboratory testing of core samples, it is easier to carry-out structural evaluation of road pavement using FWD deflection basin parameters. The basic aim was to estimate the in-situ layer properties from deflection profile through back calculation. Commercially available back-calculation software (WESLEA, BISAR, ELSYM) need seed modulus that is not available in our country. But the modulus of pavement layer is highly affected by the seed modulus. The thickness as seed input is not also available for these programs.

Due to the scarcity of FWD data of RHD, GAMES software was adopted to conduct FWD test on flexible pavement to generate synthetic data base. Validation of the software's capability was done beforehand. This FWD testing was based on a mechanistic approach and the software had the basis of multilayer elastic theory. With the help of machine learning techniques, pavement performance prediction model embracing machine learning tools were developed. This chapter presents the conclusions of the study based on test results and provide some suggestions for future work in this field.

5.2 Conclusions

In our study the seed value/input are selected from the maximum minimum range of pavement properties of national highways. Prediction models for pavement layer property are developed embracing Machine Learning technique like RF, SVR and multilinear regression using the FWD data base. A comparison among the models is done through accuracy coefficients like MAE, RMSE and R^2 . The major findings and conclusions of the present study are summarized below:

- (i.) In the process of developing models, good correlations between deflections at selected position with pavement structure are observed. Good correlations between DBPs and pavement structure are also observed. In most of the cases, it supports the existing practices. We know, the nature of stress distribution in flexible pavement, especially in upper layers affect the surface deflection at locations relatively close to the point of load application. Figure displays a good correlation between the modulus of layers and D_0 . In general, as modulus decreases D_0 increases. It confirms the existing practices. It is a common practice to use the surface deflection recorded by

the D_{1500} sensor as an indicator of the structural condition of subgrade layer. From investigation a good correlation between subgrade modulus and the D_{1500} is displayed. Here, deflection at D_{1500} increases as modulus of base and subgrade decrease.

Radius of Curvature (RoC) and BLI have been found to correlate well with surface and base layers. Due to the closeness of the geophone at 200 mm to the edge of the loading plate and associated surface disturbances observed, RoC is used with less confidence, especially if the pavement structural problem is just below these layers. BLI is used with more confidence to describe zone 1 of deflection bowl. However, from the Figure it is seen that the HMA modulus has good correlation with RoC (R^2 is 0.95).

Changing the surface layer modulus primarily affects the central deflection values. BLI value is significantly influenced by the Base and Subgrade conditions (besides being governed by the HMA layer modulus). Therefore, the BLI value is not solely dependent on the surface layer modulus and can be affected by structural condition of the underlying layers. Figure (modulus vs basin parameters) shows the change in layer modulus and its effect on BLI. It is observed that changing the base and subgrade layer modulus do not have any significant effect on the BLI values. The most successful accuracy coefficient (R^2 is 0.92) value is associated with modulus of HMA line. This goes with the theory of Horak that describes that BLI has more correlation with surface and base layer (Zone 1).

Similar results are found for change in layer modulus and its effect on MLI. Here, good correlation in base modulus vs MLI (R^2 is 0.86) and subgrade modulus vs MLI (R^2 is 0.86) is visible. Existing practice also supports these results.

Varying the base and subgrade layer modulus, on the other hand, result in significant variations in the LLI value. It is observed from the Figure that change in MR of HMA has no correlation with LLI. Neglecting other influential factors, the LLI value can be used as a reasonably accurate indicator of subgrade quality (R^2 is 0.98).

- (ii.) From models, it is found that basin parameters obtained from the synthetic data conform to the existing pavement rating. Generally, subgrade layer modulus values less than 69 MPa are considered as bad subgrade and above 137 MPa are considered as good. It is observed that, for subgrade modulus values lower than 62 MPa, the

value of LLI increases from 50 μm to 55 μm (below 65 μm , which is upper limit of Warning Zone).

Similar trend is observed from the MLI vs base modulus parameter. MLI values lower than 100 μm correspond to base modulus values higher than 220 MPa while MLI values higher than 100 μm correspond base modulus values lower than 220 MPa. Upper threshold value for MLI is 115 (South Africa suggested value) for sound road condition.

Similarly, good correlation among BLI, HMA modulus and road condition is observed. South Africa suggested upper limit of BLI for sound road condition is 250 μm . Here, the upper limit of BLI for the sound road condition is 200 μm . For all the above-mentioned cases, the accuracy coefficient R^2 has good values.

But the definition of good and bad surface layer (HMA) cannot be defined based on its modulus value alone. Because depending on the environmental temperature's variation on a particular region, a high modulus HMA layer can cause significant surface cracking and a low module can cause considerable rutting. Hence, BLI thresholds as a performance indicator of HMA layer always may not be indicative of the true condition of HMA layer.

(iii.) Thickness and modulus were predicted with reasonable accuracy by all three methods. RF, SVR and MLRM models establish good relationship between FWD deflection data, DBPs and layer properties.

For RF models: Models display actual versus predicted modulus of HMA, base and subgrade. The accuracy coefficient MAE, RMSE and R^2 values are 55.86, 213.63 and 0.95 for HMA, 0.15, 0.59 and 0.99 for base and 0.15, 0.59 and 0.99 for subgrade modulus respectively. These models also give feature importance that means the effective role-playing modulus on the associated deflections. From Figure it is observed that D_0 has the closest relation with HMA modulus and D_{1500} has the closest relation with base and subgrade modulus.

From models we also get the actual versus predicted thickness of HMA and base layer. The accuracy coefficient MAE, RMSE and R^2 values are 0.39, 1.34 and 0.65 for HMA and 4.62, 15.92 and 0.74 for base thickness respectively.

These models in addition explain feature importance that means the effective role-playing layer thickness on the associated deflections. It is observed that D_0 , D_{200} , D_{300}

and D_{1500} has close relation with HMA thickness. Similarly, model explains the close relation of D_{1500} , D_{750} and D_{600} with base thickness.

For SVR models: From models actual versus predicted modulus of HMA, base and subgrade are observed. The accuracy coefficient MAE, RMSE and R^2 values are 250.66, 345.83 and 0.87 for HMA, 0.05, 0.29 and 0.99 for base and 0.49, 0.29 and 0.99 for subgrade modulus respectively.

Models also describe the actual versus predicted thickness of HMA and base layer. The accuracy coefficient MAE, RMSE and R^2 values are 0.12, 0.32 and 0.98 for HMA, 4.58, 9.90 and 0.89 for base thickness respectively.

For MLRM models (Deflection versus Layer Properties): Regression statistics of resilient modulus of HMA, base and subgrade are presented in tabular forms with associated equation models. Figures represent predicted versus actual resilient modulus of HMA, base and subgrade along with MAE and RMSE values for necessary justification. The accuracy coefficient MAE, RMSE and R^2 values are 293.03, 351.22 and 0.87 for HMA, 6.27, 8.75 and 0.98 for base and 1.57, 2.35 and 0.98 for subgrade modulus respectively.

Regression statistics of thickness of HMA and base are also presented in tabular forms with associated equation models. Figures represent predicted versus actual thickness of HMA and base respectively along with MAE and RMSE and R^2 values. The accuracy coefficient MAE, RMSE and R^2 values are 0.55, 0.72 and 0.91 for HMA, 2.05, 2.16 and 0.96 for base thickness respectively.

For MLRM models (DBPs versus Layer Properties): Regression statistics of resilient modulus of HMA, base and subgrade are presented in tabular forms with associated equation models. Figures represent predicted vs. actual resilient modulus of HMA, base and subgrade along with MAE and RMSE and R^2 values for necessary justification. The accuracy coefficient MAE, RMSE and R^2 values are 364.55, 428.68 and 0.81 for HMA, 334.41, 339.92 and 0.95 for base and 3.33, 4.14 and 0.90 for subgrade modulus respectively.

Regression statistics of thickness of HMA and Base are also presented in tabular forms with associated equation models. Figures represent predicted versus actual thickness of HMA and base respectively along with MAE and RMSE and R^2 values.

The accuracy coefficient MAE, RMSE and R^2 values are 1.02, 1.28 and 0.72 for HMA, 2.55, 3.02 and 0.09 for base thickness respectively.

(iv.) From comparison of the three models, the accuracy co-efficient MAE, RMSE and R^2 show how well the proposed formulation can estimate the experimented data. R^2 varies from 65% to 99% in RF, 87% to 99% in SVR and 87% to 98% in Regression. However, R^2 shows lower accuracy for MLRM model obtained from DBPs. SVR method predicts layer parameter with lowest MAE and RMSE values. This gives a choice for the better selection of model for finding layer properties and correlation among DBPs and pavement performance.

5.3 Recommendations for Future Studies

Following recommendations may be put forward for future studies.

- i. Accuracy of the models will be more reliable if synthetic data are replaced by real field data basing on the availability of FWD.
- ii. Network -level pavement condition assessment can be done using DBPs as structural quality indicators of individual pavement layer.

Thus, it is suggested for future researchers to work in the abovementioned areas to address the existing research gap in this field. It is expected that, the present study will be a useful guideline for the civil engineers who are working on PMS. Moreover, the large data set presented in the current study will help the researchers working in this field.

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Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1	83	61	297.513	21	3707	269.84	228.77	207.19	180.41	158.59	140.88	126.36	104.06	87.69	62.65	Sound	48.60	Sound	32.23	Sound	
2	102	64	373.604	17	2903	270.55	214.08	185.50	154.16	132.10	116.01	103.64	85.29	71.87	85.05	Sound	53.4	Sound	28.46	Sound	
3	86	67	321.560	15	3749	303.59	247.37	215.54	179.27	153.52	134.80	120.51	99.50	84.14	88.05	Sound	62.02	Sound	33.01	Sound	
4	86	61	308.267	21	1491	339.21	255.70	220.53	184.26	158.63	139.60	124.76	102.49	86.15	118.68	Sound	61.9	Sound	33.87	Sound	
5	66	68	248.429	16	3353	366.68	305.56	270.24	228.17	196.85	173.35	155.14	128.27	108.72	96.44	Sound	73.39	Sound	41.71	Sound	
6	100	65	368.843	19	1515	309.43	225.79	191.10	157.22	134.71	118.64	106.28	87.74	73.98	118.33	Sound	56.39	Sound	28.43	Sound	
7	80	60	284.635	16	3993	319.83	267.63	237.06	200.12	172.16	150.86	134.19	109.49	91.70	82.77	Sound	64.9	Sound	37.97	Sound	
8	90	70	343.215	16	2250	314.20	241.49	205.94	169.11	144.65	127.45	114.43	95.07	80.69	108.26	Sound	61.29	Sound	30.22	Sound	
9	94	60	334.446	14	753	451.54	288.91	230.14	183.14	155.78	136.61	121.55	98.45	81.44	221.4	Warning	74.36	Sound	34.23	Sound	
10	75	62	270.812	14	3677	363.75	298.13	259.44	214.89	183.17	160.07	142.41	116.48	97.70	104.31	Sound	76.27	Sound	40.76	Sound	
11	85	69	322.056	21	2960	268.60	220.52	196.96	169.46	148.21	131.65	118.45	98.54	83.91	71.64	Sound	48.75	Sound	29.76	Sound	
12	75	66	278.539	14	3034	369.32	295.94	254.76	209.41	178.42	156.39	139.72	115.16	97.15	114.56	Sound	76.34	Sound	38.7	Sound	
13	67	67	250.518	21	3915	301.16	260.59	238.39	209.98	186.22	166.57	150.27	124.98	106.23	62.77	Sound	52.17	Sound	35.95	Sound	
14	77	70	293.640	20	2331	314.00	252.00	223.00	189.00	164.00	146.00	131.00	109.00	92.80	91	Sound	59	Sound	33	Sound	
15	76	70	289.826	15	1734	391.76	295.10	248.55	202.14	172.48	151.99	136.52	113.38	96.08	143.21	Sound	76.07	Sound	35.96	Sound	
16	71	63	258.221	19	1240	423.01	316.61	270.44	223.57	191.60	168.47	150.63	123.95	104.28	152.57	Sound	78.84	Sound	40.97	Sound	
17	97	69	367.522	19	3108	253.33	204.50	180.14	152.48	132.09	116.76	104.81	87.04	74.00	73.19	Sound	48.05	Sound	27.28	Sound	
18	73	67	272.952	16	3206	344.99	283.64	249.17	209.08	179.84	158.16	141.46	116.83	98.88	95.82	Sound	69.33	Sound	38.38	Sound	
19	78	68	293.598	18	1206	396.03	287.71	242.24	198.37	169.89	149.84	134.53	111.53	94.36	153.79	Sound	72.35	Sound	35.36	Sound	
20	75	66	278.539	14	999	476.84	330.63	269.34	215.51	183.62	161.77	144.94	119.23	99.98	207.5	Warning	85.72	Sound	38.68	Sound	
21	90	62	324.974	21	3038	266.42	219.25	195.93	168.46	147.01	130.12	116.55	96.00	80.97	70.49	Sound	48.92	Sound	30.46	Sound	
22	87	67	325.299	16	3817	289.54	238.02	209.09	175.44	150.90	132.71	118.70	98.03	82.97	80.45	Sound	58.19	Sound	32.2	Sound	
23	70	63	254.584	15	1987	422.19	329.30	281.21	230.20	195.91	171.58	153.06	125.59	105.45	140.98	Sound	85.3	Sound	42.85	Sound	
24	99	65	365.154	21	1380	308.42	222.96	189.40	156.93	134.97	119.06	106.76	88.28	74.56	119.02	Sound	54.43	Sound	28.21	Sound	
25	75	63	272.769	18	2345	351.38	283.02	248.07	208.43	179.46	157.78	140.91	115.84	97.57	103.31	Sound	68.61	Sound	38.55	Sound	
26	82	69	310.689	14	1689	385.65	284.13	236.20	190.38	162.16	142.90	128.30	106.29	89.79	149.45	Sound	74.04	Sound	33.86	Sound	
27	80	64	293.023	14	2429	373.75	290.68	246.84	200.92	170.69	149.52	133.48	109.66	92.14	126.91	Sound	76.15	Sound	37.21	Sound	
28	75	61	268.837	14	3827	363.09	298.96	260.75	216.33	184.43	161.05	143.14	116.84	97.86	102.34	Sound	76.32	Sound	41.29	Sound	
29	69	65	254.501	14	1134	495.59	355.36	292.59	234.74	199.64	175.55	157.12	129.14	108.29	203	Warning	92.95	Sound	42.52	Sound	
30	72	62	259.979	19	1983	370.30	295.46	258.83	217.81	187.76	165.16	147.51	121.18	101.97	111.47	Sound	71.07	Sound	40.25	Sound	
31	95	63	345.507	17	1208	361.97	255.05	211.57	171.41	146.12	128.41	114.79	94.21	78.92	150.4	Sound	65.45	Sound	31.33	Sound	
32	70	60	249.055	18	3437	343.27	290.36	260.31	223.13	193.84	170.78	152.34	124.61	104.55	82.96	Sound	66.47	Sound	41.5	Sound	
33	62	70	236.437	17	2817	382.98	317.41	280.98	237.96	205.89	181.75	163.00	135.28	115.05	102	Sound	75.09	Sound	42.89	Sound	
34	84	61	301.098	17	1060	415.34	293.13	243.25	196.97	167.68	147.09	131.24	107.29	89.60	172.09	Sound	75.57	Sound	36.44	Sound	
35	100	61	358.450	21	3922	231.75	193.96	174.63	151.17	132.40	117.37	105.17	86.55	72.91	57.12	Sound	42.23	Sound	27.23	Sound	
36	76	70	289.826	18	1643	366.07	279.26	239.44	198.24	170.28	150.27	135.00	112.28	95.42	126.63	Sound	69.16	Sound	35.28	Sound	
37	99	66	367.671	21	1740	285.16	214.08	184.42	154.16	133.00	117.44	105.37	87.28	73.90	100.74	Sound	51.42	Sound	27.63	Sound	
38	68	60	241.940	21	3933	309.96	269.09	246.45	217.13	192.32	171.59	154.24	127.15	107.08	63.51	Sound	54.13	Sound	38.08	Sound	
39	68	61	243.746	16	2213	412.97	330.57	286.67	237.68	203.02	177.68	158.21	129.40	108.47	126.3	Sound	83.65	Sound	44.81	Sound	
40	78	68	293.598	18	1797	354.73	273.61	235.59	195.53	167.93	148.02	132.76	110.07	93.30	119.14	Sound	67.66	Sound	35.17	Sound	
41	81	61	290.344	21	1954	326.83	258.41	227.06	192.35	166.54	146.84	131.27	107.89	90.79	99.77	Sound	60.52	Sound	35.27	Sound	
42	66	66	245.114	17	2195	397.39	319.63	278.99	233.27	200.48	176.34	157.75	130.23	110.09	118.4	Sound	78.51	Sound	42.73	Sound	

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
43	66	60	234.824	21	3738	321.08	278.25	254.62	224.12	198.38	176.92	158.99	131.04	110.35	66.46	Sound	56.24	Sound	39.39	Sound	
44	87	64	318.662	15	1920	358.09	270.33	227.82	185.06	157.42	138.10	123.41	101.43	85.19	130.27	Sound	70.4	Sound	34.01	Sound	
45	75	65	276.632	21	3547	287.32	244.24	221.53	193.33	170.35	151.71	136.45	113.03	95.78	65.79	Sound	51.18	Sound	33.9	Sound	
46	93	65	343.024	14	1722	357.47	260.74	215.95	173.62	147.59	129.70	116.06	95.44	80.10	141.52	Sound	68.36	Sound	31.53	Sound	
47	94	60	334.446	19	1847	314.75	240.62	207.14	171.97	147.35	129.28	115.27	94.35	79.06	107.61	Sound	59.79	Sound	32.08	Sound	
48	65	67	243.040	17	2040	406.77	324.71	282.49	235.63	202.41	178.13	159.49	131.89	111.64	124.28	Sound	80.08	Sound	42.92	Sound	
49	101	60	359.351	16	2874	289.01	228.02	196.46	162.05	138.12	120.77	107.46	87.74	73.40	92.55	Sound	58.34	Sound	30.66	Sound	
50	83	67	310.343	14	2387	357.57	275.51	233.07	189.42	161.15	141.53	126.72	104.66	88.32	124.5	Sound	71.92	Sound	34.43	Sound	
51	68	67	254.257	15	1590	443.35	336.13	283.80	230.95	196.80	173.02	155.01	128.09	108.10	159.55	Sound	87	Sound	41.79	Sound	
52	99	62	357.472	20	3082	253.95	206.41	182.89	155.72	135.08	119.18	106.57	87.65	73.84	71.06	Sound	47.81	Sound	28.51	Sound	
53	79	60	281.077	19	3402	304.69	255.76	229.16	196.68	171.10	150.94	134.77	110.38	92.68	75.53	Sound	58.06	Sound	36.33	Sound	
54	63	68	237.137	20	1336	428.25	329.14	285.15	238.80	206.10	182.06	163.46	135.71	115.20	143.1	Sound	79.05	Sound	42.64	Sound	
55	91	70	347.029	16	2059	255.15	199.36	176.97	153.10	134.85	120.50	108.92	91.22	78.03	78.18	Sound	42.12	Sound	25.93	Sound	
56	81	61	290.344	14	2749	367.54	290.30	248.15	202.69	172.00	150.22	133.67	109.19	91.35	119.39	Sound	76.15	Sound	38.33	Sound	
57	86	65	317.205	21	2612	281.90	228.56	203.01	173.68	151.29	133.96	120.17	99.41	84.18	78.89	Sound	51.72	Sound	31.12	Sound	
58	93	67	347.734	17	1977	313.73	238.27	203.08	167.00	142.89	125.76	112.71	93.25	78.83	110.65	Sound	60.19	Sound	30.18	Sound	
59	67	68	252.193	14	3194	393.76	320.32	277.81	229.77	196.27	172.23	154.04	127.33	107.77	115.95	Sound	81.54	Sound	42.23	Sound	
60	87	62	314.142	15	1267	401.86	286.48	236.49	190.21	161.63	141.79	126.55	103.49	86.42	165.37	Sound	74.86	Sound	35.08	Sound	
61	90	64	329.650	21	2060	293.36	229.57	200.94	169.82	147.04	129.82	116.31	96.05	81.17	92.42	Sound	53.9	Sound	30.73	Sound	
62	90	66	334.247	18	1424	344.91	252.18	212.78	174.37	149.21	131.40	117.77	97.32	82.11	132.13	Sound	63.57	Sound	31.44	Sound	
63	94	63	341.870	18	1095	367.87	256.20	212.54	172.62	147.34	129.56	115.87	95.16	79.77	155.33	Sound	65.2	Sound	31.47	Sound	
64	91	65	335.647	15	882	420.48	278.25	224.59	179.73	153.35	135.12	120.97	99.26	83.01	195.89	Sound	71.24	Sound	32.38	Sound	
65	94	70	358.469	21	3942	229.89	192.42	173.35	150.37	132.16	117.70	106.04	88.36	75.35	56.54	Sound	41.19	Sound	26.12	Sound	
66	81	65	298.762	17	912	434.72	298.79	245.89	198.72	169.64	149.40	133.83	110.17	92.50	188.83	Sound	76.25	Sound	35.81	Sound	
67	88	65	324.581	16	3883	289.50	238.50	209.70	176.03	151.33	132.93	118.72	97.72	82.47	79.8	Sound	58.37	Sound	32.61	Sound	
68	95	70	362.283	19	3694	244.71	201.72	179.35	153.08	133.16	117.92	105.94	88.07	74.99	65.36	Sound	46.19	Sound	27.22	Sound	
69	82	64	300.348	16	1815	368.71	280.67	238.37	194.97	166.21	145.87	130.35	107.22	90.16	130.34	Sound	72.16	Sound	35.86	Sound	
70	69	60	245.498	21	1500	397.69	310.36	271.25	228.78	197.60	173.98	155.39	127.47	107.07	126.44	Sound	73.65	Sound	42.21	Sound	
71	89	61	319.020	16	2435	328.89	258.01	221.78	182.68	155.73	136.28	121.39	99.30	83.19	107.11	Sound	66.05	Sound	34.34	Sound	
72	63	60	224.150	19	2949	374.19	316.61	284.77	245.32	213.89	188.90	168.74	138.25	116.09	89.42	Sound	70.88	Sound	45.15	Sound	
73	102	62	368.304	16	2634	289.10	224.97	192.74	158.44	135.07	118.30	105.49	86.45	72.53	96.36	Sound	57.67	Sound	29.58	Sound	
74	83	60	295.309	16	1013	436.53	305.21	251.43	202.43	171.99	150.70	134.27	109.41	91.09	185.1	Sound	79.44	Sound	37.72	Sound	
75	66	68	248.429	14	3890	381.75	316.89	277.71	231.72	198.53	174.26	155.75	128.63	108.91	104.04	Sound	79.18	Sound	42.78	Sound	
76	70	60	249.055	16	1459	449.97	341.31	289.37	236.16	200.79	175.63	156.37	127.66	106.65	160.6	Sound	88.58	Sound	44.42	Sound	
77	65	65	239.748	17	3407	364.14	307.05	274.06	233.72	202.62	178.63	159.70	131.52	111.08	90.08	Sound	71.44	Sound	42.92	Sound	
78	79	69	299.322	18	2275	328.49	260.54	226.94	189.96	163.66	144.37	129.53	107.52	91.33	101.55	Sound	63.28	Sound	34.13	Sound	
79	99	69	375.100	15	748	406.45	254.01	201.89	161.42	138.33	122.41	109.98	90.75	76.20	204.56	Warning	63.56	Sound	28.35	Sound	
80	92	66	341.675	21	1133	343.83	242.59	204.32	168.53	144.85	127.87	114.77	95.03	80.32	139.51	Sound	59.47	Sound	30.08	Sound	
81	62	63	225.489	14	1973	480.45	376.06	320.20	261.02	221.67	193.97	172.97	141.84	119.01	160.25	Sound	98.53	Sound	48.7	Sound	
82	103	60	366.467	16	2509	294.26	227.80	194.71	159.71	135.93	118.87	105.80	86.38	72.22	99.55	Sound	58.78	Sound	30.13	Sound	
83	69	68	259.722	19	3181	326.60	274.37	246.07	211.68	184.81	163.80	147.06	121.91	103.54	80.53	Sound	61.26	Sound	37.75	Sound	
84	66	67	246.779	21	3849	305.88	264.62	242.07	213.19	189.06	169.11	152.56	126.88	107.84	63.81	Sound	53.01	Sound	36.5	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
85	102	70	388.977	16	3910	250.21	202.32	176.37	147.12	126.38	111.30	99.79	82.83	70.39	73.84	Sound	49.99	Sound	26.593	Sound
86	86	61	308.267	21	2626	288.25	234.70	208.77	178.70	155.52	137.43	122.95	101.09	85.12	79.48	Sound	53.25	Sound	32.57	Sound
87	103	68	387.700	19	2621	255.03	200.26	174.35	146.19	126.11	111.30	99.86	82.83	70.29	80.68	Sound	48.24	Sound	26.254	Sound
88	66	65	243.436	21	3549	315.88	271.69	247.81	217.51	192.37	171.70	154.62	128.20	108.66	68.07	Sound	55.44	Sound	37.75	Sound
89	79	69	299.322	16	2671	334.79	267.20	231.54	192.20	164.78	145.02	129.98	107.76	91.42	103.25	Sound	66.76	Sound	34.8	Sound
90	101	67	377.646	16	1499	325.74	232.95	193.43	156.55	133.59	117.70	105.57	87.23	73.50	132.31	Sound	59.84	Sound	28.02	Sound
91	86	61	308.267	14	3092	341.80	271.67	232.90	190.61	161.83	141.31	125.72	102.69	85.94	108.9	Sound	71.07	Sound	36.11	Sound
92	100	62	361.082	15	2622	303.05	234.36	199.40	162.79	138.40	121.13	107.98	88.44	74.11	103.65	Sound	61	Sound	30.42	Sound
93	72	67	269.213	21	3601	291.61	248.86	226.16	197.82	174.63	155.78	140.32	116.58	99.05	65.45	Sound	51.53	Sound	34.31	Sound
94	62	62	223.871	18	2041	422.22	342.40	300.98	253.45	218.34	191.90	171.25	140.54	118.20	121.24	Sound	82.64	Sound	47.09	Sound
95	74	65	272.943	21	2855	307.15	255.84	229.90	198.80	174.20	154.67	138.91	114.96	97.39	77.25	Sound	55.7	Sound	35.29	Sound
96	68	62	245.536	19	3332	338.49	287.21	258.73	223.32	195.05	172.54	154.39	126.90	106.88	79.76	Sound	63.68	Sound	40.66	Sound
97	79	66	293.394	15	2737	350.41	278.86	240.30	198.09	169.11	148.39	132.65	109.40	92.33	110.11	Sound	71.19	Sound	36.46	Sound
98	97	70	369.910	21	3242	236.68	193.23	172.18	147.85	129.21	114.77	103.30	86.05	73.36	64.5	Sound	42.97	Sound	25.91	Sound
99	72	67	269.213	21	3930	285.15	245.28	223.75	196.48	173.89	155.35	140.05	116.42	98.93	61.4	Sound	49.86	Sound	33.84	Sound
100	70	67	261.735	21	745	472.59	323.44	269.56	221.21	190.04	167.90	150.85	125.06	105.76	203.03	Warning	79.52	Sound	39.19	Sound
101	83	65	306.139	15	2893	335.21	267.19	230.39	189.97	162.11	142.15	126.96	104.52	88.09	104.82	Sound	68.28	Sound	35.15	Sound
102	90	61	322.605	15	1588	372.69	273.78	228.33	184.35	156.48	137.03	122.15	99.77	83.30	144.36	Sound	71.85	Sound	34.33	Sound
103	79	61	283.175	21	1328	372.77	279.63	240.72	200.88	172.86	152.11	135.94	111.67	93.85	132.05	Sound	67.86	Sound	36.92	Sound
104	68	63	247.310	18	708	526.56	359.00	295.75	239.54	204.45	179.84	160.85	132.03	110.58	230.81	Warning	91.3	Sound	43.6	Sound
105	72	67	269.213	15	3092	363.85	296.02	257.74	214.23	183.42	161.05	143.99	118.88	100.54	106.11	Sound	74.32	Sound	39.43	Sound
106	76	61	272.422	17	2772	348.35	284.28	249.68	209.61	180.09	157.95	140.72	115.17	96.65	98.67	Sound	69.59	Sound	39.37	Sound
107	65	66	241.400	19	1113	456.59	339.41	289.24	238.95	205.03	180.66	161.94	133.93	113.17	167.35	Sound	84.21	Sound	43.09	Sound
108	63	68	237.137	19	1390	433.48	333.85	288.41	240.47	207.04	182.68	163.92	135.99	115.36	145.07	Sound	81.37	Sound	43.12	Sound
109	73	63	265.495	18	3250	330.70	276.56	246.62	210.42	182.51	160.89	143.76	118.16	99.57	84.08	Sound	64.11	Sound	38.75	Sound
110	92	64	336.976	14	1470	376.61	269.28	221.49	177.58	150.95	132.63	118.59	97.28	81.43	155.12	Sound	70.54	Sound	32.36	Sound
111	87	67	325.299	19	3521	269.20	223.37	199.16	170.35	148.24	131.14	117.62	97.37	82.57	70.04	Sound	50.92	Sound	30.62	Sound
112	99	61	354.865	15	3724	283.62	228.74	198.25	163.95	139.77	122.18	108.71	88.84	74.43	85.37	Sound	58.48	Sound	31.06	Sound
113	102	69	386.467	21	3798	219.86	181.85	162.96	140.62	123.19	109.51	98.55	81.99	69.82	56.9	Sound	39.77	Sound	24.637	Sound
114	92	61	329.774	19	3235	273.68	224.81	199.45	169.62	146.89	129.36	115.49	94.72	79.63	74.23	Sound	52.56	Sound	31.4	Sound
115	90	66	334.247	21	2747	267.46	216.79	192.53	164.74	143.56	127.17	114.16	94.57	80.20	74.93	Sound	48.97	Sound	29.4	Sound
116	68	62	245.536	19	1525	414.32	321.92	278.95	232.79	200.00	175.79	157.00	128.98	108.47	135.37	Sound	78.95	Sound	43	Sound
117	75	62	270.812	15	1446	434.76	323.00	270.52	218.92	185.95	162.93	145.36	118.99	99.56	164.24	Sound	84.57	Sound	40.59	Sound
118	90	61	322.605	15	1637	369.92	272.92	227.98	184.20	156.35	136.90	122.02	99.68	83.24	141.94	Sound	71.63	Sound	34.33	Sound
119	85	68	319.947	21	3609	256.27	215.10	194.00	168.42	148.03	131.76	118.60	98.58	83.85	62.27	Sound	45.97	Sound	29.43	Sound
120	82	65	302.451	17	2227	338.37	265.96	229.81	190.64	163.34	143.53	128.34	105.81	89.27	108.56	Sound	66.47	Sound	35	Sound
121	69	61	247.330	20	3838	315.67	272.11	247.72	216.52	190.67	169.48	152.02	125.11	105.36	67.95	Sound	57.05	Sound	38.65	Sound
122	93	62	335.807	17	3704	276.90	227.87	200.93	169.32	145.78	128.00	114.14	93.57	78.66	75.97	Sound	55.15	Sound	31.64	Sound
123	82	60	291.751	15	1454	411.29	302.73	252.63	203.95	172.99	151.34	134.76	109.86	91.58	158.66	Sound	79.64	Sound	38.23	Sound
124	98	64	358.953	20	1401	316.74	229.83	194.83	160.78	137.95	121.50	108.80	89.74	75.61	121.91	Sound	56.88	Sound	29.15	Sound
125	97	63	352.781	15	1669	343.42	250.73	208.69	168.45	143.19	125.64	112.23	92.02	77.05	134.73	Sound	65.5	Sound	30.96	Sound
126	88	64	322.325	20	3265	269.51	223.00	199.18	170.89	148.93	131.77	118.07	97.43	82.34	70.33	Sound	50.25	Sound	30.86	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
127	100	70	381.350	16	1878	303.87	224.48	188.56	153.51	131.19	115.72	103.99	86.40	73.23	115.31	Sound	57.37	Sound	27.2	Sound
128	66	62	238.314	15	1192	501.99	369.53	308.45	249.22	211.69	185.54	165.55	135.49	113.32	193.54	Sound	96.76	Sound	46.14	Sound
129	86	63	312.775	14	1722	384.58	284.23	236.49	190.37	161.58	141.68	126.51	103.67	86.78	148.09	Sound	74.91	Sound	35.07	Sound
130	89	61	319.020	21	2103	299.21	235.92	207.07	175.26	151.68	133.71	119.54	98.24	82.66	92.14	Sound	55.39	Sound	32.14	Sound
131	69	60	245.498	21	2364	350.34	289.26	258.84	222.72	194.33	171.86	153.74	126.25	106.17	91.5	Sound	64.51	Sound	40.59	Sound
132	100	61	358.450	16	1492	340.97	246.02	204.82	165.66	140.83	123.43	110.07	89.95	75.11	136.15	Sound	63.99	Sound	30.76	Sound
133	93	70	354.656	21	1856	285.80	217.80	188.74	158.53	137.19	121.45	109.26	91.04	77.54	97.06	Sound	51.55	Sound	27.93	Sound
134	97	69	367.522	19	1696	298.99	222.16	189.32	156.51	134.47	118.72	106.66	88.64	75.22	109.67	Sound	54.85	Sound	27.81	Sound
135	81	69	306.900	14	2315	362.31	278.40	235.27	191.17	162.79	143.19	128.43	106.44	90.07	127.04	Sound	72.48	Sound	34.36	Sound
136	73	63	265.495	18	712	500.80	337.06	276.52	223.62	190.88	167.93	150.21	123.25	103.18	224.28	Warning	85.64	Sound	40.67	Sound
137	96	61	344.112	18	3031	277.33	224.04	196.59	165.25	142.20	124.86	111.33	91.21	76.59	80.74	Sound	54.39	Sound	30.87	Sound
138	90	63	327.322	16	3535	294.61	240.24	210.17	175.57	150.52	131.99	117.70	96.58	81.25	84.44	Sound	59.65	Sound	32.82	Sound
139	95	62	343.028	16	1503	351.15	255.35	213.18	172.70	146.91	128.86	115.02	94.19	78.81	137.97	Sound	66.27	Sound	31.89	Sound
140	79	63	287.316	14	2366	382.18	297.06	252.17	205.16	174.18	152.45	135.98	111.50	93.54	130.01	Sound	77.99	Sound	38.2	Sound
141	81	65	298.762	21	2048	314.99	249.57	219.56	186.34	161.69	142.94	128.17	106.01	89.74	95.43	Sound	57.87	Sound	33.52	Sound
142	87	69	329.633	15	2841	316.52	249.53	214.15	176.13	150.46	132.31	118.59	98.31	83.32	102.37	Sound	63.69	Sound	31.87	Sound
143	66	68	248.429	18	1664	409.38	319.58	276.52	230.27	197.98	174.50	156.49	129.73	110.00	132.86	Sound	78.54	Sound	41.49	Sound
144	70	68	263.486	18	1003	451.15	323.60	271.24	221.62	189.76	167.40	150.32	124.61	105.37	179.91	Sound	81.48	Sound	39.44	Sound
145	74	67	276.691	21	2304	321.67	261.12	232.06	198.71	173.28	153.61	137.99	114.47	97.20	89.61	Sound	58.78	Sound	35.29	Sound
146	95	70	362.283	16	1492	335.19	240.93	200.43	162.45	138.83	122.56	110.20	91.52	77.49	134.76	Sound	61.6	Sound	28.63	Sound
147	88	63	320.049	20	3002	277.17	227.43	202.37	172.99	150.42	132.90	118.97	98.01	82.70	74.8	Sound	51.95	Sound	31.45	Sound
148	95	68	357.588	14	1481	357.77	253.55	207.98	166.80	142.17	125.37	112.53	92.97	78.29	149.79	Sound	65.81	Sound	29.64	Sound
149	91	66	337.961	15	3448	298.05	239.53	207.33	171.50	146.54	128.58	114.90	94.75	79.99	90.72	Sound	60.79	Sound	31.64	Sound
150	67	68	252.193	18	3500	336.16	284.40	255.14	219.15	191.04	169.11	151.69	125.61	106.60	81.02	Sound	64.1	Sound	39.35	Sound
151	67	60	238.382	19	1516	424.74	331.14	287.27	239.81	205.88	180.69	161.10	131.88	110.57	137.47	Sound	81.39	Sound	44.78	Sound
152	85	70	324.148	16	1839	344.86	259.96	220.01	179.84	153.73	135.52	121.74	101.15	85.79	124.85	Sound	66.28	Sound	31.99	Sound
153	83	64	304.011	16	2728	330.98	264.51	229.27	190.16	162.67	142.69	127.39	104.75	88.22	101.71	Sound	66.6	Sound	35.28	Sound
154	88	70	335.588	17	2582	300.06	236.95	205.21	170.68	146.63	129.26	116.01	96.40	81.93	94.85	Sound	58.58	Sound	30.62	Sound
155	68	63	247.310	15	3474	380.28	315.66	277.54	232.44	199.28	174.60	155.55	127.50	107.20	102.74	Sound	78.26	Sound	43.73	Sound
156	94	62	339.417	18	3949	262.14	218.14	194.05	165.15	143.00	125.92	112.42	92.25	77.61	68.09	Sound	51.05	Sound	30.58	Sound
157	101	62	364.693	18	3881	249.39	205.65	182.16	154.42	133.45	117.41	104.80	86.00	72.35	67.23	Sound	48.71	Sound	28.65	Sound
158	92	61	329.774	19	1789	320.53	244.39	210.18	174.43	149.52	131.28	117.16	96.07	80.62	110.35	Sound	60.66	Sound	32.36	Sound
159	89	64	325.988	19	1794	322.10	246.00	211.76	175.99	151.12	132.98	118.98	98.08	82.69	110.34	Sound	60.64	Sound	32.14	Sound
160	86	65	317.205	19	3981	266.50	224.45	201.51	173.44	151.35	133.98	120.07	99.12	83.84	64.99	Sound	50.16	Sound	31.28	Sound
161	78	66	289.681	18	2759	321.54	261.93	230.78	194.88	168.34	148.37	132.81	109.70	92.82	90.76	Sound	62.44	Sound	35.53	Sound
956	87	60	309.540	14	842	463.51	307.24	247.00	196.73	167.15	146.53	130.43	105.80	87.67	216.51	Warning	79.85	Sound	36.72	Sound
163	66	68	248.429	18	2411	372.44	303.96	268.07	226.64	196.00	172.97	155.05	128.45	108.99	104.37	Sound	72.07	Sound	40.95	Sound
164	93	64	340.639	16	2770	302.41	238.95	206.08	170.29	145.51	127.63	113.97	93.73	78.91	96.33	Sound	60.57	Sound	31.54	Sound
165	68	70	259.318	20	3165	317.70	267.84	241.38	209.06	183.45	163.17	146.88	122.24	104.17	76.32	Sound	57.93	Sound	36.57	Sound
166	80	61	286.760	18	3384	309.47	257.90	229.55	195.44	169.20	148.91	132.85	108.83	91.43	79.92	Sound	60.35	Sound	36.35	Sound
167	102	65	376.219	16	3849	259.04	209.99	183.22	152.80	131.01	115.02	102.74	84.61	71.38	75.82	Sound	52.21	Sound	28.27	Sound
168	71	69	269.011	15	875	492.73	338.42	276.18	221.79	189.47	167.36	150.40	124.47	104.92	216.55	Warning	86.71	Sound	39.07	Sound

SI No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
169	80	69	303.111	19	3463	284.48	237.32	212.16	181.97	158.66	140.58	126.26	104.81	89.13	72.32	Sound	53.5	Sound	32.4	Sound
170	64	65	236.059	14	1550	488.29	369.13	309.82	250.59	212.91	186.84	167.08	137.49	115.57	178.47	Sound	96.91	Sound	45.83	Sound
171	69	66	256.256	17	2841	360.98	297.12	262.10	221.12	190.75	167.94	150.21	123.94	104.81	98.88	Sound	71.35	Sound	40.54	Sound
172	102	68	383.936	17	1069	346.80	234.03	191.51	154.61	132.24	116.78	104.90	86.78	73.14	155.29	Sound	59.27	Sound	27.34	Sound
173	79	66	293.394	15	2162	370.03	286.49	243.94	199.46	169.97	149.23	133.51	110.14	92.88	126.09	Sound	73.97	Sound	36.46	Sound
174	80	66	297.108	14	3774	334.82	272.52	236.40	195.47	166.82	146.20	130.54	107.55	90.76	98.42	Sound	69.58	Sound	36.28	Sound
175	73	63	265.495	16	1197	449.88	328.50	274.68	222.75	189.62	166.44	148.70	122.02	102.27	175.2	Sound	85.06	Sound	40.92	Sound
176	79	61	283.175	17	979	444.52	312.78	259.27	209.78	178.53	156.58	139.68	114.16	95.32	185.25	Sound	80.74	Sound	38.85	Sound
177	72	62	259.979	19	3673	316.51	269.55	243.26	210.36	183.93	162.80	145.71	119.78	100.89	73.25	Sound	59.33	Sound	38.22	Sound
178	89	65	328.270	21	3701	250.38	210.17	189.53	164.45	144.38	128.33	115.31	95.46	80.87	60.85	Sound	45.15	Sound	29.07	Sound
179	71	62	256.368	14	3177	391.96	318.40	275.84	227.63	193.79	169.34	150.70	123.28	103.39	116.12	Sound	82.05	Sound	43.09	Sound
180	75	68	282.306	17	787	471.47	318.24	260.44	210.26	179.84	158.82	142.66	118.02	99.47	211.03	Warning	80.6	Sound	37.18	Sound
181	88	60	313.098	17	2377	325.99	257.34	222.68	184.67	157.85	138.20	123.03	100.53	84.18	103.31	Sound	64.83	Sound	34.82	Sound
182	70	66	259.970	15	1415	448.81	334.05	280.04	227.00	193.29	169.92	152.15	125.49	105.66	168.77	Sound	86.75	Sound	41.14	Sound
1040	103	60	366.467	14	1130	378.96	256.74	207.66	165.55	140.55	123.17	109.66	89.04	73.86	171.3	Sound	67.11	Sound	30.89	Sound
184	77	67	287.908	14	802	491.54	326.46	262.68	209.77	179.15	158.13	141.80	116.68	97.81	228.86	Warning	83.53	Sound	37.35	Sound
185	71	68	267.250	21	746	465.64	317.33	264.09	216.63	186.17	164.60	148.00	122.90	104.06	201.55	Warning	77.92	Sound	38.17	Sound
186	87	63	316.412	15	2552	337.12	263.97	225.80	185.04	157.51	137.94	123.04	100.96	84.78	111.32	Sound	68.29	Sound	34.47	Sound
187	97	61	347.696	18	1502	331.81	243.37	205.51	168.23	143.55	125.92	112.36	92.02	77.05	126.3	Sound	61.96	Sound	31.19	Sound
188	101	69	382.678	17	1256	330.92	230.22	190.24	154.14	131.85	116.45	104.66	86.80	73.35	140.68	Sound	58.39	Sound	27.19	Sound
189	98	70	373.723	19	2227	273.29	210.89	182.35	152.19	131.16	115.86	104.11	86.63	73.70	90.94	Sound	51.19	Sound	27.05	Sound
190	80	67	299.126	17	3474	305.52	252.64	223.37	188.86	163.14	143.75	128.67	106.32	90.05	82.15	Sound	60.23	Sound	34.47	Sound
191	62	66	230.259	14	3279	421.43	346.84	302.55	251.34	214.83	188.29	168.07	138.41	116.83	118.88	Sound	87.72	Sound	46.76	Sound
192	81	69	306.900	16	3452	309.25	253.08	221.85	185.88	159.90	140.77	126.09	104.47	88.67	87.4	Sound	61.95	Sound	33.81	Sound
193	64	61	229.408	16	900	541.23	386.86	321.05	259.31	220.45	193.25	172.35	140.81	117.53	220.18	Warning	100.6	Warning	48.1	Sound
194	71	69	269.011	19	778	471.56	322.51	267.00	217.53	186.52	164.87	148.27	123.12	104.20	204.56	Warning	80.48	Sound	38.25	Sound
195	72	60	256.171	19	1883	380.15	301.97	264.00	221.68	190.77	167.54	149.38	122.29	102.58	116.15	Sound	73.23	Sound	41.39	Sound
196	69	68	259.722	20	1294	405.20	305.77	263.03	219.23	188.91	166.83	149.81	124.38	105.54	142.17	Sound	74.12	Sound	39.1	Sound
197	84	70	320.334	20	3718	260.50	218.52	196.48	169.79	148.79	132.26	119.03	99.05	84.40	64.02	Sound	47.69	Sound	29.76	Sound
198	84	69	318.267	18	3681	278.14	231.20	205.65	175.23	152.15	134.51	120.67	100.08	85.05	72.49	Sound	53.5	Sound	31.48	Sound
199	84	68	316.183	14	1776	376.52	278.71	232.08	187.15	159.31	140.26	125.82	104.06	87.79	144.44	Sound	72.77	Sound	33.49	Sound
200	64	65	236.059	17	2214	408.42	330.25	288.92	241.98	208.03	182.89	163.47	134.72	113.73	119.5	Sound	80.89	Sound	44.56	Sound
201	81	64	296.685	17	3800	301.86	252.09	223.90	190.01	164.26	144.59	129.15	106.20	89.56	77.96	Sound	59.64	Sound	35.11	Sound
202	101	61	362.034	21	3701	233.64	194.16	174.25	150.38	131.47	116.44	104.28	85.79	72.26	59.39	Sound	42.78	Sound	27.19	Sound
203	98	62	353.861	20	3498	247.45	204.23	182.18	156.05	135.81	119.98	107.35	88.30	74.41	65.27	Sound	46.37	Sound	28.46	Sound
204	65	70	247.878	17	1559	427.45	328.96	281.89	232.73	199.54	175.93	157.98	131.32	111.54	145.56	Sound	82.35	Sound	41.56	Sound
205	76	63	276.406	15	2644	371.07	296.24	255.59	210.74	179.67	157.30	140.25	115.05	96.67	115.48	Sound	75.92	Sound	39.42	Sound
206	73	68	274.778	16	1986	384.04	298.96	256.28	211.06	180.50	158.79	142.30	117.84	99.77	127.76	Sound	75.78	Sound	38.2	Sound
207	101	60	359.351	18	3843	253.23	208.94	185.09	156.85	135.42	118.99	106.04	86.72	72.73	68.14	Sound	49.67	Sound	29.38	Sound
208	103	67	385.124	18	1749	293.69	216.88	183.67	150.85	129.19	113.83	102.10	84.51	71.44	110.02	Sound	54.48	Sound	27.09	Sound
209	91	68	342.531	16	3416	285.29	230.56	200.91	167.48	143.74	126.44	113.20	93.68	79.38	84.38	Sound	57.17	Sound	30.54	Sound
210	95	69	359.945	19	1535	312.41	229.20	194.42	160.28	137.64	121.53	109.21	90.75	76.98	117.99	Sound	56.78	Sound	28.43	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
211	92	67	343.994	16	1079	381.56	262.15	214.86	173.09	147.80	130.36	116.96	96.54	81.21	166.7	Sound	67.06	Sound	30.84	Sound
212	65	68	244.665	20	2397	356.95	294.21	262.40	224.97	196.20	173.91	156.21	129.64	110.17	94.55	Sound	66.2	Sound	39.99	Sound
213	66	60	234.824	20	1311	436.56	335.42	290.37	242.59	208.54	183.22	163.48	133.95	112.37	146.19	Sound	81.83	Sound	45.06	Sound
214	77	60	273.961	18	2571	343.14	279.20	245.75	207.07	178.30	156.51	139.44	114.04	95.62	97.39	Sound	67.45	Sound	38.86	Sound
215	87	62	314.142	15	2295	347.84	269.20	229.11	187.08	159.05	139.21	124.10	101.64	85.18	118.73	Sound	70.06	Sound	34.95	Sound
216	74	70	282.199	18	3725	303.48	255.51	228.70	196.06	170.81	151.27	135.83	112.78	95.98	74.78	Sound	57.89	Sound	34.98	Sound
217	83	63	301.864	21	3626	268.17	226.55	204.87	178.18	156.60	139.17	124.96	103.18	87.19	63.3	Sound	48.27	Sound	31.64	Sound
218	88	66	326.819	14	1388	389.95	277.56	227.98	182.82	155.62	136.99	122.73	101.04	84.83	161.97	Sound	72.36	Sound	32.89	Sound
219	79	67	295.387	17	1648	371.15	281.13	239.37	196.72	168.29	148.13	132.76	109.84	92.84	131.78	Sound	71.08	Sound	35.53	Sound
220	95	65	350.400	19	2360	283.25	222.40	193.58	162.19	139.72	123.09	110.19	90.98	76.87	89.67	Sound	53.86	Sound	29.53	Sound
221	94	67	351.473	21	1673	297.53	223.53	192.63	161.10	139.06	122.87	110.32	91.52	77.60	104.9	Sound	53.57	Sound	28.74	Sound
222	87	69	329.633	16	2118	329.12	252.35	214.99	176.38	150.80	132.79	119.14	98.83	83.75	114.13	Sound	64.19	Sound	31.66	Sound
223	95	63	345.507	19	939	376.74	254.86	210.16	170.68	145.85	128.36	114.85	94.36	79.10	166.58	Sound	64.31	Sound	31	Sound
224	98	62	353.861	21	1188	331.68	234.74	197.86	163.09	139.90	123.14	110.15	90.59	76.11	133.82	Sound	57.96	Sound	29.75	Sound
225	88	62	317.752	19	882	407.13	276.67	228.46	185.58	158.49	139.36	124.57	102.16	85.52	178.67	Sound	69.97	Sound	33.92	Sound
226	81	65	298.762	15	2628	349.18	276.09	237.21	195.08	166.36	145.89	130.33	107.31	90.42	111.97	Sound	70.85	Sound	36.03	Sound
227	74	62	267.201	17	3300	338.72	281.91	249.94	211.66	182.66	160.53	143.16	117.34	98.65	88.78	Sound	67.28	Sound	39.5	Sound
228	101	62	364.693	15	2046	319.00	238.61	200.35	162.34	137.90	120.81	107.76	88.23	73.84	118.65	Sound	62.45	Sound	30.14	Sound
229	90	68	338.767	16	2575	307.72	241.04	207.17	170.91	146.23	128.63	115.26	95.44	80.81	100.55	Sound	60.94	Sound	30.97	Sound
230	63	66	233.973	18	857	514.83	367.01	306.94	250.40	214.16	188.69	169.16	139.74	117.79	207.89	Warning	92.78	Sound	45	Sound
263	62	60	220.592	14	1221	546.47	404.41	336.56	270.68	229.24	200.43	178.41	145.34	121.07	209.91	Warning	107.32	Warning	50.83	Warning
232	90	63	327.322	21	1208	347.28	250.07	212.11	175.49	150.74	132.79	118.88	97.96	82.48	135.17	Sound	61.37	Sound	31.86	Sound
233	62	70	236.437	16	2139	421.99	337.27	292.45	242.93	208.40	183.51	164.59	136.66	116.11	129.54	Sound	84.05	Sound	43.81	Sound
234	81	70	308.894	19	3313	283.35	234.83	209.30	179.04	155.92	138.14	124.12	103.18	87.86	74.05	Sound	53.38	Sound	31.8	Sound
235	69	61	247.330	17	3024	367.15	305.29	270.52	228.92	197.42	173.36	154.47	126.40	106.11	96.63	Sound	73.1	Sound	42.95	Sound
236	86	64	314.999	17	838	430.29	288.14	235.18	189.50	161.71	142.37	127.42	104.63	87.61	195.11	Sound	73.47	Sound	34.29	Sound
237	95	68	357.588	14	3551	292.88	232.30	199.05	163.14	139.02	122.06	109.27	90.38	76.45	93.83	Sound	60.03	Sound	29.75	Sound
238	77	70	293.640	21	2043	317.80	252.15	222.02	188.72	164.12	145.49	130.89	109.03	92.93	95.78	Sound	57.9	Sound	33.23	Sound
239	65	67	243.040	17	2508	386.82	315.99	277.77	233.66	201.39	177.34	158.73	131.20	111.11	109.05	Sound	76.38	Sound	42.66	Sound
240	62	64	227.092	16	3675	386.44	327.47	292.06	248.41	214.82	188.99	168.69	138.55	116.76	94.38	Sound	77.24	Sound	46.13	Sound
241	90	62	324.974	14	1140	412.76	285.51	232.38	185.64	157.75	138.47	123.56	100.84	84.01	180.38	Sound	74.63	Sound	34.19	Sound
242	85	64	311.336	21	3701	260.55	219.88	198.75	172.82	151.90	135.05	121.32	100.32	84.88	61.8	Sound	46.85	Sound	30.58	Sound
243	71	62	256.368	17	1759	407.57	317.64	273.45	226.06	193.22	169.42	151.13	123.95	104.07	134.12	Sound	80.23	Sound	42.09	Sound
244	80	61	286.760	19	2481	325.09	263.32	232.16	196.36	169.59	149.20	133.16	109.21	91.78	92.93	Sound	62.57	Sound	36.43	Sound
245	101	66	375.099	15	2656	292.15	225.08	191.26	156.19	133.07	116.85	104.55	86.25	72.72	100.89	Sound	58.19	Sound	28.52	Sound
246	79	60	281.077	18	2765	330.54	270.33	238.50	201.37	173.56	152.40	135.79	111.05	93.12	92.04	Sound	64.94	Sound	37.77	Sound
247	99	65	365.154	19	1992	287.99	219.64	188.98	157.04	134.91	118.80	106.37	87.83	74.16	99.01	Sound	54.07	Sound	28.54	Sound
248	93	62	335.807	18	3481	272.61	224.18	198.32	167.92	145.03	127.58	113.87	93.44	78.61	74.29	Sound	53.29	Sound	31.16	Sound
249	91	66	337.961	17	2393	305.49	238.91	206.02	170.69	146.25	128.61	115.10	95.06	80.31	99.47	Sound	59.77	Sound	31.15	Sound
250	64	68	240.901	21	3552	317.62	273.44	249.56	219.28	194.18	173.59	156.59	130.34	110.90	68.06	Sound	55.38	Sound	37.59	Sound
251	87	70	331.775	21	1966	294.51	228.59	199.51	168.43	146.05	129.35	116.36	96.95	82.60	95	Sound	53.46	Sound	29.69	Sound
252	93	67	347.734	15	3468	290.85	233.13	201.57	166.61	142.40	125.03	111.83	92.37	78.09	89.28	Sound	59.17	Sound	30.57	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
253	102	65	376.219	20	1764	285.55	213.55	183.05	152.12	130.81	115.30	103.31	85.37	72.11	102.5	Sound	52.24	Sound	27.5	Sound	
254	89	69	337.211	18	1228	356.81	253.92	212.26	173.25	148.40	131.02	117.76	97.77	82.77	144.55	Sound	63.86	Sound	30.64	Sound	
255	94	65	346.712	16	2561	303.74	237.21	203.57	167.67	143.21	125.72	112.39	92.60	78.06	100.17	Sound	60.36	Sound	30.82	Sound	
256	100	70	381.350	21	2318	254.34	198.12	173.16	146.35	126.95	112.46	101.16	84.28	71.82	81.18	Sound	46.21	Sound	25.79	Sound	
257	97	69	367.522	17	2941	271.62	215.54	187.05	155.79	133.85	117.93	105.75	87.73	74.47	84.57	Sound	53.2	Sound	28.1	Sound	
258	65	65	239.748	16	870	526.79	371.40	306.90	247.79	211.24	185.89	166.45	136.99	115.01	219.89	Warning	95.66	Sound	44.79	Sound	
259	68	70	259.318	17	1232	439.82	325.21	274.44	224.54	192.21	169.61	152.44	126.72	107.49	165.38	Sound	82.23	Sound	39.77	Sound	
260	76	65	280.320	16	3011	343.72	280.07	244.96	204.69	175.64	154.23	137.75	113.42	95.70	98.76	Sound	69.32	Sound	37.89	Sound	
261	73	66	271.111	19	3191	316.56	264.94	237.15	203.57	177.43	157.03	140.78	116.37	98.56	79.41	Sound	59.72	Sound	36.65	Sound	
262	72	67	269.213	19	2027	357.20	284.41	249.02	209.69	181.13	159.83	143.28	118.65	100.58	108.18	Sound	67.89	Sound	37.85	Sound	
533	103	60	366.467	14	1233	370.67	254.81	206.96	165.13	140.13	122.77	109.30	88.81	73.72	163.71	Sound	66.83	Sound	30.83	Sound	
264	68	61	243.746	20	3004	339.56	286.65	258.34	223.45	195.48	173.09	154.95	127.35	107.19	81.22	Sound	62.86	Sound	40.53	Sound	
265	96	67	358.951	20	3428	245.15	201.51	179.49	153.69	133.91	118.60	106.46	88.22	74.87	65.66	Sound	45.58	Sound	27.45	Sound	
266	88	63	320.049	14	3091	331.20	262.10	224.28	183.43	155.87	136.35	121.55	99.67	83.66	106.92	Sound	68.41	Sound	34.32	Sound	
267	101	60	359.351	15	3688	281.81	226.76	196.31	162.15	138.11	120.63	107.23	87.47	73.16	85.5	Sound	58.2	Sound	30.88	Sound	
268	96	64	351.627	19	3943	247.49	206.14	184.09	157.62	137.10	121.14	108.44	89.37	75.48	63.4	Sound	46.99	Sound	28.66	Sound	
269	86	69	325.845	15	2925	317.22	251.24	216.07	177.97	152.08	133.73	119.84	99.33	84.20	101.15	Sound	63.99	Sound	32.24	Sound	
270	79	70	301.267	18	2298	325.74	258.44	225.15	188.52	162.49	143.42	128.76	107.04	91.04	100.59	Sound	62.66	Sound	33.73	Sound	
271	80	64	293.023	20	3717	279.79	236.83	213.76	185.26	162.40	144.11	129.29	106.75	90.24	66.03	Sound	51.36	Sound	33.11	Sound	
272	86	66	319.391	17	2859	305.00	245.31	214.11	179.02	153.86	135.34	121.07	99.94	84.49	90.89	Sound	60.25	Sound	32.79	Sound	
273	102	65	376.219	15	1993	312.53	231.79	194.05	157.14	133.73	117.48	105.11	86.53	72.74	118.48	Sound	60.32	Sound	28.62	Sound	
274	80	65	295.074	18	3622	296.82	248.26	221.43	189.04	164.11	144.85	129.62	106.87	90.32	75.39	Sound	57.32	Sound	34.49	Sound	
275	63	64	230.755	19	3583	347.88	298.73	270.74	235.24	206.40	183.15	164.26	135.49	114.46	77.14	Sound	64.34	Sound	42.14	Sound	
276	86	60	305.982	20	1876	326.22	253.98	221.01	185.35	159.57	140.25	125.15	102.55	86.06	105.21	Sound	61.44	Sound	34.42	Sound	
277	76	65	280.320	19	1022	422.07	301.74	253.55	207.79	177.93	156.73	140.43	115.91	97.66	168.52	Sound	75.62	Sound	37.5	Sound	
278	83	69	314.478	16	1621	364.59	271.20	228.37	186.12	158.99	140.12	125.80	104.36	88.34	136.22	Sound	69.38	Sound	33.19	Sound	
279	66	67	246.779	20	1299	420.03	319.67	275.87	230.37	198.56	175.27	157.26	130.36	110.48	144.16	Sound	77.31	Sound	41.3	Sound	
280	91	68	342.531	18	3554	265.68	218.40	193.25	163.86	141.89	125.27	112.29	93.01	78.94	72.43	Sound	51.36	Sound	29.6	Sound	
281	85	61	304.682	16	1839	364.72	277.72	235.83	192.71	163.99	143.56	127.93	104.65	87.58	128.89	Sound	71.84	Sound	36.06	Sound	
282	86	70	327.961	16	1839	341.85	257.28	217.61	177.81	151.99	134.00	120.37	100.01	84.82	124.24	Sound	65.62	Sound	31.62	Sound	
283	86	70	327.961	14	783	448.37	289.07	230.78	184.30	157.86	139.75	125.66	103.86	87.36	217.59	Warning	72.92	Sound	32.2	Sound	
284	76	63	276.406	16	1405	418.93	311.38	262.04	213.18	181.51	159.25	142.24	116.76	97.93	156.89	Sound	80.53	Sound	39.27	Sound	
285	68	70	259.318	20	2939	323.76	270.94	243.33	210.06	183.97	163.48	147.11	122.42	104.31	80.43	Sound	59.36	Sound	36.86	Sound	
286	88	68	331.239	15	3237	306.40	245.02	211.62	174.83	149.45	131.31	117.55	97.26	82.34	94.78	Sound	62.17	Sound	31.9	Sound	
287	101	69	382.678	20	3848	226.48	187.18	167.15	143.50	125.27	111.12	99.88	83.00	70.63	59.33	Sound	41.88	Sound	25.388	Sound	
288	66	68	248.429	21	3603	309.30	265.89	242.49	212.91	188.46	168.42	151.90	126.42	107.57	66.81	Sound	54.03	Sound	36.56	Sound	
289	87	64	318.662	17	2782	308.20	247.24	215.51	179.93	154.44	135.65	121.16	99.70	84.03	92.69	Sound	61.07	Sound	33.28	Sound	
290	98	64	358.953	14	1876	338.79	248.57	206.28	165.93	140.94	123.73	110.60	90.79	76.09	132.51	Sound	65.34	Sound	30.34	Sound	
291	94	66	349.102	18	2577	284.62	225.03	195.70	163.53	140.66	123.84	110.87	91.61	77.48	88.92	Sound	55.04	Sound	29.79	Sound	
292	92	68	346.295	16	1998	322.13	243.50	206.28	168.64	144.04	126.80	113.71	94.18	79.65	115.85	Sound	62.24	Sound	30.33	Sound	
293	92	62	332.196	15	1354	379.01	270.63	223.53	179.82	152.79	134.03	119.63	97.83	81.70	155.48	Sound	70.74	Sound	33.16	Sound	
294	98	62	353.861	17	2487	293.50	229.44	197.76	163.63	139.90	122.67	109.42	89.74	75.36	95.74	Sound	57.86	Sound	30.48	Sound	

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
295	69	65	254.501	20	3160	323.65	273.39	246.53	213.50	187.12	166.08	149.07	123.25	104.33	77.12	Sound	59.41	Sound	38.05	Sound	
296	71	62	256.368	19	2369	357.19	291.48	257.84	218.77	189.29	166.73	148.95	122.36	103.01	99.35	Sound	68.55	Sound	40.34	Sound	
297	89	61	319.020	16	849	434.02	289.72	235.30	188.70	160.58	140.96	125.73	102.49	85.29	198.72	Sound	74.72	Sound	34.85	Sound	
298	66	64	241.744	15	3238	392.77	324.54	284.70	238.01	203.98	178.81	159.44	130.92	110.25	108.07	Sound	80.72	Sound	44.54	Sound	
299	87	67	325.299	16	1989	338.36	257.83	219.10	179.40	153.19	134.74	120.71	99.81	84.32	119.26	Sound	65.91	Sound	32.48	Sound	
300	77	70	293.640	14	1766	398.18	297.29	248.37	200.67	170.96	150.67	135.36	112.35	95.10	149.81	Sound	77.41	Sound	35.6	Sound	
301	92	67	343.994	18	2926	278.30	223.79	196.06	164.81	142.13	125.28	112.22	92.85	78.67	82.24	Sound	53.93	Sound	29.91	Sound	
302	68	63	247.310	21	1376	404.82	311.64	270.99	227.86	196.79	173.53	155.34	128.06	108.03	133.83	Sound	74.2	Sound	41.45	Sound	
303	84	61	301.098	16	1732	373.52	282.58	239.35	195.30	166.14	145.46	129.65	106.04	88.72	134.17	Sound	73.21	Sound	36.49	Sound	
307	88	60	313.098	14	1350	408.28	291.70	239.80	191.95	162.68	142.40	126.79	103.17	85.80	168.48	Sound	77.12	Sound	35.89	Sound	
305	102	66	378.813	21	3969	221.04	184.14	165.49	143.14	125.48	111.47	100.18	83.02	70.43	55.55	Sound	40.01	Sound	25.3	Sound	
306	85	62	306.920	16	1872	360.75	275.04	233.69	191.09	162.71	142.56	127.17	104.22	87.36	127.06	Sound	70.98	Sound	35.54	Sound	
231	94	60	334.446	14	1477	380.04	272.48	224.26	179.58	152.19	133.20	118.59	96.51	80.28	155.78	Sound	72.07	Sound	33.6	Sound	
308	76	62	274.423	21	2425	320.35	261.94	233.44	200.20	174.47	154.32	138.20	113.81	95.98	86.91	Sound	58.97	Sound	36.27	Sound	
309	91	61	326.189	18	2772	295.23	237.52	208.04	174.62	150.16	131.83	117.54	96.30	80.86	87.19	Sound	57.88	Sound	32.62	Sound	
310	92	67	343.994	20	852	383.34	254.48	209.26	170.34	146.06	129.03	115.90	95.96	80.97	174.08	Sound	63.2	Sound	30.16	Sound	
311	102	70	388.977	16	2927	268.06	209.65	180.08	148.57	127.21	112.04	100.54	83.52	70.92	87.98	Sound	52.87	Sound	26.67	Sound	
312	64	69	242.489	20	3919	316.93	274.11	250.08	219.33	193.92	173.16	156.10	129.90	110.57	66.85	Sound	56.16	Sound	37.82	Sound	
313	80	67	299.126	16	1727	373.26	282.23	239.11	195.44	166.85	146.77	131.52	108.74	91.84	134.15	Sound	72.26	Sound	35.33	Sound	
314	68	70	259.318	20	1321	402.47	304.63	262.39	218.95	188.87	167.00	150.17	125.05	106.41	140.08	Sound	73.52	Sound	38.7	Sound	
315	80	60	284.635	18	3188	316.07	262.03	232.64	197.55	170.74	150.08	133.76	109.39	91.76	83.43	Sound	61.9	Sound	36.98	Sound	
316	82	68	308.655	15	3034	328.38	262.76	227.02	187.58	160.37	140.90	126.13	104.36	88.35	101.36	Sound	66.65	Sound	34.24	Sound	
317	94	70	358.469	19	788	388.24	250.45	203.44	164.64	141.26	125.07	112.60	93.55	79.13	184.8	Sound	62.18	Sound	28.66	Sound	
318	95	65	350.400	15	2191	322.43	244.55	206.48	167.95	142.96	125.50	112.23	92.42	77.76	115.95	Sound	63.52	Sound	30.73	Sound	
319	87	64	318.662	19	2829	289.85	235.43	207.86	176.14	152.43	134.39	120.23	99.09	83.66	81.99	Sound	55.43	Sound	32.2	Sound	
320	89	61	319.020	15	2666	332.36	261.39	223.98	183.67	156.20	136.55	121.57	99.37	83.19	108.38	Sound	67.78	Sound	34.63	Sound	
321	99	62	357.472	17	2423	293.20	228.15	196.28	162.19	138.62	121.54	108.42	88.92	74.66	96.92	Sound	57.66	Sound	30.2	Sound	
322	70	70	266.945	16	3982	332.79	279.85	248.67	210.96	182.52	161.01	144.29	119.61	101.67	84.12	Sound	66.15	Sound	38.23	Sound	
323	77	66	285.967	18	3546	305.23	255.53	228.03	194.81	169.22	149.46	133.84	110.51	93.53	77.2	Sound	58.81	Sound	35.38	Sound	
324	75	69	284.167	14	2739	370.54	292.89	250.58	205.20	174.91	153.68	137.70	114.09	96.64	119.96	Sound	75.67	Sound	37.21	Sound	
325	91	64	333.313	14	1583	373.14	270.11	223.10	179.13	152.21	133.68	119.52	98.08	82.15	150.04	Sound	70.89	Sound	32.69	Sound	
326	101	65	372.531	19	1716	296.22	220.20	187.64	154.98	132.91	117.03	104.82	86.55	73.02	108.58	Sound	54.73	Sound	28.09	Sound	
327	70	65	258.190	21	3652	300.15	257.47	234.53	205.58	181.66	162.05	145.88	120.93	102.49	65.62	Sound	52.87	Sound	35.78	Sound	
328	85	60	302.425	17	2524	329.66	263.18	228.84	190.49	163.04	142.77	127.09	103.85	86.97	100.82	Sound	65.8	Sound	35.95	Sound	
329	66	64	241.744	19	901	486.57	349.28	293.89	240.95	206.23	181.51	162.50	133.89	112.66	192.68	Sound	87.66	Sound	43.73	Sound	
330	103	68	387.700	15	1714	316.10	228.20	189.24	152.74	130.24	114.78	103.01	85.21	71.88	126.86	Sound	59	Sound	27.23	Sound	
331	78	67	291.648	20	2389	314.24	253.78	224.32	190.78	165.67	146.53	131.48	108.96	92.45	89.92	Sound	58.65	Sound	34.19	Sound	
332	91	65	335.647	18	969	386.25	263.63	217.29	176.13	150.52	132.62	118.84	97.91	82.27	168.96	Sound	66.77	Sound	31.68	Sound	
333	85	66	315.678	21	3820	255.41	215.90	195.33	170.05	149.65	133.22	119.83	99.37	84.31	60.08	Sound	45.68	Sound	29.82	Sound	
334	93	64	340.639	19	2115	298.14	231.59	200.69	167.56	144.11	126.84	113.47	93.53	78.90	97.45	Sound	56.58	Sound	30.64	Sound	
335	103	69	390.256	21	3431	224.34	183.24	163.31	140.22	122.52	108.77	97.85	81.40	69.31	61.03	Sound	40.79	Sound	24.672	Sound	
336	89	64	325.988	16	1857	344.76	260.34	220.42	179.96	153.37	134.62	120.33	98.97	83.19	124.34	Sound	67.05	Sound	33.04	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
337	64	61	229.408	17	3768	369.19	315.36	283.27	242.94	211.01	185.87	165.79	135.68	113.92	85.92	Sound	72.26	Sound	45.22	Sound
338	64	61	229.408	14	2000	473.72	370.74	315.61	257.08	218.04	190.47	169.53	138.49	115.83	158.11	Sound	97.57	Sound	48.51	Sound
339	81	61	290.344	19	904	429.62	298.64	248.45	202.40	172.79	151.76	135.51	110.98	92.83	181.17	Sound	75.66	Sound	37.28	Sound
340	74	68	278.542	20	1088	406.67	294.90	249.99	206.50	177.52	156.78	140.84	116.93	99.10	156.68	Sound	72.47	Sound	36.68	Sound
341	75	63	272.769	21	3029	302.96	253.93	228.81	198.30	173.90	154.37	138.52	114.34	96.60	74.15	Sound	54.91	Sound	35.38	Sound
342	75	62	270.812	16	3817	335.14	280.54	248.58	210.01	180.87	158.73	141.42	115.79	97.29	86.56	Sound	67.71	Sound	39.45	Sound
343	71	67	265.474	19	3813	307.46	262.19	236.84	205.18	179.83	159.63	143.35	118.71	100.69	70.62	Sound	57.01	Sound	36.48	Sound
344	90	66	334.247	16	1111	386.73	268.52	220.80	178.02	151.89	133.82	119.95	98.86	83.07	165.93	Sound	68.91	Sound	31.94	Sound
345	95	65	350.400	21	1928	286.20	219.91	191.12	160.70	138.90	122.63	109.94	90.93	76.92	95.08	Sound	52.22	Sound	28.96	Sound
346	66	60	234.824	15	1424	487.31	368.44	310.59	252.02	213.82	186.91	166.37	135.70	113.25	176.72	Sound	96.77	Sound	47.45	Sound
347	66	70	251.691	17	778	511.62	351.96	289.79	234.53	200.75	177.46	159.65	132.59	112.17	221.83	Warning	89.04	Sound	41.1	Sound
348	67	68	252.193	19	1928	379.42	302.63	265.19	223.49	193.17	170.57	153.02	126.90	107.72	114.23	Sound	72.02	Sound	40.15	Sound
349	67	64	245.406	19	3935	324.55	279.47	253.63	220.69	193.81	172.08	154.36	127.35	107.58	70.92	Sound	59.82	Sound	39.45	Sound
350	81	66	300.822	21	733	435.13	288.18	237.46	193.83	166.32	146.89	131.88	109.10	92.02	197.67	Sound	71.14	Sound	34.44	Sound
726	74	60	263.287	14	1538	452.21	337.06	281.26	226.47	191.79	167.65	149.22	121.58	101.31	170.95	Sound	89.47	Sound	42.57	Sound
352	92	62	332.196	19	3758	261.82	218.29	195.00	166.94	145.12	128.08	114.49	94.07	79.21	66.82	Sound	49.88	Sound	30.63	Sound
353	62	69	234.911	14	3882	398.56	332.43	292.08	244.32	209.61	184.12	164.66	136.17	115.46	106.48	Sound	82.47	Sound	44.95	Sound
354	83	68	312.419	20	1199	364.57	263.56	223.18	184.24	158.36	139.86	125.65	104.31	88.40	141.39	Sound	64.82	Sound	32.71	Sound
355	66	66	245.114	17	801	518.82	360.95	298.24	241.45	206.21	181.71	162.91	134.39	113.06	220.58	Warning	92.03	Sound	43.3	Sound
356	100	61	358.450	19	2493	275.49	217.29	189.43	158.75	136.56	119.99	107.07	87.81	73.76	86.06	Sound	52.87	Sound	29.49	Sound
357	91	70	347.029	19	3230	261.47	213.40	188.88	160.57	139.41	123.37	110.82	92.14	78.45	72.59	Sound	49.47	Sound	28.59	Sound
358	103	62	371.915	15	1386	346.40	243.87	200.49	161.02	136.86	120.10	107.20	87.63	73.14	145.91	Sound	63.63	Sound	29.66	Sound
359	78	67	291.648	17	725	473.36	312.40	253.88	204.49	174.88	154.38	138.56	114.36	96.15	219.48	Warning	79	Sound	36.32	Sound
360	94	64	344.301	19	1249	344.47	246.10	206.73	169.35	144.93	127.56	114.20	94.09	79.16	137.74	Sound	61.8	Sound	30.73	Sound
361	79	70	301.267	14	1547	402.58	294.20	243.87	196.37	167.38	147.65	132.70	110.10	93.12	158.71	Sound	76.49	Sound	34.68	Sound
362	97	61	347.696	20	1367	327.07	237.74	201.61	166.27	142.42	125.15	111.78	91.71	76.92	125.46	Sound	59.19	Sound	30.64	Sound
363	72	68	271.014	16	1435	420.62	314.15	264.93	216.04	184.47	162.45	145.72	120.68	102.02	155.69	Sound	80.46	Sound	38.75	Sound
364	101	60	359.351	17	1149	358.20	248.60	205.14	165.68	140.94	123.56	110.13	89.82	74.83	153.06	Sound	64.2	Sound	30.81	Sound
365	86	62	310.531	16	3091	316.86	256.19	223.21	185.79	159.00	139.29	124.11	101.68	85.39	93.65	Sound	64.21	Sound	34.89	Sound
366	64	68	240.901	21	3881	310.57	269.41	246.78	217.70	193.30	173.08	156.27	130.16	110.78	63.79	Sound	53.48	Sound	37.03	Sound
367	94	62	339.417	15	3810	291.72	236.91	206.03	170.89	145.90	127.65	113.66	93.05	78.09	85.69	Sound	60.13	Sound	32.24	Sound
368	103	64	377.266	14	1570	340.22	241.55	198.23	158.82	135.03	118.67	106.11	87.02	72.82	141.99	Sound	63.2	Sound	28.92	Sound
369	70	67	261.735	17	1180	443.32	325.39	273.83	223.57	191.08	168.30	150.92	124.84	105.40	169.49	Sound	82.75	Sound	40.16	Sound
370	81	64	296.685	16	1856	370.08	283.01	240.79	197.17	168.11	147.52	131.82	108.43	91.19	129.29	Sound	72.68	Sound	36.29	Sound
371	94	62	339.417	20	1787	306.69	233.57	201.55	168.10	144.54	127.16	113.65	93.45	78.62	105.14	Sound	57.01	Sound	30.89	Sound
372	97	62	350.250	19	1440	326.63	238.51	201.87	165.94	141.95	124.73	111.45	91.52	76.81	124.76	Sound	59.92	Sound	30.5	Sound
373	72	61	258.084	20	1043	436.90	319.07	271.03	223.75	191.70	168.46	150.46	123.45	103.56	165.87	Sound	79.33	Sound	41.24	Sound
374	68	62	245.536	16	1219	474.95	351.88	295.74	240.36	204.51	179.29	160.00	131.08	109.76	179.21	Sound	91.23	Sound	44.51	Sound
375	71	66	263.684	15	2098	404.44	316.04	270.15	221.45	188.80	165.72	148.22	122.27	103.14	134.29	Sound	81.35	Sound	40.58	Sound
376	101	67	377.646	15	3114	279.75	219.49	187.95	154.29	131.64	115.62	103.48	85.51	72.25	91.8	Sound	56.31	Sound	28.16	Sound
377	103	61	369.203	21	2192	266.46	207.09	180.72	152.29	131.54	115.87	103.57	85.11	71.59	85.74	Sound	49.18	Sound	27.97	Sound
378	78	66	289.681	18	2160	342.11	270.82	235.66	196.99	169.46	149.21	133.58	110.38	93.35	106.45	Sound	66.2	Sound	35.88	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
379	94	63	341.870	16	3353	288.52	232.88	202.75	168.71	144.43	126.61	112.92	92.68	77.95	85.77	Sound	58.32	Sound	31.51	Sound	
380	90	63	327.322	14	1428	388.15	277.60	228.34	183.02	155.46	136.47	121.90	99.80	83.41	159.81	Sound	72.88	Sound	33.56	Sound	
381	86	62	310.531	16	934	429.90	293.54	240.06	192.96	164.26	144.27	128.81	105.30	87.86	189.84	Sound	75.8	Sound	35.45	Sound	
382	66	64	241.744	16	2344	408.69	329.43	286.65	238.48	204.22	179.16	159.92	131.48	110.75	122.04	Sound	82.43	Sound	44.3	Sound	
383	63	70	240.251	19	1319	434.89	331.70	285.50	237.54	204.52	180.66	162.36	135.11	114.91	149.39	Sound	80.98	Sound	42.16	Sound	
384	64	64	234.418	17	1773	434.09	342.37	296.25	245.94	210.68	185.01	165.29	136.03	114.61	137.84	Sound	85.57	Sound	45.39	Sound	
385	85	67	317.821	20	3484	267.13	222.84	199.81	172.14	150.49	133.48	119.88	99.36	84.33	67.32	Sound	49.32	Sound	30.61	Sound	
386	96	70	366.096	19	2750	262.09	208.53	182.57	153.79	132.99	117.55	105.59	87.83	74.76	79.52	Sound	49.58	Sound	27.4	Sound	
387	81	61	290.344	21	2073	321.41	256.09	225.73	191.72	166.20	146.60	131.08	107.74	90.68	95.68	Sound	59.53	Sound	35.12	Sound	
388	66	62	238.314	16	3812	369.95	313.22	279.17	237.20	204.88	180.00	160.41	131.32	110.34	90.78	Sound	74.29	Sound	44.47	Sound	
389	72	61	258.084	17	3836	335.96	284.49	254.39	217.18	188.15	165.53	147.58	120.76	101.39	81.57	Sound	66.24	Sound	40.57	Sound	
390	72	66	267.397	19	1809	370.39	290.95	253.31	212.32	183.01	161.32	144.53	119.51	101.14	117.08	Sound	70.3	Sound	38.48	Sound	
391	84	62	303.309	15	3899	316.63	260.64	228.18	190.32	162.83	142.51	126.87	103.82	87.16	88.45	Sound	65.35	Sound	35.96	Sound	
392	100	65	368.843	14	2392	313.39	236.54	198.41	160.42	136.30	119.63	106.98	88.03	73.99	114.98	Sound	62.11	Sound	29.32	Sound	
393	97	66	360.244	20	3923	236.27	196.97	176.56	152.03	132.84	117.76	105.69	87.48	74.14	59.71	Sound	43.72	Sound	27.15	Sound	
394	68	64	249.069	21	1153	424.50	317.66	273.27	228.13	196.58	173.34	155.29	128.22	108.24	151.23	Sound	76.69	Sound	41.29	Sound	
395	90	69	341.000	17	1964	318.19	242.00	206.40	169.86	145.48	128.22	115.08	95.52	80.99	111.79	Sound	60.92	Sound	30.4	Sound	
396	98	63	356.418	18	1518	324.40	237.31	200.24	163.95	140.06	123.07	110.02	90.43	75.95	124.16	Sound	60.18	Sound	30.04	Sound	
397	82	70	312.707	21	2523	286.37	231.51	205.43	175.75	153.31	136.07	122.44	101.99	86.95	80.94	Sound	52.12	Sound	30.87	Sound	
398	72	63	261.858	20	766	477.03	328.14	273.00	223.09	190.96	168.11	150.47	123.79	103.95	204.03	Warning	82.04	Sound	40.49	Sound	
399	92	66	341.675	17	1752	328.40	245.81	208.34	170.72	145.91	128.37	114.98	94.96	80.11	120.06	Sound	62.43	Sound	30.93	Sound	
400	72	60	256.171	19	1594	397.60	309.07	267.81	223.37	191.70	168.24	150.00	122.79	102.94	129.79	Sound	76.11	Sound	41.7	Sound	
401	78	65	287.697	21	3798	274.19	233.72	212.26	185.48	163.57	145.75	131.12	108.64	92.06	61.93	Sound	48.69	Sound	32.45	Sound	
402	66	69	250.067	19	3245	334.07	282.19	253.77	218.91	191.47	169.90	152.67	126.74	107.78	80.3	Sound	62.3	Sound	38.8	Sound	
403	76	60	270.403	19	2468	340.28	277.33	245.15	207.76	179.54	157.91	140.84	115.31	96.77	95.13	Sound	65.61	Sound	38.7	Sound	
404	93	66	345.388	20	3531	250.50	207.45	185.39	159.19	138.87	123.02	110.38	91.35	77.42	65.11	Sound	46.52	Sound	28.49	Sound	
405	68	62	245.536	21	3603	313.23	269.57	245.89	215.75	190.65	169.93	152.76	126.15	106.50	67.34	Sound	55.24	Sound	37.89	Sound	
406	100	62	361.082	21	3560	236.37	195.66	175.31	151.08	132.02	116.94	104.78	86.32	72.81	61.06	Sound	43.29	Sound	27.24	Sound	
407	89	70	339.402	17	2606	296.84	234.35	202.94	168.77	144.99	127.82	114.71	95.32	81.01	93.9	Sound	57.95	Sound	30.28	Sound	
408	103	65	379.908	14	3734	277.28	219.79	188.24	154.13	131.14	114.89	102.60	84.43	71.09	89.04	Sound	57.1	Sound	28.54	Sound	
409	73	60	259.729	18	913	472.08	334.54	279.08	226.99	193.40	169.57	151.19	123.51	103.11	193	Sound	85.68	Sound	42.21	Sound	
410	80	62	288.866	19	1307	385.04	285.56	243.07	200.46	171.61	150.78	134.70	110.64	92.91	141.97	Sound	71.46	Sound	36.91	Sound	
411	79	66	293.394	21	1491	349.72	265.49	229.67	192.54	166.28	146.86	131.75	109.14	92.43	120.05	Sound	63.39	Sound	34.53	Sound	
412	102	66	378.813	18	3854	241.88	198.46	175.43	148.56	128.49	113.30	101.42	83.76	70.88	66.45	Sound	46.94	Sound	27.07	Sound	
413	102	63	370.965	17	3945	252.62	207.09	182.29	153.41	132.05	116.01	103.52	85.01	71.57	70.33	Sound	50.24	Sound	28.53	Sound	
414	62	66	230.259	18	3906	351.58	302.75	274.01	237.44	207.94	184.37	165.35	136.58	115.60	77.57	Sound	66.07	Sound	42.59	Sound	
415	77	67	287.908	16	1725	384.24	291.99	247.86	202.83	173.18	152.32	136.48	112.85	95.32	136.38	Sound	74.68	Sound	36.7	Sound	
416	83	69	314.478	16	1222	392.61	279.65	231.91	187.69	160.34	141.49	127.13	105.39	89.06	160.7	Sound	71.57	Sound	33.21	Sound	
417	79	62	285.255	19	1595	367.12	281.10	242.17	201.27	172.69	151.74	135.53	111.34	93.60	124.95	Sound	69.48	Sound	37.16	Sound	
418	92	70	350.842	15	1134	378.05	259.29	211.51	169.88	145.20	128.36	115.45	95.71	80.80	166.54	Sound	66.31	Sound	29.75	Sound	
419	73	62	263.590	20	2187	347.95	281.54	248.98	211.63	183.43	161.78	144.65	118.96	100.21	98.97	Sound	65.55	Sound	38.78	Sound	
420	94	65	346.712	17	3237	278.38	224.99	196.79	164.78	141.65	124.53	111.31	91.73	77.44	81.59	Sound	55.14	Sound	30.34	Sound	

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
421	70	64	256.395	14	1169	489.79	352.47	290.55	233.12	198.12	174.04	155.60	127.67	106.90	199.24	Sound	92.43	Sound	42.52	Sound	
422	86	61	308.267	19	3321	285.87	237.17	211.36	180.50	156.65	138.09	123.32	101.15	85.05	74.51	Sound	54.71	Sound	33.33	Sound	
423	96	69	363.734	17	3397	264.23	213.46	186.71	156.47	134.73	118.74	106.45	88.28	74.95	77.52	Sound	51.98	Sound	28.28	Sound	
424	69	60	245.498	19	3958	324.90	279.90	254.01	220.87	193.68	171.59	153.52	125.91	105.76	70.89	Sound	60.33	Sound	40.16	Sound	
425	64	63	232.763	15	3344	402.02	334.41	294.34	246.75	211.64	185.45	165.22	135.41	113.86	107.68	Sound	82.7	Sound	46.42	Sound	
426	81	61	290.344	20	3004	298.23	247.35	221.12	189.75	165.24	145.97	130.53	107.21	90.22	77.11	Sound	55.88	Sound	34.71	Sound	
427	100	68	376.408	21	2420	253.99	199.45	174.86	148.09	128.49	113.74	102.19	84.89	72.15	79.13	Sound	46.37	Sound	26.3	Sound	
428	71	70	270.759	19	2609	332.17	272.14	241.29	205.43	178.49	157.99	141.93	118.00	100.47	90.88	Sound	62.8	Sound	36.56	Sound	
429	89	65	328.270	16	1717	349.45	260.70	219.73	179.00	152.59	134.08	119.98	98.85	83.18	129.72	Sound	67.14	Sound	32.61	Sound	
430	74	64	271.046	15	1164	457.43	329.11	272.56	219.63	186.84	164.16	146.80	120.55	101.03	184.87	Sound	85.72	Sound	40.04	Sound	
431	70	63	254.584	19	2181	366.49	296.48	261.29	221.02	191.04	168.28	150.43	123.78	104.34	105.2	Sound	70.25	Sound	40.61	Sound	
432	62	65	228.682	16	1477	475.85	365.36	311.38	255.30	217.84	191.29	171.06	140.96	118.75	164.47	Sound	93.54	Sound	46.78	Sound	
433	87	64	318.662	18	1030	393.20	274.24	227.63	184.98	157.99	139.04	124.46	102.40	85.98	165.57	Sound	69.64	Sound	33.53	Sound	
434	96	62	346.639	21	2512	267.89	213.84	188.65	160.38	139.14	122.83	109.91	90.49	76.27	79.24	Sound	49.51	Sound	29.23	Sound	
435	67	67	250.518	21	2413	341.55	281.93	252.38	217.51	190.33	168.99	151.89	126.03	107.04	89.17	Sound	62.05	Sound	38.44	Sound	
436	96	63	349.144	18	2559	285.93	225.94	196.42	163.96	140.81	123.72	110.51	90.86	76.50	89.51	Sound	55.61	Sound	30.3	Sound	
437	63	67	235.561	19	3450	344.85	294.59	266.34	230.94	202.51	179.82	161.50	133.74	113.44	78.51	Sound	63.83	Sound	41.01	Sound	
438	100	62	361.082	21	1083	337.72	233.85	195.61	160.59	137.63	121.15	108.38	89.11	74.81	142.11	Sound	57.98	Sound	29.25	Sound	
439	97	62	350.250	14	2244	332.08	250.41	209.92	169.53	143.77	125.86	112.23	91.83	76.81	122.16	Sound	66.15	Sound	31.54	Sound	
440	73	65	269.255	16	3141	351.03	288.47	253.32	212.42	182.53	160.32	143.18	117.87	99.47	97.71	Sound	70.79	Sound	39.35	Sound	
441	73	68	274.778	21	1770	347.74	273.14	239.49	202.84	176.01	155.80	139.97	116.28	98.83	108.25	Sound	63.48	Sound	36.04	Sound	
442	72	60	256.171	15	1923	424.79	329.92	281.16	229.63	195.01	170.37	151.57	123.66	103.31	143.63	Sound	86.15	Sound	43.44	Sound	
443	67	67	250.518	17	2719	370.75	304.47	268.31	226.19	195.13	171.87	153.84	127.14	107.67	102.44	Sound	73.18	Sound	41.29	Sound	
444	85	63	309.138	17	1543	366.68	273.53	231.49	189.37	161.56	141.82	126.71	104.09	87.40	135.19	Sound	69.93	Sound	34.85	Sound	
445	93	67	347.734	20	1987	291.12	224.24	194.42	162.88	140.55	124.09	111.33	92.29	78.23	96.7	Sound	53.87	Sound	29.22	Sound	
446	98	69	371.311	21	3509	231.24	190.44	170.33	146.72	128.41	114.10	102.67	85.41	72.73	60.91	Sound	41.92	Sound	25.74	Sound	
447	86	60	305.982	16	1638	374.65	280.67	236.83	192.75	163.82	143.33	127.63	104.18	86.99	137.82	Sound	73.01	Sound	36.19	Sound	
448	92	70	350.842	16	3422	279.38	225.17	195.99	163.28	140.21	123.47	110.71	91.91	78.10	83.39	Sound	55.78	Sound	29.5	Sound	
449	93	66	345.388	19	3627	255.72	211.53	188.33	160.84	139.80	123.58	110.75	91.55	77.53	67.39	Sound	48.53	Sound	29.05	Sound	
450	79	67	295.387	21	2515	299.49	243.75	216.87	185.89	162.18	143.80	129.18	107.17	91.01	82.62	Sound	54.69	Sound	33	Sound	
451	77	68	289.834	16	2899	336.93	272.37	237.39	197.91	169.86	149.41	133.77	110.70	93.81	99.54	Sound	67.53	Sound	36.09	Sound	
452	98	67	366.429	21	1138	327.53	228.13	191.28	157.44	135.33	119.55	107.39	89.06	75.35	136.25	Sound	55.95	Sound	27.94	Sound	
453	81	67	302.865	21	2490	294.90	239.02	212.29	181.68	158.38	140.38	126.10	104.61	88.83	82.61	Sound	53.91	Sound	32.28	Sound	
454	98	60	348.678	16	3600	280.35	227.60	198.63	165.48	141.54	123.81	110.12	89.89	75.25	81.72	Sound	57.09	Sound	31.42	Sound	
455	77	64	282.034	18	1515	383.96	290.96	248.75	205.29	175.76	154.50	138.18	113.82	95.86	135.21	Sound	72.99	Sound	37.58	Sound	
456	73	61	261.668	15	2365	397.97	315.80	271.67	223.40	190.12	166.19	147.92	120.91	101.25	126.3	Sound	81.55	Sound	42.2	Sound	
457	72	67	269.213	21	1355	381.92	289.46	250.27	209.77	181.21	160.14	143.77	119.27	101.16	131.65	Sound	69.06	Sound	37.44	Sound	
458	81	68	304.891	18	3063	300.88	246.48	217.75	184.37	159.55	140.83	126.24	104.57	88.74	83.13	Sound	58.2	Sound	33.31	Sound	
459	99	67	370.168	17	1856	304.63	227.22	192.34	157.53	134.69	118.59	106.32	87.96	74.31	112.29	Sound	57.65	Sound	28.37	Sound	
460	85	69	322.056	18	3187	285.62	233.58	206.20	174.51	151.03	133.37	119.63	99.24	84.33	79.42	Sound	55.17	Sound	31.4	Sound	
461	103	68	387.700	16	1579	314.80	225.99	187.91	152.21	129.95	114.57	102.84	85.12	71.85	126.89	Sound	57.96	Sound	27.11	Sound	
462	70	68	263.486	19	3351	318.93	268.91	241.59	208.18	181.93	161.32	144.86	120.09	101.99	77.34	Sound	59.66	Sound	37.07	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
463	66	66	245.114	21	1311	412.25	315.39	273.66	229.89	198.69	175.51	157.46	130.43	110.49	138.59	Sound	74.97	Sound	41.23	Sound
464	79	68	297.362	18	2575	320.17	257.97	226.21	190.33	164.26	144.87	129.87	107.61	91.30	93.96	Sound	61.95	Sound	34.39	Sound
465	103	66	382.527	15	1675	321.84	232.13	192.42	155.20	132.19	116.33	104.22	85.90	72.23	129.42	Sound	60.23	Sound	27.97	Sound
466	68	61	243.746	19	1973	389.16	312.77	274.82	231.78	199.92	175.80	156.89	128.67	108.12	114.34	Sound	74.9	Sound	43.03	Sound
467	92	60	327.330	16	1641	356.11	264.30	222.24	180.54	153.41	134.24	119.56	97.57	81.44	133.87	Sound	68.83	Sound	33.85	Sound
468	68	65	250.813	18	1402	426.71	325.16	278.60	230.31	197.35	173.60	155.38	128.20	108.15	148.11	Sound	81.25	Sound	41.97	Sound
469	88	62	317.752	16	1197	394.65	280.17	232.00	187.29	159.34	139.83	124.84	102.17	85.40	162.65	Sound	72.66	Sound	34.5	Sound
470	97	63	352.781	16	1066	377.54	257.93	210.99	169.67	144.53	127.06	113.57	93.02	77.75	166.55	Sound	66.46	Sound	30.96	Sound
471	70	65	258.190	20	2609	336.40	278.26	248.52	213.24	185.91	164.57	147.56	121.94	103.20	87.88	Sound	62.61	Sound	38.35	Sound
472	85	63	309.138	15	2177	356.13	274.33	233.04	190.13	161.71	141.67	126.42	103.73	87.06	123.09	Sound	71.33	Sound	35.29	Sound
473	79	63	287.316	19	3139	305.14	253.50	226.09	193.30	167.97	148.28	132.63	109.13	92.03	79.05	Sound	58.12	Sound	35.34	Sound
474	95	68	357.588	18	2765	274.03	217.84	189.91	159.05	137.01	120.80	108.30	89.76	76.14	84.12	Sound	52.9	Sound	28.71	Sound
475	102	69	386.467	15	1499	327.49	231.60	190.75	153.60	131.10	115.71	103.96	86.11	72.68	136.74	Sound	59.65	Sound	27.14	Sound
476	80	62	288.866	14	3851	342.37	280.12	243.55	201.57	171.78	150.11	133.56	109.24	91.63	98.82	Sound	71.77	Sound	38.22	Sound
477	76	66	282.253	20	1439	371.01	281.04	242.09	201.86	173.84	153.35	137.50	113.80	96.30	128.92	Sound	68.25	Sound	36.34	Sound
478	95	67	355.212	14	3427	297.07	234.93	201.01	164.55	140.13	122.96	109.99	90.83	76.71	96.06	Sound	60.88	Sound	30.14	Sound
479	75	66	278.539	19	3191	310.21	258.92	231.48	198.46	172.86	152.93	137.10	113.33	95.98	78.73	Sound	58.62	Sound	35.76	Sound
480	100	61	358.450	15	1746	336.29	246.66	205.61	165.97	140.88	123.37	109.97	89.82	74.99	130.68	Sound	64.73	Sound	30.91	Sound
481	100	68	376.408	21	3841	223.67	185.77	166.77	144.13	126.34	112.31	101.03	83.95	71.40	56.9	Sound	40.43	Sound	25.31	Sound
482	72	64	263.720	18	2951	340.02	281.80	250.24	212.71	184.19	162.33	145.13	119.47	100.82	89.78	Sound	66.05	Sound	39.06	Sound
483	88	67	329.038	21	3897	246.23	207.69	187.73	163.31	143.68	127.92	115.12	95.58	81.19	58.5	Sound	44.05	Sound	28.56	Sound
484	84	67	314.082	16	962	420.73	287.82	235.59	189.71	162.01	142.90	128.22	105.82	89.00	185.14	Sound	73.58	Sound	33.79	Sound
485	69	68	259.722	16	806	506.39	347.14	284.33	229.07	195.72	172.76	155.14	128.28	108.07	222.06	Warning	88.61	Sound	40.58	Sound
486	90	68	338.767	18	1005	378.39	259.42	214.16	173.84	148.80	131.39	118.04	97.77	82.55	164.23	Sound	65.36	Sound	30.76	Sound
487	96	66	356.530	18	2665	277.79	219.97	191.43	160.04	137.68	121.22	108.53	89.67	75.84	86.36	Sound	53.75	Sound	29.15	Sound
488	99	69	375.100	17	1484	320.04	229.94	192.07	156.32	133.71	117.99	106.01	87.96	74.43	127.97	Sound	58.36	Sound	27.7	Sound
489	101	68	380.172	15	3495	270.71	215.02	185.15	152.61	130.38	114.56	102.58	84.88	71.85	85.56	Sound	54.77	Sound	27.8	Sound
490	79	68	297.362	21	3139	280.59	233.90	210.30	182.03	159.71	142.03	127.80	106.20	90.33	70.29	Sound	50.59	Sound	31.91	Sound
491	96	66	356.530	21	2394	265.29	209.60	184.19	156.21	135.55	119.88	107.57	89.10	75.53	81.1	Sound	48.64	Sound	27.98	Sound
492	74	65	272.943	21	3214	297.72	251.00	226.80	197.17	173.32	154.15	138.55	114.72	97.20	70.92	Sound	53.48	Sound	34.77	Sound
493	89	67	332.777	16	2411	317.26	247.10	211.85	174.45	149.12	131.10	117.39	97.06	82.05	105.41	Sound	62.73	Sound	31.73	Sound
494	82	69	310.689	16	2970	317.33	255.23	221.94	184.72	158.51	139.51	125.01	103.63	87.93	95.39	Sound	63.43	Sound	33.5	Sound
495	98	68	368.880	17	3647	257.24	209.15	183.46	154.08	132.75	116.95	104.76	86.73	73.55	73.78	Sound	50.71	Sound	27.99	Sound
496	80	63	290.953	16	1239	416.69	301.61	251.42	203.60	173.31	152.16	135.96	111.54	93.46	165.27	Sound	78.11	Sound	37.35	Sound
497	75	68	282.306	18	3752	303.46	255.70	228.93	196.26	170.90	151.20	135.61	112.29	95.31	74.53	Sound	58.03	Sound	35.29	Sound
498	75	60	266.845	16	832	496.17	341.16	279.56	224.68	190.94	167.36	149.12	121.44	101.02	216.61	Warning	88.62	Sound	41.82	Sound
499	68	67	254.257	14	3302	388.90	317.20	275.45	228.01	194.73	170.77	152.60	125.92	106.43	113.45	Sound	80.72	Sound	42.13	Sound
500	92	61	329.774	19	2660	287.90	231.29	203.20	171.35	147.78	129.95	115.97	95.11	79.92	84.7	Sound	55.42	Sound	31.81	Sound
501	67	65	247.125	16	1190	474.13	349.50	293.27	238.36	203.17	178.58	159.83	131.65	110.74	180.86	Sound	90.1	Sound	43.34	Sound
502	96	65	354.089	21	2532	262.63	209.23	184.48	156.85	136.22	120.46	108.03	89.35	75.64	78.15	Sound	48.26	Sound	28.19	Sound
503	88	66	326.819	16	1680	352.00	262.00	221.00	180.00	153.00	135.00	121.00	99.60	84.00	131	Sound	68	Sound	32	Sound
504	67	61	240.161	17	2632	388.14	319.22	281.38	236.98	203.90	178.91	159.39	130.44	109.48	106.76	Sound	77.48	Sound	44.51	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
505	82	69	310.689	21	1502	334.43	251.79	217.18	181.81	157.10	138.97	124.95	103.97	88.41	117.25	Sound	60.08	Sound	32.15	Sound
506	81	66	300.822	14	1194	430.65	303.39	248.38	198.98	169.44	149.21	133.68	110.02	92.33	182.27	Sound	78.94	Sound	35.76	Sound
507	72	60	256.171	16	3404	359.84	299.59	264.69	222.91	191.54	167.77	149.22	121.76	101.98	95.15	Sound	73.15	Sound	42.32	Sound
508	88	68	331.239	16	837	421.62	278.00	225.05	180.75	154.58	136.57	122.65	101.30	85.20	196.57	Sound	70.47	Sound	31.93	Sound
509	63	61	225.823	20	2640	371.51	312.00	280.51	242.04	211.45	187.09	167.42	137.57	115.78	91	Sound	69.06	Sound	44.03	Sound
510	95	65	350.400	17	1522	335.20	244.71	205.51	167.53	143.02	125.80	112.62	92.83	78.13	129.69	Sound	62.49	Sound	30.4	Sound
511	103	68	387.700	17	3928	243.31	198.34	174.20	146.45	126.23	111.21	99.62	82.47	69.94	69.11	Sound	47.97	Sound	26.612	Sound
512	85	64	311.336	21	2943	276.86	228.10	203.98	175.54	153.36	135.92	121.92	100.73	85.20	72.88	Sound	50.62	Sound	31.44	Sound
513	92	68	346.295	20	1181	341.48	241.66	203.10	167.00	143.43	126.69	113.84	94.50	80.03	138.38	Sound	59.67	Sound	29.59	Sound
514	91	66	337.961	15	1241	381.05	267.33	219.59	176.54	150.46	132.52	118.75	97.81	82.14	161.46	Sound	69.13	Sound	31.71	Sound
515	88	69	333.422	19	1333	343.81	249.53	210.84	173.45	148.89	131.48	118.17	98.19	83.27	132.97	Sound	61.95	Sound	30.72	Sound
516	101	66	375.099	14	2649	301.92	230.28	193.98	157.24	133.68	117.36	105.02	86.59	72.92	107.94	Sound	60.3	Sound	28.66	Sound
517	92	63	334.596	21	3480	251.30	209.20	187.93	162.39	142.16	126.08	113.08	93.32	78.83	63.37	Sound	45.77	Sound	29.08	Sound
518	67	68	252.193	18	3222	342.95	287.90	257.29	220.17	191.54	169.40	151.91	125.79	106.76	85.66	Sound	65.75	Sound	39.63	Sound
519	62	62	223.871	16	3087	407.46	340.38	301.29	254.30	218.91	192.08	171.13	140.12	117.73	106.17	Sound	82.38	Sound	47.78	Sound
520	78	61	279.591	17	2767	341.71	278.03	243.85	204.48	175.60	153.98	137.18	112.28	94.22	97.86	Sound	68.25	Sound	38.42	Sound
521	73	69	276.589	19	1936	353.82	279.05	243.40	204.41	176.50	155.88	139.94	116.24	98.80	110.42	Sound	66.9	Sound	36.56	Sound
522	64	65	236.059	17	2763	387.21	320.50	283.46	239.65	206.87	182.08	162.74	134.06	113.21	103.75	Sound	76.59	Sound	44.13	Sound
523	93	69	352.367	17	3478	269.12	218.74	191.86	161.15	138.89	122.43	109.74	90.99	77.27	77.26	Sound	52.97	Sound	29.15	Sound
524	89	61	319.020	16	3144	309.47	249.97	217.67	181.06	154.83	135.53	120.66	98.68	82.74	91.8	Sound	62.84	Sound	34.17	Sound
525	69	61	247.330	19	1932	387.12	309.81	271.72	228.82	197.23	173.40	154.74	126.90	106.63	115.4	Sound	74.49	Sound	42.49	Sound
526	71	68	267.250	21	1953	344.99	275.54	243.24	207.13	180.18	159.63	143.44	119.16	101.30	101.75	Sound	63.06	Sound	36.74	Sound
527	101	60	359.351	17	2000	307.42	233.04	198.38	162.70	138.63	121.37	108.10	88.33	73.85	109.04	Sound	59.75	Sound	30.53	Sound
528	68	63	247.310	14	3845	386.34	320.66	280.89	234.05	200.04	174.99	155.79	127.59	107.22	105.45	Sound	80.85	Sound	44.25	Sound
529	82	61	293.929	14	2373	376.10	291.75	247.41	201.04	170.45	148.94	132.59	108.31	90.56	128.69	Sound	76.96	Sound	37.86	Sound
530	67	61	240.161	15	1122	507.13	369.73	307.53	248.00	210.52	184.39	164.37	134.24	112.04	199.6	Sound	97.01	Sound	46.15	Sound
531	79	61	283.175	21	3678	280.45	238.70	216.58	188.94	166.29	147.82	132.64	109.27	92.08	63.87	Sound	50.29	Sound	33.65	Sound
532	79	63	287.316	16	3631	323.60	268.08	236.32	198.75	170.87	149.95	133.70	109.68	92.28	87.28	Sound	65.45	Sound	37.17	Sound
304	92	60	327.330	14	1760	370.76	273.30	227.12	182.55	154.61	135.20	120.35	98.03	81.65	143.64	Sound	72.51	Sound	34.26	Sound
534	98	66	363.958	17	1525	325.59	236.29	198.04	161.32	137.78	121.30	108.70	89.75	75.63	127.55	Sound	60.26	Sound	29.08	Sound
535	93	70	354.656	17	3991	258.82	213.27	188.27	159.05	137.46	121.30	108.79	90.30	76.80	70.55	Sound	50.81	Sound	28.67	Sound
536	82	64	300.348	19	1154	388.03	280.01	236.05	193.72	165.83	145.95	130.65	107.66	90.60	151.98	Sound	70.22	Sound	35.18	Sound
537	95	67	355.212	21	3251	244.21	200.43	178.98	153.90	134.50	119.35	107.25	88.98	75.57	65.23	Sound	44.48	Sound	27.25	Sound
538	93	62	335.807	19	2237	297.24	233.12	202.77	169.68	145.94	128.30	114.58	94.13	79.18	94.47	Sound	56.83	Sound	31.36	Sound
539	66	63	240.036	14	1549	483.21	364.63	305.78	247.07	209.66	183.70	163.97	134.43	112.63	177.43	Sound	96.12	Sound	45.69	Sound
540	81	66	300.822	16	1958	360.67	277.15	236.29	193.83	165.49	145.42	130.15	107.43	90.64	124.38	Sound	70.8	Sound	35.34	Sound
541	69	62	249.147	16	2266	403.43	322.97	280.12	232.33	198.57	173.92	155.00	127.01	106.63	123.31	Sound	81.55	Sound	43.57	Sound
542	97	65	357.777	19	1437	321.14	233.45	197.33	162.22	138.98	122.40	109.65	90.52	76.32	123.81	Sound	58.35	Sound	29.33	Sound
543	94	64	344.301	20	2139	287.90	224.46	195.51	164.24	141.71	124.92	111.82	92.25	77.89	92.39	Sound	53.8	Sound	29.89	Sound
544	63	67	235.561	21	2967	338.48	287.22	260.34	227.10	200.14	178.36	160.58	133.36	113.30	78.14	Sound	60.2	Sound	39.56	Sound
545	96	68	361.352	20	3349	245.23	200.88	178.67	152.81	133.10	117.91	105.90	87.88	74.68	66.56	Sound	45.57	Sound	27.2	Sound
546	96	63	349.144	17	2525	295.04	231.44	199.79	165.54	141.66	124.30	110.97	91.17	76.68	95.25	Sound	58.13	Sound	30.69	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
547	80	64	293.023	16	788	469.69	313.89	255.07	204.81	174.67	153.75	137.56	112.82	94.35	214.62	Warning	80.4	Sound	37.11	Sound
548	102	63	370.965	15	3683	274.15	219.75	189.95	156.84	133.77	117.12	104.41	85.65	71.97	84.2	Sound	56.18	Sound	29.36	Sound
549	75	70	286.013	18	3724	300.42	252.61	225.96	193.59	168.60	149.29	134.05	111.31	94.72	74.46	Sound	57.36	Sound	34.55	Sound
550	73	61	261.668	16	3438	352.86	293.45	259.14	218.19	187.54	164.38	146.33	119.61	100.34	93.72	Sound	71.6	Sound	41.21	Sound
551	83	66	308.250	16	2822	324.19	259.60	225.25	187.06	160.22	140.74	125.84	103.83	87.71	98.94	Sound	65.03	Sound	34.38	Sound
552	93	65	343.024	15	3769	289.09	234.18	203.45	168.73	144.25	126.48	112.91	92.93	78.35	85.64	Sound	59.2	Sound	31.34	Sound
553	85	70	324.148	21	3028	265.48	218.34	195.17	168.06	147.10	130.74	117.71	98.05	83.60	70.31	Sound	48.07	Sound	29.39	Sound
554	64	66	237.687	21	3059	333.83	283.87	257.54	224.83	198.20	176.61	158.94	131.84	111.87	76.29	Sound	59.34	Sound	39.26	Sound
555	95	62	343.028	16	3180	291.70	234.02	203.16	168.63	144.16	126.27	112.53	92.20	77.42	88.54	Sound	59	Sound	31.63	Sound
556	101	68	380.172	18	1719	297.59	219.57	185.90	152.68	130.82	115.35	103.54	85.85	72.67	111.69	Sound	55.08	Sound	27.28	Sound
557	69	61	247.330	15	1770	444.43	343.13	291.71	237.97	202.17	176.80	157.46	128.72	107.69	152.72	Sound	89.54	Sound	44.71	Sound
558	86	66	319.391	17	2333	320.74	251.81	217.50	180.41	154.64	135.98	121.69	100.49	84.91	103.24	Sound	62.86	Sound	32.95	Sound
559	69	65	254.501	18	3177	342.73	287.13	256.30	218.98	190.17	167.88	150.24	123.86	104.68	86.43	Sound	66.13	Sound	39.93	Sound
560	92	65	339.335	21	3257	252.79	208.61	186.69	160.81	140.60	124.70	111.94	92.62	78.45	66.1	Sound	46.09	Sound	28.66	Sound
561	97	69	367.522	18	3021	262.23	209.97	183.63	154.20	133.01	117.36	105.28	87.38	74.23	78.6	Sound	50.62	Sound	27.73	Sound
562	72	62	259.979	15	3031	377.62	307.85	268.22	222.81	190.34	166.54	148.28	121.38	101.87	109.4	Sound	77.88	Sound	42.06	Sound
563	103	61	369.203	18	3021	263.36	210.94	184.40	154.54	132.80	116.57	103.94	85.16	71.49	78.96	Sound	51.6	Sound	28.86	Sound
564	93	70	354.656	16	3733	271.48	220.60	192.75	161.08	138.47	121.95	109.33	90.74	77.11	78.73	Sound	54.28	Sound	29.14	Sound
565	71	66	263.684	17	3509	335.91	281.51	250.51	213.04	184.49	162.64	145.49	120.01	101.50	85.4	Sound	66.02	Sound	39	Sound
566	78	65	287.697	20	3130	296.17	246.89	221.28	190.50	166.38	147.42	132.22	109.28	92.49	74.89	Sound	54.9	Sound	34.16	Sound
567	76	67	284.169	20	3478	290.46	244.98	220.79	191.16	167.59	148.87	133.78	110.90	94.13	69.67	Sound	53.2	Sound	33.81	Sound
568	63	62	227.482	19	2569	382.50	318.86	284.82	243.81	211.94	187.04	167.20	137.37	115.68	97.68	Sound	72.88	Sound	44.74	Sound
569	82	62	296.088	21	2476	301.41	244.88	217.63	186.19	162.04	143.25	128.24	105.60	89.05	83.78	Sound	55.59	Sound	33.8	Sound
570	96	60	341.562	14	2003	348.27	259.72	216.76	174.56	147.82	129.21	115.01	93.70	78.09	131.51	Sound	68.94	Sound	32.81	Sound
571	95	69	359.945	14	3385	294.12	231.86	198.12	162.10	138.15	121.40	108.79	90.14	76.35	96	Sound	59.97	Sound	29.36	Sound
572	99	69	375.100	14	1727	332.15	239.05	197.10	158.36	134.98	119.06	106.94	88.55	74.73	135.05	Sound	62.12	Sound	28.04	Sound
573	95	65	350.400	17	1387	343.92	247.35	206.65	168.03	143.42	126.19	113.00	93.12	78.32	137.27	Sound	63.23	Sound	30.42	Sound
574	76	62	274.423	20	3547	297.76	252.50	228.07	197.74	173.29	153.65	137.68	113.35	95.56	69.69	Sound	54.78	Sound	35.61	Sound
575	65	63	236.400	19	3352	347.51	296.04	267.22	231.17	202.23	179.11	160.42	132.08	111.41	80.29	Sound	64.99	Sound	41.81	Sound
576	98	64	358.953	20	912	364.97	243.81	200.87	163.50	139.97	123.36	110.52	91.04	76.49	164.1	Sound	60.9	Sound	29.45	Sound
577	66	63	240.036	20	3509	329.76	282.79	256.82	223.97	197.05	175.15	157.22	129.71	109.53	72.94	Sound	59.77	Sound	39.83	Sound
578	91	61	326.189	18	2877	292.47	236.31	207.37	174.32	150.01	131.72	117.45	96.22	80.80	85.1	Sound	57.36	Sound	32.56	Sound
579	76	69	287.956	19	1528	366.67	278.33	239.11	198.65	170.91	150.88	135.51	112.61	95.62	127.56	Sound	68.2	Sound	35.4	Sound
580	63	68	237.137	14	2658	430.06	345.54	297.87	245.21	209.17	183.59	164.27	135.83	114.94	132.19	Sound	88.7	Sound	44.9	Sound
581	63	70	240.251	14	2097	447.46	349.71	297.69	243.01	207.12	182.18	163.43	135.65	115.03	149.77	Sound	90.57	Sound	43.69	Sound
582	86	69	325.845	20	950	381.85	262.12	218.00	178.39	153.17	135.44	121.83	101.25	85.79	163.85	Sound	64.83	Sound	31.34	Sound
583	78	66	289.681	15	2971	347.32	279.27	241.80	200.04	170.95	149.99	134.04	110.52	93.31	105.52	Sound	70.85	Sound	36.91	Sound
584	97	66	360.244	21	3996	228.96	191.87	172.90	149.94	131.63	117.03	105.21	87.21	73.98	56.06	Sound	41.27	Sound	26.42	Sound
585	63	67	235.561	18	1637	428.03	335.79	291.12	242.73	208.69	183.84	164.73	136.34	115.45	136.91	Sound	82.43	Sound	43.96	Sound
586	102	63	370.965	14	3265	291.66	228.44	194.57	158.63	134.72	117.89	105.12	86.20	72.33	97.09	Sound	59.85	Sound	29.6	Sound
587	83	67	310.343	17	2896	310.40	250.80	219.36	183.76	158.10	139.17	124.58	103.00	87.21	91.04	Sound	61.26	Sound	33.52	Sound
588	101	60	359.351	21	984	350.84	238.56	198.26	162.16	138.72	121.91	108.86	89.14	74.56	152.58	Sound	59.54	Sound	29.86	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
589	69	65	254.501	19	3332	328.69	277.94	250.01	215.60	188.35	166.82	149.54	123.45	104.42	78.68	Sound	61.66	Sound	38.81	Sound
590	65	68	244.665	18	787	510.97	355.70	295.13	240.04	205.48	181.38	162.92	134.99	114.03	215.84	Warning	89.65	Sound	42.56	Sound
591	98	70	373.723	16	2609	284.14	220.15	188.37	155.00	132.64	116.84	104.88	87.14	73.97	95.77	Sound	55.73	Sound	27.76	Sound
592	93	70	354.656	17	2183	300.42	230.53	197.31	162.78	139.54	123.04	110.49	91.85	78.01	103.11	Sound	57.77	Sound	29.05	Sound
593	94	68	353.824	20	3154	253.03	206.36	183.19	156.41	136.12	120.54	108.25	89.83	76.33	69.84	Sound	47.07	Sound	27.87	Sound
594	78	63	283.679	16	3726	324.85	270.11	238.55	200.96	172.91	151.77	135.32	111.00	93.40	86.3	Sound	65.64	Sound	37.59	Sound
595	88	60	313.098	18	2909	301.00	244.64	215.23	181.28	156.06	136.98	122.04	99.80	83.69	85.77	Sound	59.17	Sound	34.02	Sound
596	91	69	344.789	21	3245	249.30	205.22	183.51	158.05	138.31	122.89	110.58	91.99	78.33	65.79	Sound	45.2	Sound	27.73	Sound
597	65	62	234.704	17	3009	382.21	319.26	283.55	240.52	207.74	182.62	162.87	133.50	112.24	98.66	Sound	75.81	Sound	44.87	Sound
598	64	68	240.901	18	2281	386.45	314.54	277.06	234.00	202.26	178.47	159.98	132.54	112.46	109.39	Sound	74.8	Sound	42.28	Sound
599	92	69	348.578	20	709	405.91	257.52	208.62	168.98	145.03	128.38	115.53	95.89	81.03	197.29	Sound	63.59	Sound	29.5	Sound
600	79	65	291.386	21	1593	344.82	264.70	229.96	193.31	167.06	147.50	132.23	109.36	92.52	114.86	Sound	62.9	Sound	34.83	Sound
601	82	68	308.655	19	3027	290.63	238.62	211.75	180.36	156.65	138.54	124.30	103.05	87.51	78.88	Sound	55.1	Sound	32.35	Sound
602	70	69	265.222	14	2526	398.05	314.23	268.67	219.92	187.44	164.70	147.59	122.28	103.58	129.38	Sound	81.23	Sound	39.85	Sound
603	101	68	380.172	19	2695	256.79	202.88	177.08	148.77	128.43	113.37	101.70	84.36	71.60	79.71	Sound	48.65	Sound	26.73	Sound
604	103	70	392.791	16	2949	265.61	207.67	178.36	147.13	125.98	110.96	99.57	82.72	70.24	87.25	Sound	52.38	Sound	26.406	Sound
605	80	63	290.953	14	3702	342.99	279.32	242.30	200.22	170.61	149.20	132.89	108.90	91.48	100.69	Sound	71.69	Sound	37.72	Sound
606	62	62	223.871	21	1199	452.64	346.53	300.66	252.34	217.68	191.79	171.55	141.19	118.90	151.98	Sound	82.98	Sound	46.13	Sound
607	99	70	377.537	21	3641	226.00	186.53	167.00	144.01	126.14	112.16	100.99	84.13	71.73	59	Sound	40.86	Sound	25.15	Sound
608	91	62	328.585	15	3716	300.83	244.49	212.70	176.48	150.69	131.84	117.39	96.10	80.65	88.13	Sound	62.01	Sound	33.3	Sound
609	68	67	254.257	14	1153	492.88	354.14	291.81	234.31	199.50	175.71	157.55	129.98	109.35	201.07	Warning	92.31	Sound	41.95	Sound
610	85	67	317.821	18	1070	388.31	272.65	226.86	184.69	158.02	139.37	125.07	103.47	87.30	161.45	Sound	68.84	Sound	32.95	Sound
611	66	69	250.067	15	3735	368.48	307.45	271.13	227.96	196.18	172.59	154.45	127.80	108.42	97.35	Sound	74.95	Sound	41.73	Sound
612	66	69	250.067	14	3238	394.72	321.76	279.36	231.30	197.71	173.61	155.37	128.62	109.03	115.36	Sound	81.65	Sound	42.34	Sound
613	91	67	340.255	14	3056	315.07	247.18	210.74	172.10	146.50	128.57	115.05	95.02	80.23	104.33	Sound	64.24	Sound	31.45	Sound
614	72	63	261.858	14	3991	366.45	303.60	265.69	221.20	188.99	165.32	147.18	120.55	101.30	100.76	Sound	76.7	Sound	41.81	Sound
615	97	60	345.120	21	1093	347.35	243.19	204.16	167.82	143.71	126.29	112.77	92.39	77.35	143.19	Sound	60.45	Sound	30.94	Sound
616	64	70	244.064	16	1296	465.73	347.84	293.35	239.33	204.55	180.36	162.05	134.64	114.16	172.38	Sound	88.8	Sound	42.5	Sound
617	79	65	291.386	21	940	407.26	285.89	240.34	197.99	170.06	150.02	134.54	111.22	93.84	166.92	Sound	70.28	Sound	35.52	Sound
618	99	68	372.644	19	2053	280.64	214.24	184.44	153.42	131.99	116.45	104.51	86.71	73.54	96.2	Sound	52.45	Sound	27.48	Sound
619	85	64	311.336	21	2880	278.48	228.88	204.46	175.79	153.49	136.00	121.98	100.78	85.23	74.02	Sound	50.97	Sound	31.51	Sound
620	68	63	247.310	21	1919	368.11	296.36	262.40	223.80	194.53	171.94	154.01	127.00	107.22	105.71	Sound	67.87	Sound	40.52	Sound
621	93	63	338.233	16	3876	281.20	230.70	202.41	169.51	145.47	127.59	113.77	93.35	78.53	78.79	Sound	56.94	Sound	31.7	Sound
622	93	68	350.060	14	3783	293.67	235.05	202.26	166.27	141.79	124.46	111.38	92.11	77.93	91.41	Sound	60.47	Sound	30.41	Sound
623	95	60	338.004	20	2582	277.89	222.65	196.03	165.94	143.44	126.25	112.68	92.36	77.55	81.86	Sound	52.59	Sound	30.76	Sound
624	103	61	369.203	19	2523	268.73	211.48	184.19	154.25	132.65	116.54	104.00	85.29	71.64	84.54	Sound	51.54	Sound	28.65	Sound
625	88	61	315.436	14	904	448.18	299.75	241.59	192.57	163.71	143.65	128.02	104.11	86.45	206.59	Warning	77.88	Sound	35.69	Sound
626	86	63	312.775	20	2285	303.26	241.57	212.24	179.46	155.22	136.85	122.43	100.84	85.05	91.02	Sound	57.02	Sound	32.79	Sound
627	84	64	307.674	20	2342	304.61	243.87	214.73	181.93	157.56	139.04	124.49	102.70	86.76	89.88	Sound	57.17	Sound	33.07	Sound
628	98	68	368.880	18	2041	290.08	220.61	188.91	156.22	134.04	118.15	105.99	87.89	74.47	101.17	Sound	54.87	Sound	28.05	Sound
629	70	61	250.915	18	2474	369.73	302.45	266.88	225.43	194.40	170.82	152.33	124.79	104.82	102.85	Sound	72.48	Sound	42.07	Sound
630	87	69	329.633	16	2482	316.62	247.69	212.77	175.51	150.22	132.22	118.57	98.34	83.39	103.85	Sound	62.55	Sound	31.65	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
631	101	63	367.328	20	1117	335.67	232.68	194.09	158.80	135.95	119.68	107.11	88.13	74.03	141.58	Sound	58.14	Sound	28.84	Sound	
632	69	64	252.732	19	1841	384.91	305.31	266.84	224.24	193.33	170.26	152.30	125.53	105.94	118.07	Sound	73.51	Sound	41.03	Sound	
633	75	64	274.709	15	3402	351.77	288.46	252.08	210.04	179.78	157.56	140.51	115.40	97.17	99.69	Sound	72.3	Sound	39.27	Sound	
634	92	63	334.596	20	3662	254.66	212.44	190.44	163.92	143.07	126.63	113.43	93.47	78.89	64.22	Sound	47.37	Sound	29.64	Sound	
635	83	62	299.698	16	732	473.55	310.74	251.12	201.23	171.44	150.68	134.53	109.83	91.48	222.43	Warning	79.68	Sound	36.91	Sound	
636	91	68	342.531	14	704	448.67	281.02	222.74	177.73	152.22	134.58	120.75	99.33	83.19	225.93	Warning	70.52	Sound	31.47	Sound	
637	74	65	272.943	15	750	510.64	340.75	275.68	220.72	188.27	165.87	148.50	121.88	101.97	234.96	Warning	87.41	Sound	39.77	Sound	
638	93	68	350.060	16	2469	303.25	235.35	201.49	165.80	141.77	124.72	111.78	92.57	78.36	101.76	Sound	59.72	Sound	29.99	Sound	
639	79	70	301.267	19	1073	393.76	280.02	234.92	192.59	165.30	146.11	131.44	109.37	92.82	158.84	Sound	69.62	Sound	33.86	Sound	
640	97	66	360.244	15	1497	346.30	247.77	204.84	165.04	140.60	123.76	110.88	91.38	76.81	141.46	Sound	64.24	Sound	29.72	Sound	
641	102	60	362.909	15	3948	275.38	222.95	193.57	160.25	136.60	119.31	106.05	86.50	72.36	81.81	Sound	56.97	Sound	30.55	Sound	
642	97	61	347.696	14	3617	300.62	239.88	206.01	168.83	143.38	125.20	111.37	90.97	76.13	94.61	Sound	62.63	Sound	32.01	Sound	
643	102	66	378.813	18	2171	280.36	214.36	183.92	152.21	130.52	114.89	102.91	85.05	71.87	96.44	Sound	53.4	Sound	27.61	Sound	
644	79	69	299.322	17	2533	328.93	262.75	228.68	190.88	164.12	144.61	129.66	107.55	91.31	100.25	Sound	64.56	Sound	34.46	Sound	
645	82	60	291.751	19	1078	405.64	290.96	244.66	200.28	170.99	150.01	133.80	109.44	91.50	160.98	Sound	73.67	Sound	37.19	Sound	
646	91	69	344.789	18	1384	339.15	245.40	206.33	168.88	144.69	127.71	114.75	95.29	80.72	132.82	Sound	61.64	Sound	29.94	Sound	
647	80	68	301.127	16	1121	415.23	293.76	243.06	196.49	167.79	147.99	132.86	109.94	92.74	172.17	Sound	75.27	Sound	34.93	Sound	
648	68	70	259.318	19	1316	411.95	310.56	266.11	220.77	189.93	167.77	150.80	125.50	106.70	145.84	Sound	76.18	Sound	39.13	Sound	
649	64	66	237.687	15	1094	511.54	371.71	308.93	249.43	212.43	186.89	167.42	138.02	116.09	202.61	Warning	96.5	Sound	45.01	Sound	
650	100	69	378.889	18	3877	240.78	197.61	174.74	148.10	128.25	113.28	101.61	84.29	71.63	66.04	Sound	46.49	Sound	26.64	Sound	
651	95	62	343.028	14	2453	330.75	252.85	213.13	172.62	146.40	128.10	114.20	93.46	78.22	117.62	Sound	66.73	Sound	32.2	Sound	
652	68	62	245.536	15	3279	387.81	320.40	281.01	234.77	200.99	175.94	156.62	128.16	107.59	106.8	Sound	80.02	Sound	44.37	Sound	
653	67	65	247.125	15	2428	411.59	329.47	284.65	235.05	200.67	175.95	157.13	129.35	109.03	126.94	Sound	83.98	Sound	43.54	Sound	
654	93	68	350.060	15	3948	280.65	227.87	198.23	164.67	141.02	123.89	110.86	91.68	77.65	82.42	Sound	57.21	Sound	30.16	Sound	
655	98	63	356.418	14	2365	323.38	244.88	205.65	166.28	141.11	123.62	110.33	90.46	75.80	117.73	Sound	64.54	Sound	30.78	Sound	
656	74	68	278.542	15	3113	353.43	286.70	249.29	207.02	177.26	155.73	139.35	115.25	97.60	104.14	Sound	72.03	Sound	37.91	Sound	
657	96	64	351.627	21	3049	250.93	204.71	182.29	156.27	136.24	120.63	108.16	89.35	75.56	68.64	Sound	46.05	Sound	28.08	Sound	
658	79	60	281.077	21	980	412.98	294.45	248.79	205.22	175.87	154.56	138.01	113.11	94.76	164.19	Sound	72.92	Sound	37.86	Sound	
659	64	69	242.489	18	782	514.67	358.35	297.36	241.92	207.19	183.02	164.53	136.55	115.52	217.31	Warning	90.17	Sound	42.66	Sound	
660	67	60	238.382	15	3226	399.10	330.20	289.75	242.07	207.06	180.98	160.82	131.12	109.73	109.35	Sound	82.69	Sound	46.24	Sound	
661	97	61	347.696	15	1318	369.29	260.75	214.56	172.31	146.34	128.29	114.39	93.32	77.77	154.73	Sound	68.22	Sound	31.95	Sound	
662	82	62	296.088	19	3558	289.33	242.68	217.40	186.62	162.48	143.50	128.31	105.43	88.79	71.93	Sound	54.92	Sound	34.17	Sound	
663	101	65	372.531	21	825	364.41	236.25	193.25	157.23	134.80	118.99	106.75	88.13	74.16	171.16	Sound	58.45	Sound	28.05	Sound	
664	91	70	347.029	15	1381	361.92	256.92	211.87	170.72	145.78	128.74	115.76	96.05	81.20	150.05	Sound	66.09	Sound	30.02	Sound	
665	87	69	329.633	18	3391	276.39	226.97	200.75	170.18	147.39	130.19	116.78	96.87	82.32	75.64	Sound	53.36	Sound	30.61	Sound	
666	76	70	289.826	17	892	444.88	305.80	251.71	203.70	174.36	154.14	138.67	115.16	97.42	193.17	Sound	77.35	Sound	35.69	Sound	
667	69	61	247.330	20	3365	326.32	278.04	251.69	218.68	191.83	170.13	152.41	125.33	105.51	74.63	Sound	59.86	Sound	39.42	Sound	
668	82	69	310.689	21	2165	300.49	238.50	210.01	178.50	155.18	137.50	123.62	102.84	87.54	90.48	Sound	54.83	Sound	31.56	Sound	
669	66	63	240.036	19	954	481.03	349.20	294.97	242.27	207.32	182.31	163.05	134.13	112.73	186.06	Sound	87.65	Sound	44.27	Sound	
670	87	64	318.662	14	732	469.31	301.03	240.00	191.31	163.26	143.77	128.51	104.98	87.43	229.31	Warning	76.74	Sound	34.75	Sound	
671	100	70	381.350	18	3160	251.95	201.90	176.65	148.41	128.08	113.07	101.50	84.36	71.77	75.3	Sound	48.57	Sound	26.58	Sound	
672	85	64	311.336	19	2004	323.02	252.13	218.92	183.04	157.51	138.65	124.03	102.23	86.25	104.1	Sound	61.41	Sound	33.48	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
673	78	67	291.648	19	1170	393.37	285.79	241.55	198.66	170.37	150.25	134.83	111.67	94.43	151.82	Sound	71.18	Sound	35.54	Sound
674	74	70	282.199	21	2801	300.04	248.42	222.72	192.31	168.57	149.93	135.01	112.48	95.90	77.32	Sound	54.15	Sound	33.56	Sound
675	78	65	287.697	21	2265	314.68	253.76	224.87	192.00	167.09	147.88	132.64	109.72	92.90	89.81	Sound	57.78	Sound	34.45	Sound
676	82	68	308.655	18	3234	294.13	242.04	214.27	181.75	157.42	138.99	124.59	103.20	87.58	79.86	Sound	56.85	Sound	32.83	Sound
677	78	70	297.453	17	1250	396.47	287.59	241.04	196.53	168.19	148.48	133.49	110.95	94.05	155.43	Sound	72.85	Sound	34.7	Sound
678	75	60	266.845	16	2286	382.86	304.48	263.26	217.71	185.71	162.39	144.47	117.95	98.70	119.6	Sound	77.55	Sound	41.24	Sound
679	63	66	233.973	20	1130	454.74	341.61	293.34	244.09	210.08	185.29	166.15	137.52	116.34	161.4	Sound	83.26	Sound	43.93	Sound
680	83	62	299.698	15	705	487.57	316.13	253.68	202.60	172.59	151.68	135.36	110.31	91.72	233.89	Warning	81.09	Sound	37.23	Sound
681	64	66	237.687	15	2011	442.35	348.15	298.53	245.23	209.17	183.57	164.15	135.40	114.24	143.82	Sound	89.36	Sound	45.02	Sound
682	77	64	282.034	21	1720	345.31	269.31	235.41	198.75	172.00	151.85	136.04	112.34	94.93	109.9	Sound	63.41	Sound	35.96	Sound
683	90	65	331.958	17	3652	279.46	229.86	202.69	170.90	147.34	129.63	115.86	95.45	80.60	76.77	Sound	55.35	Sound	31.48	Sound
684	62	63	225.489	14	1155	542.47	396.98	329.12	264.55	224.58	197.00	175.92	144.13	120.59	213.35	Warning	104.54	Warning	48.66	Sound
685	66	66	245.114	20	3010	336.72	284.11	256.09	221.71	194.33	172.54	154.96	128.28	108.74	80.63	Sound	61.76	Sound	39.37	Sound
686	96	62	346.639	16	2518	306.01	238.59	204.57	168.26	143.46	125.65	112.03	91.82	77.03	101.44	Sound	61.11	Sound	31.43	Sound
687	68	65	250.813	14	2076	436.28	339.20	288.02	234.49	199.32	174.73	156.13	128.50	108.14	148.26	Sound	88.7	Sound	43.19	Sound
688	79	67	295.387	17	2784	325.33	263.15	230.28	192.99	166.07	146.19	130.86	108.19	91.60	95.05	Sound	64.21	Sound	35.21	Sound
689	93	62	335.807	16	1395	363.78	262.35	218.40	176.69	150.31	131.86	117.71	96.38	80.61	145.38	Sound	68.09	Sound	32.6	Sound
690	83	68	312.419	14	2748	344.33	269.45	229.47	187.31	159.50	140.10	125.48	103.81	87.77	114.86	Sound	69.97	Sound	34.02	Sound
691	94	68	353.824	19	2562	274.36	217.35	189.92	159.69	137.91	121.74	109.22	90.58	76.89	84.44	Sound	52.01	Sound	28.69	Sound
692	86	66	319.391	21	3065	268.38	221.45	198.20	170.76	149.35	132.53	119.05	98.64	83.66	70.18	Sound	48.85	Sound	30.3	Sound
693	72	64	263.720	14	2234	413.28	322.24	273.93	223.13	189.57	166.04	148.22	121.77	102.32	139.35	Sound	84.36	Sound	41.35	Sound
694	99	60	352.236	19	3517	255.27	210.10	186.54	158.72	137.44	120.98	107.93	88.37	74.18	68.73	Sound	49.1	Sound	29.51	Sound
695	100	67	373.907	15	3795	269.41	216.36	187.23	154.87	132.39	116.24	103.96	85.87	72.60	82.18	Sound	54.84	Sound	28.43	Sound
696	83	66	308.250	21	2781	282.74	231.69	206.73	177.62	155.12	137.55	123.52	102.34	86.79	76.01	Sound	51.61	Sound	31.6	Sound
697	82	62	296.088	21	2988	286.47	237.73	213.23	183.96	160.85	142.51	127.71	105.22	88.75	73.24	Sound	52.38	Sound	33.14	Sound
698	89	65	328.270	21	1442	327.09	242.64	208.08	173.39	149.38	131.80	118.16	97.72	82.59	119.01	Sound	58.7	Sound	31.22	Sound
699	92	63	334.596	16	2847	304.88	242.20	209.37	173.25	148.03	129.75	115.75	95.03	79.89	95.51	Sound	61.34	Sound	32.28	Sound
700	75	62	270.812	16	1742	403.51	309.79	263.96	216.21	184.16	161.34	143.89	117.93	98.88	139.55	Sound	79.8	Sound	40.27	Sound
701	99	62	357.472	20	3954	237.89	198.68	178.18	153.40	133.87	118.43	106.02	87.23	73.52	59.71	Sound	44.31	Sound	27.85	Sound
702	95	65	350.400	15	2764	305.30	238.36	203.66	166.86	142.18	124.71	111.45	91.78	77.30	101.64	Sound	61.48	Sound	30.73	Sound
703	95	64	347.964	20	2377	277.43	219.08	191.80	161.76	139.80	123.29	110.37	91.05	76.90	85.63	Sound	52	Sound	29.43	Sound
704	63	62	227.482	16	2233	433.96	350.34	305.02	253.75	217.11	190.19	169.47	138.85	116.60	128.94	Sound	87.91	Sound	47.64	Sound
705	72	68	271.014	16	3336	343.33	283.56	249.68	209.97	180.83	159.16	142.45	117.81	99.85	93.65	Sound	68.85	Sound	38.38	Sound
706	103	60	366.467	18	2129	290.39	222.63	191.13	157.99	135.05	118.35	105.46	86.24	72.21	99.26	Sound	56.08	Sound	29.59	Sound
707	68	66	252.542	16	2599	384.95	312.22	272.50	227.36	195.05	171.36	153.19	126.36	106.76	112.45	Sound	77.45	Sound	41.86	Sound
708	94	63	341.870	14	3953	298.06	240.41	207.57	170.88	145.44	127.19	113.32	92.89	78.01	90.49	Sound	62.13	Sound	32.12	Sound
709	85	63	309.138	20	1262	363.01	265.48	225.67	186.48	159.97	140.79	125.97	103.72	87.28	137.34	Sound	65.7	Sound	34	Sound
710	82	66	304.536	19	3510	283.30	236.60	211.58	181.45	158.07	139.86	125.38	103.64	87.78	71.72	Sound	53.51	Sound	32.69	Sound
711	69	67	257.996	16	1895	407.86	318.20	273.00	224.91	192.28	169.04	151.36	125.14	105.79	134.86	Sound	80.72	Sound	40.92	Sound
712	100	66	371.385	18	2170	284.49	218.10	187.33	155.14	133.06	117.13	104.91	86.70	73.27	97.16	Sound	54.27	Sound	28.15	Sound
713	91	64	333.313	18	2746	290.40	232.73	203.55	170.76	146.99	129.30	115.57	95.17	80.27	86.85	Sound	56.56	Sound	31.42	Sound
714	71	66	263.684	17	3898	327.71	277.31	247.97	211.89	183.94	162.32	145.24	119.79	101.32	79.74	Sound	64.03	Sound	38.7	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
715	102	68	383.936	15	3707	265.07	211.69	182.73	150.89	128.97	113.32	101.45	83.94	71.06	82.34	Sound	53.76	Sound	27.52	Sound
716	96	60	341.562	17	2902	290.60	232.48	202.33	168.55	144.30	126.36	112.48	91.91	76.98	88.27	Sound	58.03	Sound	31.82	Sound
717	101	62	364.693	14	3561	290.29	230.03	196.94	161.09	136.81	119.58	106.50	87.16	73.05	93.35	Sound	60.13	Sound	30.31	Sound
718	92	63	334.596	21	2315	280.96	222.92	196.19	166.49	144.37	127.48	114.15	94.12	79.45	84.77	Sound	51.82	Sound	30.22	Sound
719	67	62	241.925	14	2588	428.92	343.22	295.19	242.23	205.89	179.93	160.19	131.09	109.90	133.73	Sound	89.3	Sound	45.7	Sound
720	78	60	277.519	19	1883	358.50	281.89	245.40	205.39	176.51	154.96	138.15	113.10	94.85	113.1	Sound	68.89	Sound	38.36	Sound
721	101	69	382.678	18	3216	250.43	201.05	176.03	147.95	127.67	112.65	101.06	83.87	71.25	74.4	Sound	48.36	Sound	26.61	Sound
722	72	64	263.720	21	2567	324.29	268.04	240.04	206.85	180.84	160.33	143.84	118.85	100.53	84.25	Sound	59.2	Sound	37	Sound
723	101	62	364.693	18	3285	259.97	210.54	184.96	155.67	134.08	117.83	105.15	86.29	72.58	75.01	Sound	50.88	Sound	28.93	Sound
724	67	70	255.505	17	3274	348.34	290.77	258.30	219.45	190.16	167.95	150.63	124.99	106.30	90.04	Sound	68.14	Sound	39.53	Sound
725	64	69	242.489	16	3796	362.74	306.39	272.87	231.96	200.83	177.14	158.65	131.31	111.46	89.87	Sound	72.04	Sound	42.18	Sound
726	68	60	241.940	14	2178	446.52	350.76	299.07	243.78	206.66	180.35	160.35	130.73	109.18	147.45	Sound	92.41	Sound	46.31	Sound
727	84	65	309.828	14	1006	439.99	300.25	243.43	194.52	165.73	145.94	130.63	107.19	89.67	196.56	Sound	77.7	Sound	35.1	Sound
728	93	66	345.388	20	2505	274.47	218.37	191.81	162.24	140.50	124.10	111.26	92.07	77.99	82.66	Sound	51.31	Sound	29.24	Sound
729	95	62	343.028	20	3089	261.60	213.69	189.75	161.87	140.56	124.06	110.95	91.26	76.89	71.85	Sound	49.19	Sound	29.61	Sound
730	99	66	367.671	15	3761	273.81	220.10	190.54	157.62	134.69	118.18	105.61	87.08	73.52	83.27	Sound	55.85	Sound	29.08	Sound
731	82	62	296.088	18	2750	317.76	258.22	227.19	191.47	165.00	145.03	129.43	106.22	89.34	90.57	Sound	62.19	Sound	35.57	Sound
732	75	70	286.013	16	2258	360.37	283.49	244.11	201.74	172.81	152.19	136.55	113.42	96.33	116.26	Sound	71.3	Sound	36.26	Sound
733	81	66	300.822	19	1753	342.91	263.96	227.95	189.95	163.38	143.98	129.01	106.69	90.24	114.96	Sound	64.57	Sound	34.37	Sound
734	98	69	371.311	17	1106	351.00	239.87	197.07	159.35	136.34	120.46	108.28	89.76	75.81	153.93	Sound	60.73	Sound	28.06	Sound
735	101	63	367.328	17	1687	315.56	232.47	195.84	159.81	136.29	119.67	106.93	87.83	73.72	119.72	Sound	59.55	Sound	29.36	Sound
736	72	60	256.171	18	2052	381.97	305.19	266.49	223.06	191.52	167.96	149.63	122.38	102.58	115.48	Sound	74.97	Sound	41.89	Sound
737	92	68	346.295	15	3383	293.10	234.37	202.43	167.23	142.96	125.60	112.44	93.03	78.76	90.67	Sound	59.47	Sound	30.52	Sound
738	73	60	259.729	16	1420	439.02	329.87	278.65	226.93	192.88	168.75	150.27	122.65	102.43	160.37	Sound	85.77	Sound	42.61	Sound
739	64	63	232.763	18	3304	363.90	308.59	277.06	237.99	207.17	182.94	163.57	134.46	113.31	86.84	Sound	69.89	Sound	43.6	Sound
740	87	70	331.775	20	2061	297.19	231.52	201.66	169.61	146.71	129.78	116.67	97.13	82.70	95.53	Sound	54.95	Sound	30.04	Sound
741	91	62	328.585	15	1921	350.56	263.68	221.87	179.97	152.89	133.91	119.45	97.80	81.87	128.69	Sound	68.98	Sound	33.44	Sound
742	80	61	286.760	18	2894	321.65	263.77	233.02	197.03	169.99	149.40	133.23	109.14	91.67	88.63	Sound	63.03	Sound	36.76	Sound
743	91	67	340.255	18	850	398.44	264.00	215.56	174.25	149.12	131.65	118.19	97.66	82.22	182.88	Sound	66.44	Sound	30.93	Sound
744	88	67	329.038	15	2194	337.41	257.95	218.50	178.15	151.83	133.45	119.53	98.78	83.38	118.91	Sound	66.67	Sound	32.3	Sound
745	80	64	293.023	20	2302	317.12	254.88	224.79	190.71	165.27	145.88	130.61	107.75	91.03	92.33	Sound	59.52	Sound	34.66	Sound
746	66	70	251.691	20	1873	372.67	297.33	261.52	221.62	192.30	170.24	153.04	127.38	108.50	111.15	Sound	69.22	Sound	39.26	Sound
747	93	65	343.024	18	817	402.24	264.01	214.91	173.46	148.28	130.73	117.15	96.43	80.90	187.33	Sound	66.63	Sound	31.13	Sound
748	97	62	350.250	19	3498	256.29	210.93	187.30	159.46	138.21	121.82	108.85	89.42	75.29	68.99	Sound	49.09	Sound	29.36	Sound
749	67	70	255.505	14	1677	448.56	338.71	284.22	230.12	196.03	172.68	155.08	128.73	109.02	164.34	Sound	88.19	Sound	40.95	Sound
750	67	69	253.856	15	2226	409.37	323.37	277.76	228.60	195.31	171.74	153.92	127.59	108.14	131.61	Sound	82.45	Sound	41.39	Sound
751	71	62	256.368	17	773	509.93	349.95	287.79	232.31	197.92	173.87	155.30	127.11	106.20	222.14	Warning	89.87	Sound	42.62	Sound
752	86	61	308.267	17	800	444.33	296.32	241.50	194.29	165.47	145.29	129.64	105.81	88.15	202.83	Warning	76.03	Sound	35.83	Sound
753	101	61	362.034	20	1699	297.66	222.77	190.94	158.50	136.01	119.53	106.75	87.61	73.55	106.72	Sound	54.93	Sound	29.26	Sound
754	102	60	362.909	17	929	379.39	252.39	205.52	165.24	140.62	123.35	109.95	89.55	74.48	173.87	Sound	64.9	Sound	30.67	Sound
755	79	66	293.394	16	3584	318.39	262.82	231.32	194.39	167.25	147.03	131.40	108.34	91.56	87.07	Sound	64.07	Sound	35.85	Sound
756	103	68	387.700	21	1974	264.05	200.45	173.43	145.46	125.73	111.18	99.89	82.99	70.49	90.62	Sound	47.7	Sound	25.844	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
757	78	62	281.644	15	3758	338.15	279.36	245.00	204.68	175.23	153.38	136.54	111.73	93.80	93.15	Sound	69.77	Sound	38.69	Sound
758	78	60	277.519	18	2153	355.48	282.95	246.66	206.19	176.94	155.16	138.22	113.05	94.75	108.82	Sound	69.72	Sound	38.72	Sound
759	67	69	253.856	17	2488	374.20	303.91	266.47	223.75	192.82	169.96	152.35	126.33	107.27	107.73	Sound	73.65	Sound	40.47	Sound
760	70	61	250.915	19	1808	389.85	308.88	269.78	226.42	194.88	171.26	152.82	125.33	105.28	120.07	Sound	74.9	Sound	42.06	Sound
761	96	60	341.562	20	1963	297.65	229.65	199.13	166.56	143.24	125.86	112.30	92.02	77.20	98.52	Sound	55.89	Sound	30.94	Sound
762	90	66	334.247	21	2598	271.60	218.65	193.64	165.27	143.85	127.37	114.32	94.70	80.29	77.96	Sound	49.79	Sound	29.53	Sound
763	87	66	323.105	14	3110	327.15	258.69	221.32	181.12	154.16	135.17	120.82	99.60	83.99	105.83	Sound	67.16	Sound	33.34	Sound
764	70	67	261.735	17	3395	340.12	284.33	252.71	214.71	185.90	163.94	146.75	121.24	102.69	87.41	Sound	66.81	Sound	39.15	Sound
765	74	63	269.132	21	807	452.79	313.45	262.19	215.33	184.65	162.66	145.65	119.96	100.87	190.6	Sound	77.54	Sound	39	Sound
766	88	60	313.098	21	3187	270.64	224.80	201.69	173.98	152.02	134.55	120.41	98.90	83.18	68.95	Sound	49.67	Sound	31.61	Sound
767	63	63	229.126	18	895	517.35	373.12	313.24	255.81	218.45	191.99	171.65	141.06	118.41	204.11	Warning	94.79	Sound	46.8	Sound
768	97	67	362.690	18	3593	254.06	207.83	183.48	155.23	134.24	118.42	106.08	87.74	74.35	70.58	Sound	49.24	Sound	28.16	Sound
769	93	67	347.734	16	2359	308.52	238.31	203.61	167.29	142.94	125.68	112.56	93.07	78.66	104.91	Sound	60.67	Sound	30.38	Sound
770	86	67	321.560	15	1826	358.75	268.52	225.59	183.10	156.00	137.21	122.96	101.60	85.70	133.16	Sound	69.59	Sound	33.04	Sound
771	77	67	287.908	20	2172	325.47	260.21	229.03	194.10	168.27	148.75	133.46	110.60	93.83	96.44	Sound	60.76	Sound	34.81	Sound
772	97	67	362.690	20	1091	340.06	235.00	195.88	160.38	137.59	121.49	109.10	90.39	76.38	144.18	Sound	58.29	Sound	28.49	Sound
773	88	63	320.049	14	779	460.38	298.70	238.83	190.35	162.25	142.72	127.44	103.94	86.47	221.55	Warning	76.58	Sound	34.81	Sound
774	70	67	261.735	17	1475	417.77	316.89	269.97	221.93	189.88	167.13	149.79	123.92	104.75	147.8	Sound	80.09	Sound	40.09	Sound
775	78	65	287.697	19	3684	292.37	246.71	221.69	190.99	166.75	147.65	132.33	109.25	92.40	70.68	Sound	54.94	Sound	34.42	Sound
776	92	70	350.842	18	2631	280.94	222.42	193.60	161.99	139.59	123.20	110.61	91.96	78.21	87.34	Sound	54.01	Sound	28.98	Sound
777	74	62	267.201	16	3437	346.90	287.89	253.99	213.72	183.71	161.12	143.54	117.55	98.75	92.91	Sound	70.28	Sound	40.17	Sound
778	97	66	360.244	21	3518	236.83	195.80	175.39	151.22	132.32	117.45	105.50	87.42	74.15	61.44	Sound	43.07	Sound	26.82	Sound
779	79	69	299.322	21	3029	281.66	233.72	209.73	181.22	158.87	141.28	127.16	105.80	90.10	71.93	Sound	50.86	Sound	31.71	Sound
780	68	70	259.318	17	1766	400.40	311.38	267.95	221.85	190.34	167.80	150.65	125.21	106.38	132.45	Sound	77.61	Sound	39.69	Sound
781	101	60	359.351	20	2051	283.48	218.50	189.38	158.36	136.18	119.66	106.76	87.48	73.39	94.1	Sound	53.2	Sound	29.42	Sound
782	100	63	363.692	18	950	368.70	246.83	202.16	163.39	139.47	122.71	109.76	90.05	75.37	166.54	Sound	62.69	Sound	29.71	Sound
783	92	65	339.335	15	1277	377.50	265.97	218.76	175.90	149.81	131.81	118.00	97.03	81.37	158.74	Sound	68.95	Sound	31.81	Sound
784	98	61	351.281	19	1816	305.02	230.92	198.06	164.08	140.56	123.41	110.14	90.31	75.78	106.96	Sound	57.5	Sound	30.42	Sound
785	65	65	239.748	17	3610	359.22	304.49	272.50	233.00	202.28	178.43	159.56	131.40	110.98	86.72	Sound	70.22	Sound	42.72	Sound
786	71	62	256.368	14	2934	398.82	321.38	277.33	228.16	194.06	169.57	150.94	123.50	103.56	121.49	Sound	83.27	Sound	43.12	Sound
787	101	67	377.646	14	3538	281.24	221.69	189.40	154.89	131.88	115.73	103.54	85.51	72.21	91.84	Sound	57.52	Sound	28.34	Sound
788	64	67	239.301	16	2470	405.53	328.98	287.17	239.67	205.72	180.85	161.79	133.66	113.11	118.36	Sound	81.45	Sound	43.93	Sound
789	98	69	371.311	17	2116	293.02	222.53	189.68	156.05	133.65	117.79	105.72	87.75	74.40	103.34	Sound	56.03	Sound	27.93	Sound
790	62	66	230.259	17	1720	442.41	348.30	301.19	250.04	214.37	188.51	168.69	139.30	117.71	141.22	Sound	86.82	Sound	45.68	Sound
791	83	61	297.513	15	1528	399.94	295.57	247.05	199.66	169.48	148.39	132.26	108.05	90.23	152.89	Sound	77.57	Sound	37.22	Sound
792	86	70	327.961	21	711	415.68	267.77	218.61	177.95	152.95	135.49	122.05	101.59	86.11	197.07	Sound	65.66	Sound	30.9	Sound
793	91	60	323.772	19	1441	345.78	255.85	217.55	179.19	153.19	134.38	119.84	98.06	82.08	128.23	Sound	64.36	Sound	33.35	Sound
794	83	69	314.478	20	2959	280.41	230.07	204.79	175.30	152.79	135.44	121.72	101.15	86.07	75.62	Sound	52	Sound	31.07	Sound
795	97	63	352.781	19	2271	285.32	222.73	193.39	161.66	139.04	122.30	109.32	89.96	75.78	91.93	Sound	54.35	Sound	29.72	Sound
796	76	67	284.169	18	2555	332.21	268.86	236.21	199.02	171.80	151.46	135.68	112.25	95.10	96	Sound	64.41	Sound	36.12	Sound
797	102	69	386.467	14	1589	331.25	234.43	192.21	154.17	131.48	116.05	104.25	86.28	72.76	139.04	Sound	60.73	Sound	27.23	Sound
798	72	60	256.171	18	3857	326.77	278.58	250.73	215.78	187.88	165.73	147.90	121.01	101.53	76.04	Sound	62.85	Sound	39.98	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
799	80	70	305.080	18	3606	288.34	240.17	213.86	182.43	158.53	140.24	125.90	104.55	88.98	74.48	Sound	55.33	Sound	32.63	Sound
800	97	65	357.777	20	3692	241.44	200.16	178.95	153.69	134.06	118.70	106.44	87.96	74.45	62.49	Sound	44.89	Sound	27.62	Sound
801	64	60	227.708	21	3060	345.89	295.32	268.33	234.39	206.41	183.49	164.59	135.42	113.97	77.56	Sound	61.92	Sound	41.82	Sound
802	68	67	254.257	16	2805	375.79	306.99	268.86	225.01	193.33	169.99	152.06	125.60	106.29	106.93	Sound	75.53	Sound	41.27	Sound
803	66	61	236.577	20	1662	405.92	321.78	282.10	238.00	205.50	180.90	161.57	132.64	111.52	123.82	Sound	76.6	Sound	43.93	Sound
804	88	60	313.098	17	3101	305.37	248.50	217.95	182.70	156.81	137.41	122.31	99.93	83.73	87.42	Sound	61.14	Sound	34.5	Sound
805	100	69	378.889	17	2927	265.78	210.02	181.93	151.31	129.95	114.49	102.68	85.19	72.30	83.85	Sound	51.98	Sound	27.27	Sound
806	85	63	309.138	18	3554	288.41	239.70	213.11	181.33	157.04	138.35	123.61	101.59	85.61	75.3	Sound	56.07	Sound	33.43	Sound
807	79	62	285.255	16	1695	390.67	296.81	251.85	205.77	175.19	153.50	136.93	112.22	94.06	138.82	Sound	76.66	Sound	38.26	Sound
808	76	64	278.371	14	1334	445.84	323.15	267.03	214.44	182.20	160.02	143.06	117.40	98.34	178.81	Sound	84.83	Sound	39.14	Sound
809	82	62	296.088	16	2882	334.08	269.45	234.50	195.02	166.83	146.15	130.23	106.70	89.60	99.58	Sound	67.67	Sound	36.6	Sound
810	97	66	360.244	17	1894	309.42	232.45	197.28	161.78	138.29	121.66	108.96	89.99	75.93	112.14	Sound	58.99	Sound	29.33	Sound
811	75	68	282.306	14	3265	358.79	289.21	249.70	205.80	175.61	154.12	137.88	114.01	96.48	109.09	Sound	74.09	Sound	37.73	Sound
812	93	66	345.388	14	2428	328.23	250.21	210.72	170.78	145.19	127.47	114.07	94.05	79.20	117.51	Sound	65.53	Sound	31.12	Sound
813	85	63	309.138	21	1620	329.67	251.54	217.98	182.83	157.75	139.07	124.48	102.62	86.55	111.69	Sound	60.23	Sound	33.27	Sound
814	84	66	311.964	21	1195	359.14	260.20	221.23	183.44	157.87	139.36	125.06	103.57	87.61	137.91	Sound	63.36	Sound	32.81	Sound
815	69	68	259.722	19	3489	319.20	270.53	243.65	210.48	184.20	163.45	146.81	121.72	103.37	75.55	Sound	59.45	Sound	37.39	Sound
816	85	65	313.516	20	2301	301.66	240.39	211.27	178.76	154.77	136.63	122.41	101.14	85.56	90.39	Sound	56.5	Sound	32.36	Sound
817	67	66	248.828	15	3201	384.19	316.16	276.81	231.12	198.13	173.89	155.31	127.97	108.09	107.38	Sound	78.68	Sound	42.82	Sound
818	102	67	381.385	16	3834	256.03	207.11	180.55	150.53	129.15	113.54	101.57	83.92	71.01	75.48	Sound	51.4	Sound	27.58	Sound
819	94	64	344.301	18	2824	281.45	225.43	197.12	165.35	142.32	125.18	111.89	92.14	77.72	84.33	Sound	54.8	Sound	30.43	Sound
820	67	62	241.925	18	821	511.27	359.91	299.63	243.65	207.85	182.59	163.12	133.75	111.99	211.64	Warning	91.78	Sound	44.73	Sound
821	75	63	272.769	17	2835	345.46	282.52	248.41	208.85	179.70	157.84	140.85	115.67	97.38	97.05	Sound	68.71	Sound	38.85	Sound
822	63	60	224.150	20	2043	399.67	326.94	290.45	247.77	215.00	189.54	169.26	138.76	116.56	109.22	Sound	75.45	Sound	45.74	Sound
823	74	61	265.253	14	1366	461.62	338.21	280.47	225.31	190.99	167.21	149.02	121.61	101.42	181.15	Sound	89.48	Sound	41.97	Sound
824	67	62	241.925	14	3958	391.05	326.08	286.34	239.05	204.39	178.70	158.94	129.92	109.01	104.71	Sound	81.95	Sound	45.45	Sound
825	63	61	225.823	17	2845	399.26	332.96	295.46	250.36	216.05	189.76	169.10	138.37	116.16	103.8	Sound	79.41	Sound	46.95	Sound
826	74	68	278.542	17	3615	319.23	266.85	237.19	201.57	174.59	154.05	137.99	114.17	96.84	82.04	Sound	62.6	Sound	36.6	Sound
827	101	66	375.099	16	3677	262.15	211.51	184.16	153.35	131.46	115.49	103.25	85.17	71.96	77.99	Sound	52.7	Sound	28.21	Sound
828	65	65	239.748	20	1733	396.12	315.06	276.67	233.94	202.49	178.74	160.13	132.32	111.92	119.45	Sound	74.18	Sound	42.36	Sound
829	73	68	274.778	16	2747	355.44	287.32	250.40	208.75	179.17	157.60	141.11	116.77	98.95	105.04	Sound	71.23	Sound	38.06	Sound
830	93	63	338.233	19	1624	322.96	241.72	206.46	170.68	146.28	128.62	115.00	94.63	79.61	116.5	Sound	60.18	Sound	31.28	Sound
831	82	68	308.655	15	1118	417.84	292.32	239.92	192.94	164.64	145.24	130.39	107.78	90.79	177.92	Sound	75.28	Sound	34.25	Sound
832	86	60	305.982	17	2060	343.80	267.35	229.90	189.81	162.01	141.82	126.28	103.19	86.36	113.9	Sound	67.89	Sound	35.73	Sound
833	64	64	234.418	19	1236	453.33	344.07	295.47	245.16	210.42	185.16	165.67	136.56	115.12	157.86	Sound	85.05	Sound	44.75	Sound
834	76	70	289.826	15	1187	430.18	306.76	253.35	204.25	174.39	153.98	138.45	114.89	97.15	176.83	Sound	78.96	Sound	35.94	Sound
835	100	70	381.350	15	2393	294.36	223.14	188.40	153.42	130.92	115.34	103.58	86.03	72.92	105.96	Sound	57.48	Sound	27.34	Sound
836	83	70	316.521	15	2718	329.53	259.63	222.77	183.23	156.59	137.79	123.59	102.61	87.09	106.76	Sound	66.18	Sound	33	Sound
837	77	69	291.745	15	1675	393.49	294.83	247.82	201.28	171.66	151.20	135.72	112.52	95.20	145.67	Sound	76.16	Sound	35.94	Sound
838	76	65	280.320	21	1221	384.05	284.49	243.84	203.13	174.98	154.38	138.42	114.47	96.75	140.21	Sound	68.86	Sound	36.56	Sound
839	66	61	236.577	20	2757	354.91	297.97	267.85	231.09	201.86	178.60	159.82	131.32	110.52	87.06	Sound	65.99	Sound	42.04	Sound
840	66	64	241.744	20	892	478.66	343.92	290.51	239.28	205.21	180.74	161.87	133.49	112.44	188.15	Sound	85.3	Sound	43.34	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
841	82	67	306.604	21	3610	264.65	223.10	201.61	175.33	154.23	137.30	123.56	102.58	87.14	63.04	Sound	47.38	Sound	30.67	Sound
842	85	60	302.425	17	800	450.65	301.76	246.21	198.08	168.55	147.84	131.78	107.35	89.31	204.44	Warning	77.66	Sound	36.77	Sound
843	94	61	336.943	16	1650	347.68	257.12	215.94	175.38	149.11	130.62	116.45	95.22	79.59	131.74	Sound	66.83	Sound	32.66	Sound
844	102	64	373.604	15	3055	284.29	222.93	190.83	156.50	133.31	116.83	104.30	85.74	72.11	93.46	Sound	57.52	Sound	29.01	Sound
845	76	62	274.423	14	1356	450.02	327.75	271.24	217.80	184.78	161.97	144.50	118.14	98.66	178.78	Sound	86.46	Sound	40.28	Sound
846	71	69	269.011	18	981	447.08	318.24	266.05	217.16	186.01	164.23	147.61	122.54	103.75	181.03	Sound	80.04	Sound	38.4	Sound
847	65	63	236.400	20	2553	361.69	301.31	269.94	232.21	202.61	179.30	160.59	132.33	111.69	91.75	Sound	67.33	Sound	42.02	Sound
848	93	65	343.024	14	723	446.17	281.24	223.26	177.99	152.10	134.09	119.96	98.13	81.80	222.91	Warning	71.16	Sound	32.14	Sound
849	70	64	256.395	17	799	503.94	347.78	286.56	231.63	197.60	173.87	155.60	127.87	107.20	217.38	Warning	88.96	Sound	42	Sound
850	82	69	310.689	16	3283	309.96	252.01	220.24	184.05	158.16	139.22	124.72	103.36	87.71	89.72	Sound	62.08	Sound	33.44	Sound
851	62	65	228.682	15	807	569.62	397.14	325.56	261.50	222.77	196.06	175.53	144.28	120.95	244.06	Warning	102.79	Warning	47.24	Sound
852	82	62	296.088	18	3804	293.32	246.45	220.25	188.29	163.42	144.05	128.64	105.57	88.83	73.07	Sound	56.83	Sound	34.78	Sound
853	95	62	343.028	14	3517	305.33	243.23	208.75	171.04	145.32	127.00	113.09	92.55	77.58	96.58	Sound	63.43	Sound	32.23	Sound
854	97	70	369.910	20	1530	300.32	219.83	187.01	154.84	133.29	117.85	106.01	88.28	75.06	113.31	Sound	53.72	Sound	27.28	Sound
855	82	63	298.227	14	3667	337.12	273.61	236.95	195.54	166.55	145.64	129.73	106.33	89.31	100.17	Sound	70.4	Sound	36.82	Sound
856	78	68	293.598	16	3674	315.72	261.18	230.15	193.68	166.85	146.87	131.45	108.71	92.14	85.57	Sound	63.3	Sound	35.4	Sound
857	70	65	258.190	19	3024	333.10	278.66	249.37	213.97	186.40	164.86	147.70	121.92	103.12	83.73	Sound	62.97	Sound	38.7	Sound
858	64	63	232.763	20	2599	364.19	304.44	273.16	235.33	205.51	181.94	162.99	134.32	113.37	91.03	Sound	67.65	Sound	42.52	Sound
859	92	63	334.596	21	1512	318.61	237.52	204.03	170.12	146.47	129.06	115.53	95.23	80.26	114.58	Sound	57.56	Sound	30.94	Sound
860	74	63	269.132	15	2205	394.90	309.79	265.20	217.45	185.12	162.11	144.60	118.64	99.63	129.7	Sound	80.08	Sound	40.52	Sound
861	94	70	358.469	21	876	363.60	240.70	198.34	162.06	139.32	123.38	111.12	92.53	78.50	165.26	Sound	59.02	Sound	28.2	Sound
862	84	62	303.309	14	3590	334.63	270.58	233.88	192.66	163.93	143.24	127.49	104.31	87.47	100.75	Sound	69.95	Sound	36.44	Sound
863	84	64	307.674	14	1982	376.70	284.14	238.26	192.56	163.51	143.39	128.11	105.22	88.30	138.44	Sound	74.75	Sound	35.4	Sound
864	78	69	295.533	19	1242	382.16	279.69	237.04	195.33	167.71	148.09	133.08	110.58	93.80	145.12	Sound	69.33	Sound	34.63	Sound
865	88	69	333.422	18	3820	266.11	220.99	196.48	167.35	145.27	128.42	115.20	95.55	81.20	69.63	Sound	51.21	Sound	30.07	Sound
866	62	66	230.259	20	3340	343.69	294.51	267.42	233.28	205.41	182.84	164.41	136.20	115.48	76.27	Sound	62.01	Sound	41	Sound
867	71	66	263.684	21	760	467.42	320.80	267.60	219.65	188.61	166.53	149.49	123.74	104.49	199.82	Sound	78.99	Sound	39.12	Sound
868	67	62	241.925	14	3569	399.91	330.35	288.64	239.90	204.76	178.96	159.19	130.17	109.20	111.27	Sound	83.88	Sound	45.57	Sound
869	87	70	331.775	17	1484	349.43	255.98	215.30	175.84	150.50	132.83	119.41	99.26	84.17	134.13	Sound	64.8	Sound	31.09	Sound
870	67	70	255.505	21	1436	388.40	299.16	260.32	219.29	189.98	168.23	151.33	126.09	107.42	128.08	Sound	70.34	Sound	38.65	Sound
871	75	63	272.769	18	2814	335.71	275.91	244.03	206.65	178.55	157.16	140.37	115.38	97.21	91.68	Sound	65.48	Sound	38.18	Sound
872	75	70	286.013	20	3372	290.60	244.15	219.68	189.98	166.55	148.08	133.27	110.91	94.51	70.92	Sound	53.13	Sound	33.28	Sound
873	91	70	347.029	15	894	406.91	267.79	215.82	172.90	148.00	130.96	117.79	97.53	82.19	191.09	Sound	67.82	Sound	30.21	Sound
874	73	65	269.255	20	3660	298.98	254.71	230.62	200.54	176.20	156.60	140.65	116.33	98.48	68.36	Sound	54.42	Sound	35.55	Sound
875	95	65	350.400	16	1717	332.89	246.01	206.62	168.02	143.22	125.88	112.65	92.80	78.06	126.27	Sound	63.4	Sound	30.57	Sound
876	71	67	265.474	14	1805	429.77	326.19	274.24	222.11	188.93	166.03	148.72	122.83	103.58	155.53	Sound	85.31	Sound	40.21	Sound
877	66	64	241.744	15	2093	433.60	342.27	293.83	241.45	205.77	180.31	160.95	132.29	111.29	139.77	Sound	88.06	Sound	44.82	Sound
878	85	63	309.138	20	3981	264.38	224.12	202.41	175.51	153.85	136.48	122.38	100.90	85.18	61.97	Sound	48.56	Sound	31.47	Sound
879	87	68	327.475	20	3722	256.64	214.86	192.99	166.56	145.80	129.45	116.34	96.56	82.07	63.65	Sound	47.19	Sound	29.46	Sound
880	66	70	251.691	18	1002	465.27	336.10	282.44	231.16	198.13	175.00	157.37	130.88	111.03	182.83	Sound	84.31	Sound	40.76	Sound
881	88	65	324.581	17	1040	394.45	273.52	225.74	182.63	155.89	137.27	122.96	101.24	85.03	168.71	Sound	69.85	Sound	32.93	Sound
882	69	64	252.732	17	3976	337.61	287.29	257.61	220.65	191.70	169.08	151.12	124.26	104.79	80	Sound	65.91	Sound	40.58	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
883	78	69	295.533	17	3579	305.53	253.66	224.73	190.42	164.75	145.38	130.30	107.98	91.71	80.8	Sound	59.98	Sound	34.45	Sound	
884	65	69	246.278	18	1721	408.00	320.21	277.68	231.67	199.36	175.84	157.78	130.99	111.24	130.32	Sound	78.32	Sound	41.58	Sound	
885	79	63	287.316	19	2137	337.01	268.04	234.52	197.19	169.99	149.62	133.73	110.04	92.74	102.49	Sound	64.53	Sound	36.26	Sound	
886	69	61	247.330	16	3057	378.62	313.03	275.62	231.45	198.70	174.09	154.97	126.69	106.26	103	Sound	76.92	Sound	43.73	Sound	
887	79	70	301.267	17	1625	366.01	275.75	234.33	192.47	164.86	145.41	130.63	108.60	92.18	131.68	Sound	69.47	Sound	34.23	Sound	
888	88	64	322.325	18	2102	318.99	248.29	214.52	178.31	152.97	134.47	120.22	99.02	83.46	104.47	Sound	61.55	Sound	32.75	Sound	
889	83	69	314.478	19	2009	318.95	248.54	215.72	180.50	155.65	137.43	123.39	102.51	87.11	103.23	Sound	60.07	Sound	32.26	Sound	
890	69	62	249.147	14	3656	388.77	320.99	280.39	232.99	198.84	173.78	154.59	126.41	106.05	108.38	Sound	81.55	Sound	44.25	Sound	
891	85	66	315.678	14	1352	402.90	287.13	235.95	189.23	161.07	141.78	127.02	104.58	87.81	166.95	Sound	74.88	Sound	34.05	Sound	
892	76	62	274.423	19	3212	314.23	262.89	235.22	201.68	175.47	154.92	138.51	113.80	95.84	79.01	Sound	59.75	Sound	36.96	Sound	
893	99	66	367.671	19	2129	281.05	216.15	186.60	155.45	133.70	117.82	105.57	87.31	73.85	94.45	Sound	52.9	Sound	28.13	Sound	
894	91	70	347.029	15	1023	391.87	264.43	214.66	172.21	147.28	130.25	117.15	97.08	81.89	177.21	Sound	67.38	Sound	30.13	Sound	
895	90	64	329.650	20	1821	310.90	238.40	206.30	172.48	148.56	130.89	117.18	96.67	81.59	104.6	Sound	57.74	Sound	31.38	Sound	
896	82	67	306.604	15	3469	320.56	260.40	226.56	188.20	161.10	141.45	126.47	104.42	88.31	94	Sound	65.46	Sound	34.63	Sound	
897	88	68	331.239	16	1461	360.76	262.25	219.00	177.73	151.73	133.72	120.01	99.36	83.91	141.76	Sound	67.27	Sound	31.72	Sound	
898	78	67	291.648	21	3216	283.04	237.03	213.55	185.17	162.59	144.61	130.08	107.97	91.71	69.49	Sound	50.96	Sound	32.51	Sound	
899	72	66	267.397	18	1194	425.43	313.39	265.15	217.60	186.24	164.00	146.98	121.46	102.50	160.28	Sound	78.91	Sound	39.26	Sound	
900	77	64	282.034	16	1733	391.03	298.33	253.58	207.52	176.93	155.26	138.75	114.12	95.97	137.45	Sound	76.65	Sound	38.18	Sound	
901	102	61	365.619	18	3737	251.48	206.51	182.55	154.43	133.28	117.14	104.47	85.58	71.89	68.93	Sound	49.27	Sound	28.81	Sound	
902	75	68	282.306	15	2768	359.23	287.37	248.25	205.11	175.35	154.06	137.91	114.10	96.60	110.98	Sound	72.9	Sound	37.44	Sound	
903	84	61	301.098	14	798	479.29	316.12	253.82	202.22	171.99	150.94	134.51	109.32	90.71	225.47	Warning	81.83	Sound	37.48	Sound	
904	87	66	323.105	15	719	457.85	293.14	234.48	187.45	160.21	141.36	126.66	104.01	87.00	223.37	Warning	74.27	Sound	33.55	Sound	
905	103	65	379.908	16	1649	316.87	229.93	191.86	155.53	132.56	116.57	104.35	85.93	72.23	125.01	Sound	59.3	Sound	28.21	Sound	
906	73	64	267.383	14	1531	445.31	330.77	275.74	222.23	188.73	165.60	148.00	121.53	101.91	169.57	Sound	87.01	Sound	40.73	Sound	
907	93	62	335.807	15	3986	291.17	237.80	207.37	172.39	147.30	128.89	114.76	93.93	78.84	83.8	Sound	60.07	Sound	32.54	Sound	
908	79	69	299.322	17	2987	315.97	257.13	225.65	189.62	163.46	144.09	129.16	107.09	90.94	90.32	Sound	62.19	Sound	34.3	Sound	
909	100	61	358.450	15	2594	305.86	236.46	201.15	164.15	139.46	121.96	108.61	88.79	74.28	104.71	Sound	61.69	Sound	30.85	Sound	
910	66	65	243.436	21	2301	353.82	291.49	260.67	224.39	196.11	173.90	156.09	129.15	109.39	93.15	Sound	64.56	Sound	40.02	Sound	
911	66	60	234.824	21	3357	330.08	283.40	258.18	226.16	199.53	177.57	159.38	131.21	110.45	71.9	Sound	58.65	Sound	40.15	Sound	
912	65	67	243.040	21	2858	333.97	281.51	254.37	221.21	194.58	173.22	155.87	129.41	109.94	79.6	Sound	59.79	Sound	38.71	Sound	
913	70	67	261.735	17	1881	392.58	307.55	265.42	220.07	188.68	166.02	148.70	123.00	104.07	127.16	Sound	76.74	Sound	39.98	Sound	
914	88	63	320.049	16	2129	338.27	260.80	222.60	182.59	155.66	136.47	121.81	100.02	84.01	115.67	Sound	66.94	Sound	33.85	Sound	
915	79	61	283.175	19	1417	381.89	287.71	246.32	203.81	174.54	153.23	136.76	112.14	94.07	135.57	Sound	71.78	Sound	37.78	Sound	
916	81	64	296.685	21	2334	305.45	246.31	218.25	186.30	162.06	143.34	128.49	106.12	89.73	87.2	Sound	56.19	Sound	33.57	Sound	
917	102	62	368.304	20	3899	233.53	194.15	173.76	149.30	130.15	115.08	102.99	84.73	71.41	59.77	Sound	43.61	Sound	27.16	Sound	
918	67	69	253.856	14	2264	421.96	330.66	281.79	230.15	196.09	172.35	154.48	128.01	108.40	140.17	Sound	85.7	Sound	41.61	Sound	
919	89	69	337.211	17	3637	275.27	225.86	198.98	167.76	144.82	127.70	114.46	94.88	80.58	76.29	Sound	54.16	Sound	30.36	Sound	
920	74	69	280.378	17	3941	310.92	261.84	233.61	199.27	172.97	152.80	136.98	113.48	96.38	77.31	Sound	60.64	Sound	35.99	Sound	
921	96	68	361.352	16	3335	275.42	220.69	191.56	159.19	136.49	120.05	107.50	88.98	75.39	83.86	Sound	55.07	Sound	28.99	Sound	
922	102	65	376.219	14	975	384.26	252.06	202.14	161.26	137.61	121.26	108.52	88.91	74.25	182.12	Sound	64.53	Sound	29.09	Sound	
923	80	60	284.635	16	3191	336.88	275.83	241.71	202.06	173.06	151.44	134.69	109.93	92.04	95.17	Sound	68.65	Sound	38.37	Sound	
924	83	63	301.864	16	2495	340.29	269.42	232.55	192.23	164.19	143.92	128.40	105.41	88.61	107.74	Sound	68.36	Sound	35.79	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
925	91	60	323.772	19	3171	279.09	229.23	203.33	172.86	149.61	131.67	117.46	96.17	80.72	75.76	Sound	53.72	Sound	32.15	Sound
926	103	69	390.256	16	2611	275.24	212.15	181.12	148.80	127.24	112.03	100.50	83.37	70.66	94.12	Sound	53.88	Sound	26.74	Sound
927	90	60	320.214	19	2418	301.95	240.66	210.69	177.12	152.49	133.94	119.43	97.77	82.02	91.26	Sound	58.2	Sound	33.06	Sound
928	94	61	336.943	20	2012	298.23	231.32	201.01	168.45	145.04	127.56	113.91	93.51	78.58	97.22	Sound	55.97	Sound	31.13	Sound
929	97	64	355.290	15	2128	321.63	242.61	204.40	166.01	141.21	123.88	110.70	90.99	76.42	117.23	Sound	63.19	Sound	30.51	Sound
930	103	60	366.467	15	3925	273.67	221.21	191.91	158.78	135.31	118.19	105.06	85.69	71.68	81.76	Sound	56.6	Sound	30.25	Sound
931	100	60	355.794	18	2897	273.87	219.25	191.61	160.49	137.83	120.89	107.70	88.08	73.83	82.26	Sound	53.78	Sound	30.13	Sound
932	63	60	224.150	20	1009	487.19	362.24	309.70	256.59	219.95	193.14	172.34	141.17	118.31	177.49	Sound	89.75	Sound	47.61	Sound
933	73	68	274.778	20	2877	312.39	259.33	232.03	199.52	174.29	154.59	138.89	115.27	97.96	80.36	Sound	57.74	Sound	35.4	Sound
934	70	67	261.735	16	2222	388.29	308.22	266.41	220.65	188.90	166.04	148.61	122.84	103.90	121.88	Sound	77.51	Sound	40.29	Sound
935	96	66	356.530	18	844	387.44	253.89	206.58	166.76	142.64	125.86	112.90	93.09	78.22	180.86	Sound	63.94	Sound	29.74	Sound
936	92	62	332.196	20	3728	255.04	213.31	191.43	164.92	143.98	127.40	114.05	93.85	79.10	63.61	Sound	47.45	Sound	29.93	Sound
937	69	66	256.256	19	1725	387.01	303.81	264.43	221.60	190.99	168.36	150.83	124.73	105.55	122.58	Sound	73.44	Sound	40.16	Sound
938	71	68	267.250	18	1629	390.13	300.74	258.90	214.84	184.51	162.63	145.87	120.94	102.51	131.23	Sound	74.39	Sound	38.64	Sound
939	103	60	366.467	20	1140	334.75	233.20	194.80	159.34	136.16	119.57	106.71	87.32	73.02	139.95	Sound	58.64	Sound	29.45	Sound
940	75	68	282.306	20	1502	365.71	278.72	240.68	201.11	173.44	153.19	137.55	114.20	96.92	125.03	Sound	67.24	Sound	35.89	Sound
941	78	68	293.598	18	1794	354.89	273.67	235.62	195.54	167.94	148.02	132.77	110.08	93.31	119.27	Sound	67.68	Sound	35.17	Sound
942	78	66	289.681	17	2180	351.00	276.59	239.28	198.70	170.37	149.81	134.06	110.71	93.55	111.72	Sound	68.91	Sound	36.31	Sound
943	88	67	329.038	21	3568	251.99	210.66	189.64	164.32	144.22	128.24	115.34	95.73	81.32	62.35	Sound	45.42	Sound	28.88	Sound
944	93	65	343.024	21	1637	305.12	229.40	197.72	165.29	142.56	125.80	112.79	93.28	78.87	107.4	Sound	55.16	Sound	29.77	Sound
945	100	65	368.843	20	1401	310.61	224.28	189.80	156.52	134.33	118.40	106.12	87.67	73.97	120.81	Sound	55.47	Sound	28.21	Sound
946	87	62	314.142	15	930	435.98	295.17	239.77	191.93	163.30	143.42	128.02	104.50	87.06	196.21	Sound	76.47	Sound	35.28	Sound
947	87	66	323.105	18	1863	328.16	251.12	215.53	178.41	153.00	134.68	120.63	99.70	84.24	112.63	Sound	62.53	Sound	32.37	Sound
948	66	62	238.314	19	2648	366.61	305.11	272.33	232.95	202.41	178.61	159.65	131.16	110.45	94.28	Sound	69.92	Sound	42.76	Sound
949	72	61	258.084	21	2820	321.99	269.45	242.57	209.97	183.90	163.03	146.07	120.21	101.26	79.42	Sound	58.67	Sound	37.83	Sound
950	92	68	346.295	21	907	367.60	247.18	204.76	167.61	144.00	127.33	114.50	95.06	80.46	162.84	Sound	60.76	Sound	29.5	Sound
951	62	63	225.489	16	2312	432.89	351.08	306.34	255.37	218.75	191.79	171.03	140.37	118.07	126.55	Sound	87.59	Sound	47.72	Sound
952	83	68	312.419	17	1027	405.55	282.30	233.31	189.00	161.59	142.61	128.07	106.03	89.47	172.24	Sound	71.72	Sound	33.52	Sound
953	68	66	252.542	15	3811	365.28	305.15	269.24	226.35	194.60	170.90	152.61	125.68	106.16	96.04	Sound	74.64	Sound	41.99	Sound
954	82	62	296.088	18	894	432.94	298.28	246.54	199.87	170.49	149.81	133.86	109.69	91.77	186.4	Sound	76.05	Sound	36.63	Sound
955	83	66	308.250	18	2804	305.66	247.72	217.76	183.53	158.40	139.57	124.94	103.20	87.32	87.9	Sound	59.36	Sound	33.46	Sound
956	99	60	352.236	14	2299	329.57	249.19	209.08	168.81	142.95	124.90	111.14	90.58	75.53	120.49	Sound	66.13	Sound	31.81	Sound
957	73	64	267.383	17	3289	338.16	281.30	249.38	211.25	182.46	160.56	143.40	117.93	99.45	88.78	Sound	66.92	Sound	39.06	Sound
958	85	70	324.148	17	2499	310.50	245.25	212.42	176.69	151.80	133.82	120.10	99.79	84.82	98.08	Sound	60.62	Sound	31.7	Sound
959	83	68	312.419	15	3817	308.85	252.81	220.79	184.02	157.76	138.62	124.01	102.53	86.84	88.06	Sound	63.03	Sound	33.75	Sound
183	99	60	352.236	14	2603	320.47	246.04	207.73	168.29	142.54	124.48	110.73	90.27	75.32	112.74	Sound	65.19	Sound	31.81	Sound
961	99	70	377.537	19	990	346.80	232.45	191.16	155.37	133.28	117.93	106.15	88.26	74.75	155.64	Sound	57.88	Sound	27.13	Sound
962	83	62	299.698	18	2252	331.28	262.62	228.58	190.95	163.96	143.98	128.49	105.46	88.66	102.7	Sound	64.62	Sound	35.47	Sound
963	97	61	347.696	20	3662	247.88	205.98	184.29	158.27	137.89	121.84	108.96	89.50	75.32	63.59	Sound	46.4	Sound	28.93	Sound
964	100	68	376.408	14	2467	305.29	230.59	193.50	156.60	133.28	117.23	105.12	86.96	73.43	111.79	Sound	60.22	Sound	28.16	Sound
965	68	66	252.542	21	2423	339.44	280.08	250.67	215.96	188.89	167.61	150.56	124.75	105.81	88.77	Sound	61.78	Sound	38.33	Sound
966	74	62	267.201	14	3300	376.35	305.61	264.72	218.42	185.95	162.48	144.60	118.29	99.21	111.63	Sound	78.77	Sound	41.35	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
967	100	70	381.350	17	1589	309.98	224.54	188.11	153.33	131.22	115.85	104.16	86.57	73.38	121.87	Sound	56.89	Sound	27.06	Sound
968	73	70	278.386	19	3998	292.43	249.33	225.24	195.22	171.26	152.24	136.95	113.85	96.95	67.19	Sound	53.98	Sound	34.31	Sound
969	83	70	316.521	16	1239	388.90	277.27	230.01	186.22	159.16	140.54	126.38	104.94	88.82	158.89	Sound	70.85	Sound	32.78	Sound
970	74	66	274.825	18	3841	308.54	261.23	234.41	201.34	175.41	155.13	138.98	114.75	97.13	74.13	Sound	59	Sound	36.43	Sound
971	93	68	350.060	14	2928	310.76	241.77	205.39	167.38	142.50	125.19	112.15	92.79	78.44	105.37	Sound	62.89	Sound	30.35	Sound
972	87	64	318.662	19	3448	275.56	228.69	203.88	174.28	151.47	133.78	119.74	98.68	83.34	71.68	Sound	52.41	Sound	31.73	Sound
973	91	61	326.189	15	3142	314.63	251.43	216.99	178.86	152.32	133.14	118.49	96.85	81.12	97.64	Sound	64.67	Sound	33.83	Sound
974	85	62	306.920	18	3967	282.55	237.54	212.35	181.58	157.63	138.95	124.09	101.83	85.69	70.2	Sound	54.72	Sound	33.54	Sound
975	98	67	366.429	15	2327	306.51	232.85	196.75	160.19	136.50	120.00	107.50	88.83	74.97	109.76	Sound	60.25	Sound	29	Sound
976	72	60	256.171	21	942	445.29	320.58	271.81	224.64	192.63	169.29	151.16	123.90	103.83	173.48	Sound	79.18	Sound	41.47	Sound
977	85	65	313.516	16	859	436.16	292.43	237.88	191.12	163.08	143.68	128.67	105.74	88.59	198.28	Sound	74.8	Sound	34.41	Sound
978	62	68	233.373	15	1266	499.27	371.27	311.16	252.31	215.08	189.36	169.86	140.58	118.72	188.11	Sound	96.08	Sound	45.22	Sound
979	74	62	267.201	15	997	482.00	339.39	279.04	224.12	190.49	167.16	149.21	121.97	101.80	202.96	Warning	88.55	Sound	41.28	Sound
980	74	67	276.691	18	1327	402.60	299.83	254.71	209.55	179.53	158.17	141.84	117.42	99.28	147.89	Sound	75.18	Sound	37.69	Sound
981	72	60	256.171	20	2015	363.77	292.49	257.92	218.60	189.07	166.45	148.58	121.78	102.27	105.85	Sound	68.85	Sound	40.49	Sound
982	101	64	369.941	21	3503	232.89	191.91	171.63	147.72	129.06	114.38	102.61	84.77	71.70	61.26	Sound	42.57	Sound	26.45	Sound
983	95	61	340.527	14	823	434.44	281.69	225.17	179.31	152.59	133.95	119.34	96.92	80.36	209.27	Warning	72.58	Sound	33.25	Sound
984	78	66	289.681	17	3391	315.21	260.88	230.74	195.12	168.51	148.40	132.74	109.51	92.62	84.47	Sound	62.23	Sound	35.77	Sound
985	98	63	356.418	19	1024	358.57	245.29	203.01	165.12	141.12	124.18	111.10	91.30	76.57	155.56	Sound	61.89	Sound	30.02	Sound
986	95	64	347.964	19	3500	257.07	211.71	188.08	160.25	139.04	122.72	109.81	90.50	76.42	68.99	Sound	49.04	Sound	29.23	Sound
987	90	65	331.958	15	3132	309.25	246.45	212.49	175.20	149.51	131.09	117.09	96.40	81.24	96.76	Sound	62.98	Sound	32.42	Sound
988	97	64	355.290	21	1813	288.91	219.52	189.94	159.19	137.36	121.16	108.54	89.62	75.69	98.97	Sound	52.58	Sound	28.82	Sound
989	62	60	220.592	16	2805	422.15	350.00	308.57	259.36	222.66	194.98	173.41	141.51	118.51	113.58	Sound	85.91	Sound	49.25	Sound
990	73	67	272.952	17	2790	345.22	281.72	247.53	208.14	179.36	157.94	141.37	116.85	98.95	97.69	Sound	68.17	Sound	37.99	Sound
991	70	60	249.055	21	3502	312.55	267.96	243.94	213.52	188.29	167.52	150.33	123.74	104.16	68.61	Sound	55.65	Sound	37.96	Sound
992	62	60	220.592	17	3382	390.53	331.62	296.93	253.78	219.92	193.43	172.34	140.79	118.02	93.6	Sound	77.01	Sound	47.58	Sound
993	79	67	295.387	20	3503	281.68	236.85	213.15	184.28	161.43	143.33	128.78	106.75	90.61	68.53	Sound	51.72	Sound	32.65	Sound
994	63	65	232.371	20	3728	332.34	287.29	261.98	229.53	202.63	180.59	162.44	134.48	113.88	70.36	Sound	59.35	Sound	40.19	Sound
995	72	66	267.397	20	3635	300.82	256.27	232.04	201.82	177.39	157.73	141.76	117.40	99.53	68.78	Sound	54.65	Sound	35.63	Sound
996	77	62	278.033	20	1001	420.14	300.65	253.56	208.55	178.61	157.08	140.44	115.40	96.89	166.58	Sound	74.95	Sound	38.17	Sound
997	65	70	247.878	15	1200	482.29	352.72	293.85	237.71	202.86	178.96	160.84	133.54	113.04	188.44	Sound	90.99	Sound	42.02	Sound
998	68	66	252.542	17	1151	458.57	337.22	283.96	231.86	198.07	174.32	156.19	128.98	108.74	174.61	Sound	85.89	Sound	41.88	Sound
999	71	65	261.878	17	713	513.41	345.26	282.19	227.55	194.30	171.19	153.36	126.17	105.84	231.22	Warning	87.89	Sound	40.94	Sound
1000	76	62	274.423	20	1750	359.17	281.09	245.16	206.06	177.70	156.45	139.83	114.98	96.80	114.01	Sound	67.46	Sound	37.87	Sound
1001	91	68	342.531	21	1042	352.59	244.52	204.73	168.43	144.82	128.02	115.09	95.59	80.98	147.86	Sound	59.91	Sound	29.73	Sound
1002	78	67	291.648	20	1069	396.57	284.43	240.16	197.91	169.97	150.02	134.69	111.63	94.44	156.41	Sound	70.19	Sound	35.28	Sound
1003	69	65	254.501	21	3345	310.31	264.40	240.08	209.75	184.95	164.78	148.24	122.81	104.08	70.23	Sound	55.13	Sound	36.71	Sound
1004	84	61	301.098	15	3597	324.61	265.31	231.42	192.38	164.31	143.66	127.79	104.41	87.50	93.19	Sound	67.11	Sound	36.52	Sound
1005	79	66	293.394	15	850	467.65	315.00	255.55	204.78	174.74	154.05	138.06	113.56	95.20	212.1	Warning	80.81	Sound	36.68	Sound
1006	88	64	322.325	21	2686	276.73	224.71	199.69	170.89	148.85	131.74	118.11	97.55	82.49	77.04	Sound	50.84	Sound	30.74	Sound
1007	93	67	347.734	14	998	403.80	269.61	217.25	173.53	148.17	130.77	117.27	96.51	80.92	186.55	Sound	69.08	Sound	30.9	Sound
1008	96	68	361.352	18	2700	273.57	216.56	188.46	157.62	135.71	119.64	107.26	88.91	75.41	85.11	Sound	52.75	Sound	28.45	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1009	103	63	374.602	17	3793	253.14	206.45	181.29	152.25	130.93	114.99	102.62	84.28	70.95	71.85	Sound	50.36	Sound	28.31	Sound	
1010	85	69	322.056	20	767	414.52	272.68	223.56	181.86	156.08	138.09	124.25	103.20	87.31	190.96	Sound	67.48	Sound	31.83	Sound	
1011	87	67	325.299	19	2878	283.41	230.05	203.10	172.19	149.18	131.76	118.12	97.80	82.92	80.31	Sound	53.92	Sound	31.06	Sound	
1012	93	66	345.388	21	2040	284.14	220.56	192.46	162.34	140.54	124.20	111.43	92.30	78.21	91.68	Sound	51.92	Sound	29.11	Sound	
1013	78	69	295.533	18	1253	389.50	284.38	239.86	196.65	168.52	148.72	133.61	110.95	94.03	149.64	Sound	71.34	Sound	34.91	Sound	
1014	88	67	329.038	19	2542	290.28	231.86	203.28	171.36	148.08	130.69	117.16	97.02	82.24	87	Sound	55.2	Sound	30.92	Sound	
1015	67	66	248.828	16	2935	378.47	311.33	273.55	229.54	197.36	173.47	155.04	127.84	108.04	104.92	Sound	76.19	Sound	42.32	Sound	
1016	68	65	250.813	15	1346	467.31	347.22	290.87	235.63	200.53	176.15	157.60	129.74	109.07	176.44	Sound	90.34	Sound	42.93	Sound	
1017	74	67	276.691	14	3875	351.56	288.84	251.76	209.04	178.71	156.73	140.02	115.51	97.64	99.8	Sound	73.05	Sound	38.69	Sound	
1018	84	60	298.867	21	3352	276.31	231.84	208.95	181.03	158.60	140.57	125.88	103.45	87.02	67.36	Sound	50.35	Sound	32.72	Sound	
1019	91	62	328.585	19	1281	353.75	256.01	215.99	177.24	151.56	133.18	119.01	97.72	81.99	137.76	Sound	64.43	Sound	32.55	Sound	
1020	82	62	296.088	21	3653	271.68	230.11	208.32	181.36	159.45	141.69	127.16	104.87	88.50	63.36	Sound	48.87	Sound	32.29	Sound	
1021	95	62	343.028	17	865	402.53	266.83	217.08	174.63	148.84	130.82	116.85	95.55	79.71	185.45	Sound	68.24	Sound	31.99	Sound	
1022	72	67	269.213	20	2700	322.71	266.69	238.11	204.32	178.23	157.94	141.79	117.51	99.72	84.6	Sound	59.88	Sound	36.44	Sound	
1023	69	60	245.498	16	3502	369.39	309.58	274.43	231.84	199.52	174.86	155.54	126.91	106.29	94.96	Sound	74.91	Sound	43.98	Sound	
1024	63	61	225.823	21	1192	451.01	344.57	298.69	250.46	215.90	190.08	169.87	139.57	117.36	152.32	Sound	82.79	Sound	46.03	Sound	
1025	79	67	295.387	15	3264	334.52	271.07	235.57	195.50	167.30	146.89	131.34	108.45	91.71	98.95	Sound	68.27	Sound	35.96	Sound	
1026	78	65	287.697	17	3841	307.94	258.17	229.76	195.39	169.14	149.03	133.22	109.72	92.67	78.18	Sound	60.62	Sound	35.92	Sound	
1027	84	66	311.964	17	1063	402.71	282.27	233.79	189.46	161.80	142.55	127.79	105.44	88.73	168.92	Sound	71.99	Sound	34.01	Sound	
1028	76	60	270.403	21	1211	396.26	295.08	253.30	210.93	181.28	159.39	142.31	116.70	97.90	142.96	Sound	72.02	Sound	38.97	Sound	
1029	82	69	310.689	21	3249	269.00	224.00	201.32	174.21	152.86	135.99	122.42	101.86	86.75	67.68	Sound	48.46	Sound	30.44	Sound	
1030	88	70	335.588	16	3248	292.61	235.63	205.02	170.75	146.61	129.10	115.76	96.11	81.66	87.59	Sound	58.41	Sound	30.85	Sound	
1031	100	67	373.907	14	3125	291.33	226.68	192.56	156.89	133.51	117.21	104.91	86.65	73.14	98.77	Sound	59.05	Sound	28.6	Sound	
1032	77	61	276.006	16	3946	328.08	275.00	243.82	206.06	177.44	155.62	138.54	113.24	95.00	84.26	Sound	66.38	Sound	38.9	Sound	
1033	87	69	329.633	18	929	394.84	267.93	220.46	178.77	153.11	135.32	121.68	100.94	85.31	174.38	Sound	67.35	Sound	31.43	Sound	
1034	101	62	364.693	17	2215	295.56	226.69	193.90	159.60	136.26	119.47	106.60	87.43	73.37	101.66	Sound	57.64	Sound	29.66	Sound	
1035	85	67	317.821	19	2408	302.07	240.70	210.82	177.57	153.40	135.36	121.35	100.49	85.18	91.25	Sound	57.42	Sound	32.05	Sound	
1036	85	69	322.056	18	3478	279.52	230.72	204.55	173.77	150.66	133.12	119.41	99.05	84.17	74.97	Sound	53.89	Sound	31.25	Sound	
1037	64	68	240.901	19	2820	356.10	297.83	266.54	228.83	199.56	176.78	158.69	131.55	111.72	89.56	Sound	66.98	Sound	40.87	Sound	
1038	87	60	309.540	19	1447	356.56	265.87	226.72	187.07	160.00	140.35	125.15	102.42	85.76	129.84	Sound	66.72	Sound	34.85	Sound	
1039	94	66	349.102	19	3945	248.36	207.01	184.95	158.47	137.98	122.06	109.41	90.45	76.60	63.41	Sound	46.97	Sound	28.57	Sound	
351	63	60	224.150	14	2820	447.85	364.41	315.90	260.69	221.71	193.41	171.80	140.01	117.05	131.95	Sound	94.19	Sound	49.91	Sound	
1041	88	64	322.325	20	794	410.91	272.68	224.15	182.29	156.05	137.54	123.23	101.49	85.25	186.76	Sound	68.1	Sound	32.82	Sound	
1042	102	70	388.977	16	3197	262.43	207.43	178.99	148.14	126.95	111.80	100.29	83.30	70.75	83.44	Sound	52.04	Sound	26.66	Sound	
1043	102	70	388.977	19	807	365.31	232.55	188.10	152.03	130.45	115.52	104.01	86.39	73.04	177.21	Sound	57.65	Sound	26.44	Sound	
1044	97	69	367.522	19	931	360.76	240.13	197.03	159.97	137.16	121.29	109.10	90.55	76.56	163.73	Sound	59.87	Sound	28.06	Sound	
1045	82	65	302.451	18	3490	293.98	244.39	217.34	185.04	160.41	141.50	126.60	104.38	88.21	76.64	Sound	56.93	Sound	33.81	Sound	
1046	66	67	246.779	16	1528	444.63	339.37	288.58	236.40	201.87	177.54	159.06	131.52	111.10	156.05	Sound	86.71	Sound	42.81	Sound	
1047	93	62	335.807	21	2491	274.73	219.95	194.28	165.33	143.50	126.71	113.39	93.36	78.70	80.45	Sound	50.78	Sound	30.11	Sound	
1048	86	63	312.775	17	3565	294.68	243.29	214.89	181.38	156.34	137.41	122.62	100.69	84.77	79.79	Sound	58.55	Sound	33.72	Sound	
1049	77	62	278.033	19	1251	400.69	296.91	252.64	208.32	178.33	156.68	139.98	114.97	96.55	148.05	Sound	74.31	Sound	38.35	Sound	
1050	95	67	355.212	21	1696	294.12	221.08	190.55	159.38	137.58	121.56	109.14	90.55	76.78	103.57	Sound	52.97	Sound	28.44	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1051	80	63	290.953	15	933	460.18	315.86	257.66	206.54	175.78	154.49	138.05	112.97	94.33	202.52	Warning	81.88	Sound	37.73	Sound
1052	101	63	367.328	14	2046	326.59	241.75	201.26	162.05	137.54	120.59	107.68	88.24	73.87	125.33	Sound	63.72	Sound	29.86	Sound
1053	68	60	241.940	21	3976	309.10	268.58	246.10	216.92	192.20	171.52	154.20	127.14	107.07	63	Sound	53.9	Sound	38	Sound
1054	92	63	334.596	19	1000	377.09	259.96	215.71	175.64	150.12	132.09	118.17	97.13	81.48	161.38	Sound	65.59	Sound	31.95	Sound
1055	86	64	314.999	19	1077	383.47	271.07	226.87	185.51	158.72	139.72	125.09	103.05	86.66	156.6	Sound	68.15	Sound	33.63	Sound
1056	89	66	330.533	19	2877	280.36	227.17	200.39	169.74	146.95	129.70	116.20	96.06	81.33	79.97	Sound	53.44	Sound	30.75	Sound
1057	70	67	261.735	21	2473	328.60	270.66	242.06	208.45	182.31	161.83	145.44	120.68	102.49	86.54	Sound	59.75	Sound	36.87	Sound
1058	100	70	381.350	16	1554	319.33	229.15	190.51	154.38	131.93	116.48	104.73	86.98	73.63	128.82	Sound	58.58	Sound	27.2	Sound
1059	81	64	296.685	18	2721	317.53	257.63	226.55	190.92	164.65	144.91	129.52	106.65	89.97	90.98	Sound	61.9	Sound	35.13	Sound
1060	103	66	382.527	14	1558	336.55	238.04	195.12	156.37	133.14	117.23	105.02	86.45	72.56	141.43	Sound	61.98	Sound	28.12	Sound
1061	71	66	263.684	14	1474	453.02	335.28	279.15	224.98	191.30	168.16	150.58	124.10	104.38	173.87	Sound	87.85	Sound	40.72	Sound
1062	91	68	342.531	15	2238	325.32	248.00	209.86	171.03	145.83	128.27	115.00	95.19	80.47	115.46	Sound	64.03	Sound	30.83	Sound
1063	95	63	345.507	15	2370	320.62	246.16	208.83	170.24	144.78	126.85	113.20	92.88	77.94	111.79	Sound	64.05	Sound	31.58	Sound
1064	81	60	288.193	16	2738	345.90	278.30	241.88	200.84	171.56	150.04	133.46	108.95	91.20	104.02	Sound	70.32	Sound	38.1	Sound
1065	75	66	278.539	20	2776	312.68	258.24	230.50	197.70	172.36	152.64	136.95	113.33	96.05	82.18	Sound	58.14	Sound	35.41	Sound
1066	81	65	298.762	16	1970	362.38	278.99	238.02	195.29	166.66	146.33	130.86	107.83	90.84	124.36	Sound	71.36	Sound	35.8	Sound
1067	79	67	295.387	18	3487	298.77	248.90	221.61	188.94	164.00	144.86	129.79	107.33	90.97	77.16	Sound	57.61	Sound	34.21	Sound
1068	98	66	363.958	17	1921	305.95	229.97	195.22	160.11	136.86	120.40	107.84	89.06	75.15	110.73	Sound	58.36	Sound	29.02	Sound
1069	63	62	227.482	14	1976	477.57	373.55	317.95	259.04	219.84	192.21	171.25	140.16	117.42	159.62	Sound	98.11	Sound	48.59	Sound
1070	71	69	269.011	19	1104	422.81	308.22	260.85	214.77	184.39	162.82	146.32	121.59	103.12	161.96	Sound	76.46	Sound	38.07	Sound
1071	89	69	337.211	21	3170	254.98	209.87	187.66	161.61	141.43	125.66	113.06	94.06	80.10	67.32	Sound	46.23	Sound	28.37	Sound
1072	87	62	314.142	19	3920	270.14	227.42	204.08	175.49	152.93	135.13	120.85	99.31	83.64	66.06	Sound	51.15	Sound	32.08	Sound
1073	89	64	325.988	20	2821	277.76	225.83	200.15	170.53	148.07	130.81	117.14	96.64	81.66	77.61	Sound	52.08	Sound	30.93	Sound
1074	85	65	313.516	16	1341	385.45	279.07	232.68	188.55	160.71	141.32	126.51	104.18	87.56	152.77	Sound	71.97	Sound	34.2	Sound
1075	66	70	251.691	21	1035	433.71	317.89	271.49	225.88	194.87	172.45	155.18	129.32	110.05	162.22	Sound	76.62	Sound	39.69	Sound
1076	74	70	282.199	21	2037	327.28	260.92	230.19	195.98	170.55	151.24	136.06	113.34	96.61	97.09	Sound	59.64	Sound	34.49	Sound
1077	70	69	265.222	18	750	490.21	332.87	273.95	222.16	190.27	168.16	151.21	125.43	106.02	216.26	Warning	83.68	Sound	39.06	Sound
1078	67	61	240.161	19	2967	354.51	298.17	267.43	229.80	200.11	176.69	157.90	129.55	108.94	87.08	Sound	67.32	Sound	42.21	Sound
1079	101	62	364.693	15	3959	273.57	221.40	192.22	159.22	135.88	118.87	105.86	86.66	72.73	81.35	Sound	56.34	Sound	30.02	Sound
1080	80	65	295.074	16	2394	348.92	275.59	237.66	196.41	167.91	147.39	131.72	108.52	91.50	111.26	Sound	69.75	Sound	36.19	Sound
1081	101	68	380.172	17	1016	354.68	237.43	193.81	156.35	133.74	118.13	106.11	87.77	73.95	160.87	Sound	60.07	Sound	27.63	Sound
1082	65	67	243.040	21	789	486.44	341.74	287.42	236.94	203.72	179.96	161.65	134.06	113.46	199.02	Sound	83.7	Sound	42.07	Sound
1083	66	63	240.036	17	1382	454.84	346.28	295.34	242.73	207.26	181.89	162.46	133.48	112.16	159.5	Sound	88.08	Sound	44.8	Sound
1084	98	67	366.429	18	1060	352.93	240.85	198.53	161.01	137.76	121.56	109.12	90.22	76.04	154.4	Sound	60.77	Sound	28.64	Sound
1085	85	69	322.056	19	2096	309.88	242.07	210.32	176.11	151.90	134.13	120.42	100.05	85.01	99.56	Sound	58.42	Sound	31.48	Sound
1086	74	65	272.943	17	2994	340.12	279.67	246.57	207.88	179.21	157.67	140.92	116.10	98.04	93.55	Sound	67.36	Sound	38.29	Sound
1087	95	68	357.588	15	1211	367.10	253.96	207.70	166.86	142.43	125.69	112.85	93.25	78.51	159.4	Sound	65.27	Sound	29.58	Sound
1088	99	67	370.168	19	2700	261.98	207.77	181.61	152.72	131.85	116.33	104.29	86.37	73.21	80.37	Sound	49.76	Sound	27.56	Sound
1089	87	69	329.633	21	1932	297.63	230.69	201.21	169.77	147.12	130.23	117.08	97.41	82.88	96.42	Sound	54.09	Sound	30.04	Sound
1090	98	68	368.880	20	1976	279.33	213.10	184.09	153.86	132.70	117.21	105.24	87.38	74.16	95.24	Sound	51.39	Sound	27.46	Sound
1091	87	64	318.662	15	2644	332.18	260.93	223.52	183.40	156.24	136.92	122.24	100.48	84.51	108.66	Sound	67.28	Sound	34	Sound
1092	94	68	353.824	20	3659	243.38	201.78	180.43	155.06	135.41	120.09	107.89	89.54	76.10	62.95	Sound	45.02	Sound	27.52	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1093	70	64	256.395	16	2269	393.75	314.17	272.13	225.59	192.94	169.25	151.10	124.25	104.64	121.62	Sound	79.19	Sound	41.84	Sound
1094	96	66	356.530	17	880	388.46	256.07	208.03	167.49	143.15	126.28	113.23	93.28	78.31	180.43	Sound	64.88	Sound	29.92	Sound
1095	101	69	382.678	16	966	364.70	240.34	194.53	156.27	133.72	118.23	106.28	87.93	74.08	170.17	Sound	60.81	Sound	27.44	Sound
1096	86	64	314.999	20	1782	323.15	248.65	215.45	180.31	155.35	136.89	122.54	101.10	85.33	107.7	Sound	60.1	Sound	32.81	Sound
1097	103	65	379.908	14	2963	291.87	225.35	190.78	155.04	131.76	115.53	103.26	84.99	71.50	101.09	Sound	59.02	Sound	28.5	Sound
1098	81	68	304.891	17	3082	309.57	252.29	221.55	186.25	160.52	141.43	126.68	104.88	88.94	88.02	Sound	61.03	Sound	33.84	Sound
1099	91	68	342.531	18	1932	310.78	237.00	203.16	168.11	144.27	127.16	114.08	94.59	80.15	107.62	Sound	58.89	Sound	30.19	Sound
1100	67	65	247.125	20	2497	351.46	290.72	259.65	222.79	194.23	171.94	154.17	127.40	107.82	91.81	Sound	65.42	Sound	40.06	Sound
1101	82	62	296.088	19	805	439.93	297.71	245.49	199.31	170.21	149.67	133.79	109.71	91.82	194.44	Sound	75.28	Sound	36.42	Sound
1102	91	60	323.772	18	1948	325.62	250.85	215.76	178.58	152.71	133.83	119.25	97.52	81.66	109.86	Sound	63.05	Sound	33.46	Sound
1103	74	61	265.253	20	2876	322.49	268.79	240.81	207.08	180.55	159.59	142.74	117.26	98.68	81.68	Sound	60.26	Sound	37.81	Sound
1104	70	65	258.190	14	3804	373.52	308.43	269.49	224.14	191.60	167.82	149.67	123.03	103.69	104.03	Sound	77.89	Sound	41.93	Sound
1105	63	65	232.371	20	1531	419.27	329.46	287.89	242.49	209.53	184.86	165.61	136.85	115.73	131.38	Sound	78.36	Sound	43.92	Sound
1106	91	65	335.647	16	2226	322.10	248.16	211.79	173.79	148.32	130.23	116.46	95.96	80.85	110.31	Sound	63.47	Sound	31.86	Sound
1107	80	66	297.108	16	3440	318.34	261.38	229.45	192.38	165.36	145.33	129.89	107.11	90.52	88.89	Sound	64.09	Sound	35.47	Sound
1108	79	63	287.316	21	3233	286.62	240.56	216.89	188.09	165.00	146.50	131.47	108.52	91.69	69.73	Sound	51.89	Sound	33.53	Sound
1109	99	65	365.154	15	3792	275.06	221.50	191.90	158.80	135.65	118.94	106.20	87.42	73.69	83.16	Sound	56.25	Sound	29.45	Sound
1110	62	68	233.373	19	3291	351.02	298.83	269.73	233.52	204.63	181.69	163.24	135.35	114.96	81.29	Sound	65.1	Sound	41.39	Sound
1111	66	62	238.314	16	3309	382.15	319.45	282.86	238.81	205.61	180.41	160.74	131.62	110.58	99.29	Sound	77.25	Sound	44.87	Sound
1112	63	67	235.561	15	3420	394.55	328.40	289.23	242.79	208.67	183.33	163.83	135.16	114.34	105.32	Sound	80.56	Sound	44.84	Sound
1113	84	66	311.964	21	2877	277.72	228.15	203.79	175.26	153.14	135.83	121.99	101.07	85.72	73.93	Sound	50.65	Sound	31.15	Sound
1114	63	65	232.371	14	3008	426.85	348.12	302.25	250.06	213.35	186.85	166.70	137.09	115.52	124.6	Sound	88.9	Sound	46.65	Sound
1115	81	68	304.891	15	1407	397.66	288.93	240.14	193.99	165.39	145.73	130.78	108.20	91.29	157.52	Sound	74.75	Sound	34.61	Sound
1116	64	61	229.408	21	3959	321.81	280.74	257.77	227.76	202.19	180.71	162.67	134.38	113.36	64.04	Sound	55.58	Sound	39.52	Sound
1117	95	63	345.507	21	2612	265.41	212.98	188.32	160.43	139.37	123.16	110.30	90.96	76.79	77.09	Sound	48.95	Sound	29.07	Sound
1118	97	66	360.244	18	1597	316.42	232.83	196.91	161.56	138.27	121.76	109.12	90.18	76.10	119.51	Sound	58.64	Sound	29.15	Sound
1119	82	68	308.655	19	3967	271.55	229.19	206.00	177.60	155.25	137.68	123.63	102.50	87.05	65.55	Sound	50.75	Sound	31.62	Sound
1120	103	62	371.915	15	2675	294.88	227.78	193.70	158.09	134.40	117.63	104.87	85.89	71.97	101.18	Sound	59.3	Sound	29.53	Sound
1121	72	61	258.084	20	2383	345.67	283.18	251.75	214.94	186.66	164.69	147.19	120.87	101.69	93.92	Sound	65.09	Sound	39.47	Sound
1122	98	67	366.429	20	3339	243.13	198.80	176.67	150.95	131.39	116.32	104.39	86.51	73.41	66.46	Sound	45.28	Sound	27	Sound
1123	98	63	356.418	21	1756	291.29	220.16	190.10	159.05	137.10	120.84	108.17	89.17	75.18	101.19	Sound	53	Sound	28.93	Sound
1124	102	65	376.219	16	2261	294.45	223.93	190.13	155.53	132.65	116.51	104.21	85.87	72.31	104.32	Sound	57.48	Sound	28.44	Sound
1125	92	65	339.335	19	2271	292.99	229.85	200.00	167.52	144.31	127.12	113.80	93.96	79.39	92.99	Sound	55.69	Sound	30.51	Sound
1126	96	68	361.352	20	1355	317.51	228.60	193.29	159.44	137.02	121.02	108.72	90.26	76.48	124.22	Sound	56.27	Sound	28.3	Sound
1127	79	64	289.360	21	907	414.46	289.38	242.80	199.77	171.45	151.15	135.45	111.76	94.15	171.66	Sound	71.35	Sound	36	Sound
1128	103	69	390.256	16	1464	319.40	226.19	187.22	151.41	129.35	114.17	102.58	85.03	71.84	132.18	Sound	57.87	Sound	26.77	Sound
1129	85	66	315.678	16	2327	333.41	260.27	223.34	183.99	157.22	138.12	123.57	101.99	86.10	110.07	Sound	66.12	Sound	33.65	Sound
1130	100	65	368.843	14	3236	292.86	229.22	195.20	159.22	135.37	118.65	106.00	87.24	73.43	97.66	Sound	59.83	Sound	29.37	Sound
1131	98	65	361.466	21	3333	239.89	197.07	176.03	151.36	132.20	117.20	105.18	87.02	73.70	63.86	Sound	43.83	Sound	27.02	Sound
1132	82	66	304.536	19	1610	348.05	264.19	226.91	188.38	161.85	142.62	127.81	105.70	89.37	121.14	Sound	65.06	Sound	34.04	Sound
1133	101	62	364.693	18	948	368.60	246.58	201.89	163.10	139.13	122.31	109.29	89.49	74.78	166.71	Sound	62.76	Sound	29.84	Sound
1134	95	70	362.283	18	3558	254.13	207.63	183.22	155.04	134.20	118.57	106.42	88.42	75.23	70.91	Sound	49.02	Sound	27.78	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1135	85	70	324.148	18	3895	270.29	225.51	200.96	171.55	149.13	131.95	118.45	98.37	83.71	69.33	Sound	51.83	Sound	30.68	Sound
1136	100	69	378.889	20	2124	268.17	205.93	178.35	149.36	128.95	113.97	102.40	85.14	72.37	89.82	Sound	49.4	Sound	26.55	Sound
1137	69	64	252.732	20	2040	365.00	294.33	259.94	220.79	191.44	169.02	151.34	124.85	105.48	105.06	Sound	68.5	Sound	40.1	Sound
1138	64	60	227.708	17	1071	507.27	375.24	316.51	258.21	219.80	192.48	171.50	140.07	117.02	190.76	Sound	96.71	Sound	48.3	Sound
1182	84	60	298.867	14	3399	343.37	276.57	238.57	196.10	166.58	145.31	129.10	105.24	87.96	104.8	Sound	71.99	Sound	37.48	Sound
1140	76	68	286.070	21	3868	273.46	233.59	212.40	185.90	164.22	146.58	132.12	109.91	93.50	61.06	Sound	48.18	Sound	32.1	Sound
1141	66	63	240.036	15	2665	413.07	335.05	291.22	241.51	206.28	180.61	160.96	132.01	110.96	121.85	Sound	84.94	Sound	45.32	Sound
1142	69	62	249.147	21	1074	434.54	321.48	275.35	229.09	197.02	173.47	155.15	127.67	107.41	159.19	Sound	78.33	Sound	41.87	Sound
1143	98	70	373.723	16	2775	279.91	218.55	187.60	154.70	132.44	116.65	104.69	86.97	73.84	92.31	Sound	55.16	Sound	27.75	Sound
1144	76	63	276.406	17	3999	315.12	266.18	237.75	202.83	175.76	154.79	138.20	113.46	95.54	77.37	Sound	61.99	Sound	37.56	Sound
1145	70	63	254.584	17	3266	351.98	294.01	261.15	221.58	191.48	168.44	150.34	123.43	103.93	90.83	Sound	69.67	Sound	41.14	Sound
1146	70	66	259.970	14	1042	497.14	350.76	287.30	230.19	196.00	172.59	154.63	127.27	106.81	209.84	Warning	91.3	Sound	41.37	Sound
1147	86	70	327.961	17	2993	294.39	237.18	207.21	173.51	149.41	131.74	118.19	98.17	83.46	87.18	Sound	57.8	Sound	31.22	Sound
1148	86	66	319.391	20	1183	361.24	259.63	219.37	180.80	155.21	136.90	122.81	101.62	85.85	141.87	Sound	64.16	Sound	32.4	Sound
1149	77	61	276.006	19	1236	404.54	299.58	254.84	210.02	179.67	157.74	140.80	115.43	96.78	149.7	Sound	75.17	Sound	38.87	Sound
1150	93	67	347.734	14	3158	307.54	241.58	206.07	168.35	143.31	125.78	112.54	92.95	78.48	101.47	Sound	62.76	Sound	30.77	Sound
1151	75	66	278.539	18	1625	379.47	290.86	249.80	206.87	177.42	156.18	139.88	115.61	97.69	129.67	Sound	72.38	Sound	37.54	Sound
1152	78	67	291.648	17	2584	334.51	268.70	234.40	195.94	168.45	148.26	132.73	109.75	92.91	100.11	Sound	65.95	Sound	35.72	Sound
1153	78	66	289.681	17	3644	309.86	258.29	229.23	194.46	168.19	148.20	132.56	109.36	92.49	80.63	Sound	61.04	Sound	35.63	Sound
1154	101	68	380.172	17	3561	252.89	204.39	178.81	149.84	128.98	113.60	101.77	84.27	71.45	74.08	Sound	49.83	Sound	27.21	Sound
1155	69	69	261.433	16	2255	386.42	307.21	265.75	220.31	188.81	166.17	148.94	123.50	104.76	120.67	Sound	76.94	Sound	39.87	Sound
1156	92	67	343.994	20	1891	297.57	227.93	197.19	164.94	142.25	125.58	112.67	93.40	79.17	100.38	Sound	54.94	Sound	29.58	Sound
1157	86	68	323.711	18	3801	272.72	227.06	202.11	172.31	149.60	132.21	118.53	98.16	83.31	70.61	Sound	52.51	Sound	31.07	Sound
1158	99	69	375.100	17	939	366.55	242.09	196.80	158.61	135.79	120.06	107.94	89.40	75.40	169.75	Sound	61.01	Sound	27.85	Sound
1159	97	61	347.696	21	1377	320.08	233.44	198.88	164.88	141.58	124.54	111.30	91.41	76.75	121.2	Sound	57.3	Sound	30.28	Sound
1160	64	66	237.687	18	2714	374.69	311.13	276.57	235.40	204.10	180.13	161.27	133.17	112.70	98.12	Sound	72.47	Sound	42.83	Sound
1161	81	68	304.891	19	1154	382.60	275.15	231.72	190.26	163.19	144.04	129.37	107.32	90.85	150.88	Sound	68.53	Sound	33.82	Sound
1162	93	66	345.388	14	2209	335.34	252.61	211.73	171.18	145.53	127.83	114.43	94.33	79.40	123.61	Sound	66.2	Sound	31.1	Sound
1163	73	70	278.386	17	2973	333.88	273.64	240.95	203.09	175.34	154.69	138.74	115.18	97.96	92.93	Sound	65.61	Sound	36.6	Sound
1164	67	66	248.828	17	3557	350.02	295.29	263.64	224.94	195.11	172.12	153.99	127.01	107.43	86.38	Sound	68.53	Sound	41.12	Sound
1165	77	63	280.043	18	3275	317.04	263.95	234.86	199.98	173.27	152.67	136.41	112.11	94.47	82.18	Sound	61.59	Sound	36.86	Sound
1166	85	61	304.682	17	838	441.57	297.86	243.61	196.21	167.08	146.67	130.88	106.86	89.07	197.96	Sound	76.53	Sound	36.2	Sound
1167	101	66	375.099	14	3889	277.23	220.99	189.77	155.71	132.61	116.25	103.88	85.62	72.22	87.46	Sound	57.16	Sound	28.73	Sound
1168	81	64	296.685	20	3148	289.29	240.55	215.33	185.13	161.53	142.99	128.15	105.75	89.38	73.96	Sound	53.8	Sound	33.38	Sound
1169	96	66	356.530	18	2294	288.85	224.37	193.72	161.01	138.24	121.69	108.97	90.06	76.13	95.13	Sound	55.48	Sound	29.27	Sound
1170	98	69	371.311	21	2390	257.17	201.95	177.07	149.99	130.20	115.31	103.66	86.24	73.40	80.1	Sound	46.87	Sound	26.54	Sound
1171	67	61	240.161	19	2394	374.26	307.97	273.43	232.70	201.59	177.57	158.54	130.02	109.31	100.83	Sound	71.84	Sound	43.05	Sound
1172	74	68	278.542	15	742	503.20	333.50	269.32	215.74	184.41	162.90	146.26	120.69	101.43	233.88	Warning	84.91	Sound	38.15	Sound
1173	69	64	252.732	15	929	510.50	358.41	294.44	236.58	201.38	177.05	158.35	129.94	108.79	216.06	Warning	93.06	Sound	43.03	Sound
1174	91	63	330.959	14	1579	375.81	272.29	224.95	180.58	153.33	134.54	120.16	98.42	82.31	150.86	Sound	71.62	Sound	33.17	Sound
1175	84	67	314.082	16	942	423.27	288.45	235.82	189.84	162.13	143.02	128.32	105.90	89.05	187.45	Sound	73.69	Sound	33.81	Sound
1176	100	63	363.692	21	1912	279.95	213.70	185.23	155.38	134.07	118.20	105.80	87.22	73.56	94.72	Sound	51.16	Sound	28.27	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1177	63	64	230.755	20	3667	335.70	289.96	264.29	231.41	204.16	181.84	163.44	135.12	114.27	71.41	Sound	60.13	Sound	40.72	Sound
1178	91	68	342.531	21	2223	278.36	218.87	191.98	162.65	141.16	124.95	112.26	93.26	79.27	86.38	Sound	50.82	Sound	28.9	Sound
1179	68	70	259.318	17	1849	395.78	309.60	267.06	221.49	190.12	167.60	150.45	125.03	106.25	128.72	Sound	76.94	Sound	39.67	Sound
1180	63	60	224.150	18	1342	470.96	362.57	311.77	258.00	220.61	193.33	172.27	140.88	117.97	159.19	Sound	91.16	Sound	48.34	Sound
1181	74	68	278.542	14	751	511.93	337.88	271.42	216.77	185.29	163.70	146.94	121.10	101.64	240.51	Warning	86.13	Sound	38.35	Sound
1182	99	60	352.236	14	3555	299.06	237.89	203.99	166.94	141.64	123.58	109.83	89.54	74.81	95.07	Sound	62.35	Sound	31.81	Sound
1183	75	68	282.306	19	2519	325.55	264.48	233.60	198.16	171.77	151.81	136.19	112.92	95.88	91.95	Sound	61.83	Sound	35.58	Sound
1184	64	63	232.763	21	1281	431.51	331.65	288.22	242.23	209.16	184.44	165.10	136.11	114.81	143.29	Sound	79.06	Sound	44.06	Sound
1185	86	62	310.531	20	3040	282.69	233.07	207.81	177.93	154.81	136.76	122.35	100.64	84.81	74.88	Sound	53	Sound	32.46	Sound
1186	71	69	269.011	15	1259	448.64	326.56	271.60	219.51	187.25	165.10	148.28	122.89	103.85	177.04	Sound	84.35	Sound	38.97	Sound
1187	92	66	341.675	17	1358	351.95	253.24	211.61	172.13	147.01	129.44	116.01	95.77	80.68	140.34	Sound	64.6	Sound	31	Sound
1188	94	70	358.469	19	922	367.64	245.42	201.57	163.75	140.47	124.29	111.89	93.02	78.77	166.07	Sound	61.1	Sound	28.58	Sound
1189	100	70	381.350	19	2895	250.90	199.90	175.10	147.57	127.63	112.82	101.34	84.29	71.75	75.8	Sound	47.47	Sound	26.29	Sound
1190	68	62	245.536	16	2140	413.53	329.46	285.13	236.10	201.68	176.64	157.43	129.01	108.30	128.4	Sound	83.45	Sound	44.25	Sound
1191	93	63	338.233	15	1591	358.70	261.67	217.73	175.73	149.37	131.07	117.08	95.99	80.38	140.97	Sound	68.36	Sound	32.29	Sound
1192	81	70	308.894	14	1394	404.81	290.42	239.19	192.16	163.89	144.68	130.07	107.87	91.16	165.62	Sound	75.3	Sound	33.82	Sound
1193	62	61	222.239	14	781	603.96	418.00	340.24	271.71	230.70	202.30	180.33	146.86	122.15	263.72	Warning	109.54	Warning	50.37	Warning
1194	92	69	348.578	15	2488	312.73	241.04	204.88	167.46	142.89	125.73	112.77	93.50	79.19	107.85	Sound	61.99	Sound	30.12	Sound
1195	101	60	359.351	17	1182	355.25	247.80	204.83	165.53	140.81	123.43	110.02	89.74	74.78	150.42	Sound	64.02	Sound	30.79	Sound
1196	89	62	321.363	14	2411	349.27	268.56	226.92	184.04	156.10	136.56	121.72	99.62	83.40	122.35	Sound	70.82	Sound	34.38	Sound
1197	67	69	253.856	15	3921	360.28	301.53	266.34	224.26	193.13	169.93	152.06	125.81	106.73	93.94	Sound	73.21	Sound	41.07	Sound
1198	76	69	287.956	20	2017	331.48	262.46	230.11	194.47	168.49	149.04	133.89	111.29	94.66	101.37	Sound	61.62	Sound	34.6	Sound
1199	68	70	259.318	19	2414	349.90	285.57	252.76	214.88	186.56	165.09	148.30	123.30	104.99	97.14	Sound	66.2	Sound	38.26	Sound
1200	91	67	340.255	16	1973	327.79	247.99	210.15	171.80	146.66	129.01	115.61	95.59	80.73	117.64	Sound	63.49	Sound	31.05	Sound
1201	98	62	353.861	20	3466	248.04	204.52	182.35	156.14	135.85	120.01	107.37	88.32	74.42	65.69	Sound	46.5	Sound	28.48	Sound
1202	85	62	306.920	16	3269	315.54	256.96	224.63	187.50	160.62	140.74	125.40	102.72	86.28	90.91	Sound	64.01	Sound	35.22	Sound
1203	65	65	239.748	17	2721	384.07	316.91	279.87	236.30	203.85	179.38	160.33	132.08	111.54	104.2	Sound	76.02	Sound	43.52	Sound
1204	92	66	341.675	16	1724	338.48	251.16	211.28	171.98	146.69	129.01	115.55	95.36	80.35	127.2	Sound	64.59	Sound	31.14	Sound
1205	84	65	309.828	15	2748	336.07	265.97	228.61	188.07	160.39	140.65	125.65	103.45	87.17	107.46	Sound	68.22	Sound	34.74	Sound
1206	68	67	254.257	17	2364	379.21	306.27	267.83	224.33	193.00	169.88	152.08	125.73	106.46	111.38	Sound	74.83	Sound	40.92	Sound
1207	103	70	392.791	16	1096	344.57	231.46	188.41	151.60	129.73	114.74	103.22	85.60	72.27	156.16	Sound	58.68	Sound	26.51	Sound
1208	73	65	269.255	18	3395	323.16	271.00	242.01	206.86	179.70	158.65	141.98	117.06	98.93	81.15	Sound	62.31	Sound	37.72	Sound
1209	96	66	356.530	18	1495	324.82	236.88	199.69	163.56	139.95	123.25	110.47	91.29	77.01	125.13	Sound	59.74	Sound	29.48	Sound
1210	85	63	309.138	18	1863	339.94	261.84	225.27	186.63	159.88	140.44	125.47	103.17	86.80	114.67	Sound	65.39	Sound	34.41	Sound
1211	75	60	266.845	19	3183	322.12	270.00	241.76	207.35	180.32	159.04	141.99	116.30	97.64	80.36	Sound	61.44	Sound	38.33	Sound
1212	94	70	358.469	16	1970	314.35	235.92	199.33	162.78	139.13	122.67	110.20	91.57	77.65	115.02	Sound	60.2	Sound	28.93	Sound
1213	85	62	306.920	20	2147	313.00	247.97	217.35	183.40	158.42	139.54	124.73	102.57	86.37	95.65	Sound	58.93	Sound	33.69	Sound
1214	73	60	259.729	21	1576	376.66	293.66	256.56	216.32	186.82	164.48	146.90	120.51	101.22	120.1	Sound	69.74	Sound	39.92	Sound
1215	69	60	245.498	15	1851	442.80	344.10	293.30	239.59	203.47	177.76	158.14	129.02	107.79	149.5	Sound	89.83	Sound	45.33	Sound
1216	92	64	336.976	15	854	423.58	278.47	224.34	179.41	153.00	134.71	120.47	98.63	82.33	199.24	Sound	71.34	Sound	32.53	Sound
1217	86	65	317.205	17	2711	310.92	248.79	216.63	180.75	155.17	136.38	121.92	100.49	84.82	94.29	Sound	61.46	Sound	33.25	Sound
1218	91	63	330.959	17	1600	345.44	256.46	216.66	177.07	151.05	132.60	118.48	97.33	81.71	128.78	Sound	65.61	Sound	32.57	Sound

Sl No	Actual/ Seed Value					Deflection Values								Basin Parameters						
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1219	81	63	294.590	14	3574	342.28	277.43	240.10	198.03	168.64	147.48	131.37	107.67	90.44	102.18	Sound	71.46	Sound	37.27	Sound
1220	98	68	368.880	21	3876	226.47	188.69	169.62	146.78	128.77	114.51	103.03	85.62	72.82	56.85	Sound	40.85	Sound	25.74	Sound
1221	75	64	274.709	17	1577	397.34	302.33	257.82	211.93	181.06	159.02	142.15	117.01	98.47	139.52	Sound	76.76	Sound	38.91	Sound
1222	77	63	280.043	17	3120	330.92	272.58	240.49	202.79	174.72	153.53	137.01	112.51	94.72	90.43	Sound	65.77	Sound	37.71	Sound
1223	64	63	232.763	14	1633	488.97	372.86	313.99	254.26	215.78	188.99	168.65	138.28	115.91	174.98	Sound	98.21	Sound	47.13	Sound
1224	77	66	285.967	15	1025	453.18	316.68	259.80	208.79	177.96	156.76	140.47	115.69	97.14	193.38	Sound	81.84	Sound	37.49	Sound
1225	83	68	312.419	15	2462	341.34	266.33	227.54	186.54	159.18	139.92	125.36	103.76	87.78	113.8	Sound	68.36	Sound	33.82	Sound
1226	78	66	289.681	17	2201	350.17	276.26	239.11	198.63	170.33	149.78	134.03	110.68	93.53	111.06	Sound	68.78	Sound	36.3	Sound
1227	70	69	265.222	14	926	502.50	346.59	281.91	225.66	192.66	170.17	152.90	126.44	106.50	220.59	Warning	89.25	Sound	39.76	Sound
1228	63	60	224.150	15	2700	435.70	356.42	311.01	258.55	220.72	192.83	171.37	139.75	116.93	124.69	Sound	90.29	Sound	49.35	Sound
1229	68	65	250.813	16	1052	484.32	349.57	291.15	235.83	201.00	176.78	158.25	130.31	109.51	193.17	Sound	90.15	Sound	42.75	Sound
1230	78	70	297.453	20	1274	369.51	272.06	231.93	192.29	165.57	146.39	131.67	109.66	93.25	137.58	Sound	66.36	Sound	33.9	Sound
1231	64	65	236.059	17	3388	368.97	311.41	278.07	237.25	205.73	181.38	162.17	133.56	112.80	90.9	Sound	72.34	Sound	43.56	Sound
1232	67	69	253.856	14	3238	390.10	317.53	275.48	227.95	194.81	171.06	153.10	126.75	107.44	114.62	Sound	80.67	Sound	41.71	Sound
1233	89	65	328.270	17	1356	362.78	262.73	220.03	179.12	152.89	134.50	120.43	99.25	83.51	142.75	Sound	67.14	Sound	32.46	Sound
1234	66	61	236.577	16	1782	444.92	348.48	299.34	246.45	210.06	183.83	163.74	133.95	112.21	145.58	Sound	89.28	Sound	46.32	Sound
1235	81	66	300.822	15	3771	319.64	262.37	229.43	191.35	163.97	143.90	128.53	105.92	89.45	90.21	Sound	65.46	Sound	35.44	Sound
1236	62	69	234.911	14	899	554.58	388.16	317.14	254.13	216.83	191.44	171.99	142.30	119.94	237.44	Warning	100.31	Warning	44.84	Sound
1237	63	63	229.126	14	3808	411.02	343.19	301.60	252.03	215.67	188.71	167.98	137.55	115.59	109.42	Sound	85.93	Sound	47.69	Sound
1238	66	70	251.691	21	2211	347.63	283.89	253.00	217.26	189.88	168.66	151.81	126.45	107.81	94.63	Sound	63.12	Sound	38.07	Sound
1239	73	68	274.778	14	1231	456.89	327.61	269.77	216.61	184.55	162.68	146.00	120.66	101.66	187.12	Sound	85.22	Sound	38.55	Sound
1240	64	62	231.093	18	1107	484.50	361.08	306.71	252.00	215.31	189.00	168.77	138.50	116.22	177.79	Sound	91.4	Sound	46.54	Sound
1241	86	61	308.267	17	3288	304.36	249.62	219.74	184.85	158.96	139.45	124.24	101.68	85.34	84.62	Sound	60.78	Sound	34.72	Sound
1242	84	62	303.309	21	1174	369.34	268.26	228.22	189.10	162.43	142.98	127.89	105.21	88.47	141.12	Sound	65.79	Sound	34.54	Sound
1243	79	60	281.077	17	3400	324.19	269.30	238.49	201.66	173.78	152.48	135.75	110.89	92.94	85.7	Sound	64.71	Sound	38.03	Sound
1244	101	64	369.941	16	1383	338.99	240.24	198.85	160.60	136.82	120.29	107.60	88.40	74.12	140.14	Sound	62.03	Sound	29.22	Sound
1245	69	68	259.722	20	3731	304.96	261.08	236.99	206.71	182.09	162.20	146.00	121.27	103.08	67.97	Sound	54.9	Sound	36.09	Sound
1246	99	70	377.537	17	2526	276.26	214.35	184.28	152.47	130.80	115.31	103.53	86.05	73.11	91.98	Sound	53.48	Sound	27.27	Sound
1247	84	69	318.267	15	3548	309.14	250.67	217.93	180.99	155.03	136.29	122.04	101.09	85.74	91.21	Sound	62.9	Sound	32.99	Sound
1248	88	64	322.325	17	1355	368.05	267.35	224.12	182.49	155.69	136.84	122.41	100.71	84.61	143.93	Sound	68.43	Sound	33.28	Sound
1249	63	67	235.561	16	2468	410.53	333.56	291.39	243.34	208.91	183.67	164.30	135.74	114.86	119.14	Sound	82.48	Sound	44.61	Sound
1250	72	70	274.572	20	3958	287.74	246.39	223.70	195.21	172.08	153.43	138.26	115.12	98.11	64.04	Sound	51.62	Sound	33.82	Sound
1251	78	70	297.453	15	3205	332.94	268.97	233.44	193.64	165.86	145.89	130.75	108.49	92.14	99.5	Sound	67.58	Sound	35.11	Sound
1252	101	61	362.034	15	1121	374.11	255.37	207.93	166.47	141.50	124.13	110.68	90.19	75.05	166.18	Sound	66.43	Sound	30.82	Sound
1253	88	64	322.325	14	1306	400.80	283.41	232.28	186.03	158.18	139.04	124.32	101.94	85.29	168.52	Sound	74.1	Sound	33.86	Sound
1254	85	70	324.148	16	1840	344.81	259.94	220.01	179.84	153.73	135.52	121.73	101.15	85.79	124.8	Sound	66.28	Sound	32	Sound
1255	103	67	385.124	17	2646	269.85	210.19	180.97	149.80	128.38	112.96	101.19	83.70	70.81	88.88	Sound	52.59	Sound	27.19	Sound
1256	73	62	263.590	21	2379	331.61	271.81	242.48	208.15	181.49	160.58	143.81	118.44	99.88	89.13	Sound	60.99	Sound	37.68	Sound
1257	90	64	329.650	18	3999	266.69	222.82	198.62	169.44	146.99	129.65	115.93	95.44	80.54	68.07	Sound	51.63	Sound	31.06	Sound
1258	96	66	356.530	14	3851	289.06	231.42	199.14	163.64	139.41	122.20	109.18	89.99	75.91	89.92	Sound	59.73	Sound	30.23	Sound
1259	98	66	363.958	16	2971	282.17	222.99	192.36	159.05	136.04	119.50	106.88	88.21	74.49	89.81	Sound	56.32	Sound	29.16	Sound
1260	103	68	387.700	14	1605	330.02	233.86	191.83	153.84	131.13	115.64	103.79	85.75	72.21	138.19	Sound	60.7	Sound	27.34	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1261	84	70	320.334	21	2899	270.94	222.03	198.16	170.40	149.03	132.41	119.20	99.29	84.65	72.78	Sound	49.13	Sound	29.83	Sound
1262	88	69	333.422	17	2814	295.49	235.96	205.34	171.37	147.35	129.83	116.41	96.56	81.97	90.15	Sound	57.99	Sound	30.94	Sound
1263	73	64	267.383	14	3660	366.91	300.90	261.97	217.17	185.34	162.20	144.57	118.66	99.85	104.94	Sound	76.63	Sound	40.77	Sound
1264	80	63	290.953	19	1426	373.23	280.23	239.64	198.25	169.94	149.42	133.60	109.93	92.50	133.59	Sound	69.7	Sound	36.34	Sound
1265	92	63	334.596	15	3607	298.32	241.23	209.37	173.43	148.07	129.64	115.54	94.77	79.65	88.95	Sound	61.3	Sound	32.53	Sound
1266	68	64	249.069	14	2352	427.19	337.19	288.21	235.59	200.29	175.36	156.48	128.54	108.06	138.98	Sound	87.92	Sound	43.81	Sound
1267	101	63	367.328	20	2916	252.47	203.19	179.29	152.14	131.81	116.28	104.04	85.70	72.29	73.18	Sound	47.48	Sound	27.77	Sound
1268	72	67	269.213	20	3002	313.98	262.38	235.45	203.00	177.54	157.52	141.48	117.26	99.52	78.53	Sound	57.91	Sound	36.06	Sound
1269	102	64	373.604	16	1271	344.46	240.26	197.84	159.48	135.89	119.52	106.92	87.81	73.57	146.62	Sound	61.95	Sound	28.97	Sound
1270	62	65	228.682	14	2841	437.63	355.47	308.01	254.40	216.94	189.99	169.53	139.43	117.48	129.62	Sound	91.07	Sound	47.41	Sound
1271	82	68	308.655	17	1650	358.83	270.10	229.44	188.33	161.16	141.96	127.35	105.53	89.32	129.39	Sound	68.28	Sound	33.81	Sound
1272	95	64	347.964	17	3123	280.35	225.60	196.93	164.59	141.33	124.15	110.89	91.24	76.91	83.42	Sound	55.6	Sound	30.44	Sound
1273	75	67	280.430	19	1333	389.23	290.67	248.14	205.26	176.26	155.41	139.41	115.48	97.74	141.09	Sound	71.88	Sound	36.85	Sound
1274	99	69	375.100	14	1854	326.62	237.48	196.49	158.07	134.69	118.75	106.65	88.33	74.58	130.13	Sound	61.8	Sound	28.04	Sound
1275	74	66	274.825	20	830	448.56	310.30	258.72	211.80	181.62	160.25	143.79	118.93	100.35	189.84	Sound	77.1	Sound	37.83	Sound
1276	89	65	328.270	21	2850	268.49	219.05	195.08	167.29	145.91	129.26	115.98	95.95	81.25	73.41	Sound	49.17	Sound	29.93	Sound
1277	97	65	357.777	21	3561	237.44	196.72	176.36	152.17	133.16	118.16	106.09	87.79	74.36	61.08	Sound	43.2	Sound	27.07	Sound
1278	92	65	339.335	18	2564	291.34	231.04	201.17	168.22	144.67	127.30	113.88	93.94	79.34	90.17	Sound	56.5	Sound	30.79	Sound
1279	101	65	372.531	18	3385	253.23	205.23	180.39	152.00	131.12	115.47	103.28	85.18	71.96	72.84	Sound	49.27	Sound	27.84	Sound
1280	98	68	368.880	19	3443	246.28	201.10	178.02	151.30	131.28	116.06	104.12	86.33	73.30	68.26	Sound	46.74	Sound	27.16	Sound
1281	96	62	346.639	20	3514	250.94	207.68	185.48	159.06	138.51	122.41	109.53	90.10	75.93	65.46	Sound	46.97	Sound	28.98	Sound
1282	77	65	284.009	16	2109	370.33	289.39	248.43	204.66	174.81	153.46	137.18	113.03	95.28	121.9	Sound	73.62	Sound	37.63	Sound
1283	69	60	245.498	20	857	481.31	342.62	288.36	236.76	202.48	177.78	158.66	129.89	108.69	192.95	Sound	85.88	Sound	43.82	Sound
1284	81	65	298.762	15	778	473.60	312.87	252.41	201.97	172.34	151.86	135.95	111.54	93.28	221.19	Warning	80.07	Sound	36.39	Sound
1285	97	66	360.244	14	3316	296.33	233.16	199.03	162.64	138.39	121.36	108.50	89.45	75.42	97.3	Sound	60.64	Sound	29.89	Sound
1286	78	60	277.519	15	2772	367.16	294.59	254.69	210.15	178.93	156.28	138.93	113.33	94.78	112.47	Sound	75.76	Sound	40	Sound
1287	91	63	330.959	16	1725	347.65	259.33	218.53	177.90	151.48	132.89	118.70	97.43	81.74	129.12	Sound	67.05	Sound	32.78	Sound
1288	69	64	252.732	18	1225	440.74	328.95	279.61	229.96	196.72	172.94	154.70	127.42	107.25	161.13	Sound	82.89	Sound	42.02	Sound
1289	68	68	255.958	17	3096	353.24	293.27	259.80	220.09	190.35	167.87	150.36	124.42	105.53	93.44	Sound	69.45	Sound	39.99	Sound
1290	92	68	346.295	17	2933	284.55	227.36	197.89	165.15	141.95	125.00	111.99	92.76	78.63	86.66	Sound	55.94	Sound	29.96	Sound
1291	82	70	312.707	21	824	405.54	272.90	226.14	185.22	159.28	141.03	127.00	105.78	89.79	179.4	Sound	66.86	Sound	32.28	Sound
1292	73	69	276.589	14	2204	397.11	307.15	260.27	211.83	180.41	158.64	142.26	117.90	99.79	136.84	Sound	79.86	Sound	38.15	Sound
1293	78	66	289.681	18	952	429.56	300.36	249.56	203.00	173.59	152.99	137.19	113.29	95.43	180	Sound	75.97	Sound	36.4	Sound
1294	75	61	268.837	20	2015	350.93	280.49	246.73	208.74	180.46	158.92	141.96	116.54	98.01	104.2	Sound	66.27	Sound	38.5	Sound
1295	76	66	282.253	15	1373	424.91	311.27	259.43	209.72	178.59	157.08	140.70	116.01	97.62	165.48	Sound	80.84	Sound	37.89	Sound
1296	88	63	320.049	17	1579	355.28	264.57	223.76	182.99	156.11	137.04	122.44	100.58	84.45	131.52	Sound	67.65	Sound	33.67	Sound
1297	62	70	236.437	15	700	574.49	387.96	315.01	252.73	216.13	191.14	171.92	142.46	120.18	259.48	Warning	98.88	Sound	44.21	Sound
1298	87	67	325.299	14	1755	369.83	272.33	226.33	182.31	155.13	136.50	122.35	101.00	85.06	143.5	Sound	71.2	Sound	32.78	Sound
1299	93	60	330.888	18	1620	336.95	252.02	214.32	176.10	150.29	131.71	117.39	95.98	80.29	122.63	Sound	64.03	Sound	32.9	Sound
1300	85	69	322.056	19	1267	357.67	258.88	218.53	179.68	154.22	136.20	122.41	101.71	86.25	139.14	Sound	64.31	Sound	31.81	Sound
1301	89	70	339.402	14	1262	386.16	268.96	219.43	175.80	150.11	132.65	119.28	98.85	83.42	166.73	Sound	69.32	Sound	30.83	Sound
1302	85	64	311.336	16	2939	319.34	256.66	223.03	185.35	158.67	139.19	124.24	102.16	86.05	96.31	Sound	64.36	Sound	34.43	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1303	93	60	330.888	20	3427	261.80	217.17	194.13	166.55	144.97	127.99	114.36	93.78	78.80	67.67	Sound	49.16	Sound	30.61	Sound	
1304	96	66	356.530	15	2958	296.41	232.77	199.39	163.66	139.56	122.47	109.52	90.33	76.20	97.02	Sound	59.83	Sound	30.04	Sound	
1305	89	63	323.686	19	2249	304.63	240.20	209.41	175.59	151.20	133.03	118.91	97.85	82.44	95.22	Sound	58.21	Sound	32.29	Sound	
1306	66	70	251.691	17	3265	352.59	294.67	261.91	222.65	192.98	170.45	152.88	126.85	107.89	90.68	Sound	68.93	Sound	40.1	Sound	
1307	97	70	369.910	20	3604	236.02	194.38	173.32	148.61	129.67	115.04	103.46	86.09	73.35	62.7	Sound	43.65	Sound	26.21	Sound	
1308	62	67	231.822	15	3329	401.89	334.18	294.15	246.81	212.08	186.32	166.51	137.37	116.21	107.74	Sound	82.07	Sound	45.57	Sound	
1309	64	65	236.059	20	2091	380.89	310.49	275.52	235.03	204.28	180.60	161.86	133.74	113.17	105.37	Sound	71.24	Sound	42.42	Sound	
1310	63	67	235.561	17	3970	355.43	304.20	273.64	235.27	205.00	181.27	162.38	134.12	113.59	81.79	Sound	68.64	Sound	42.62	Sound	
1311	83	60	295.309	20	3413	285.12	239.19	214.91	185.30	161.75	143.01	127.87	104.90	88.15	70.21	Sound	53.16	Sound	33.88	Sound	
1312	99	60	352.236	21	3380	244.40	201.72	180.47	155.26	135.46	119.79	107.16	88.00	74.00	63.93	Sound	45.01	Sound	28.3	Sound	
1313	91	70	347.029	20	3446	250.33	206.60	184.38	158.23	138.13	122.57	110.24	91.73	78.16	65.95	Sound	46.25	Sound	27.89	Sound	
1314	68	69	257.645	18	1997	379.71	301.90	263.23	220.51	190.04	167.64	150.40	124.84	106.05	116.48	Sound	73.19	Sound	39.64	Sound	
1315	88	63	320.049	16	1393	376.64	273.54	228.29	184.97	157.46	138.23	123.50	101.33	84.91	148.35	Sound	70.83	Sound	33.96	Sound	
1316	94	66	349.102	19	2893	268.86	216.60	190.59	161.10	139.34	122.94	110.14	91.06	77.09	78.27	Sound	51.25	Sound	29.2	Sound	
1317	103	63	374.602	18	3561	249.47	203.23	179.03	151.07	130.31	114.63	102.38	84.16	70.90	70.44	Sound	48.72	Sound	27.93	Sound	
1318	72	64	263.720	17	2694	358.45	292.58	257.05	216.00	185.88	163.37	145.91	120.03	101.19	101.4	Sound	71.17	Sound	39.97	Sound	
1319	78	61	279.591	16	2470	362.37	289.17	250.43	207.41	177.10	154.99	138.01	112.88	94.62	111.94	Sound	73.33	Sound	39.09	Sound	
1320	80	69	303.111	16	1454	385.31	283.61	237.90	193.51	165.29	145.72	130.86	108.54	91.84	147.41	Sound	72.61	Sound	34.43	Sound	
1321	70	65	258.190	21	2248	341.10	278.39	247.95	212.66	185.49	164.33	147.45	121.98	103.30	93.15	Sound	62.46	Sound	38.04	Sound	
1322	66	60	234.824	16	2085	431.37	344.47	298.37	247.08	210.87	184.39	164.04	133.92	112.07	133	Sound	87.5	Sound	46.83	Sound	
1323	65	67	243.040	16	3637	366.44	308.32	274.01	232.38	200.84	176.89	158.20	130.57	110.52	92.43	Sound	73.17	Sound	42.64	Sound	
1324	88	68	331.239	16	843	420.71	277.79	224.97	180.71	154.54	136.53	122.61	101.27	85.19	195.74	Sound	70.43	Sound	31.93	Sound	
1325	62	61	222.239	21	1607	418.41	333.92	294.53	250.29	217.03	191.46	171.20	140.72	118.43	123.88	Sound	77.5	Sound	45.83	Sound	
1326	64	70	244.064	14	2471	426.26	338.70	290.47	238.31	203.29	178.70	160.21	132.94	112.79	135.79	Sound	87.18	Sound	43.08	Sound	
1327	89	69	337.211	17	1050	381.41	262.81	216.50	175.21	149.90	132.41	119.02	98.68	83.37	164.91	Sound	66.6	Sound	30.88	Sound	
1328	66	67	246.779	17	781	519.69	359.37	296.36	239.82	204.94	180.76	162.20	134.03	112.90	223.33	Warning	91.42	Sound	42.74	Sound	
1329	89	60	316.656	20	3843	262.58	221.34	199.32	172.23	150.54	133.20	119.13	97.75	82.16	63.26	Sound	48.78	Sound	31.41	Sound	
1330	78	64	285.697	19	1485	373.46	282.85	242.70	201.27	172.73	151.99	135.99	112.10	94.49	130.76	Sound	69.97	Sound	36.74	Sound	
1331	73	60	259.729	18	1782	392.10	307.35	266.22	221.45	189.69	166.27	148.13	121.15	101.50	125.88	Sound	76.53	Sound	41.56	Sound	
1332	68	67	254.257	19	984	456.13	329.36	277.76	228.18	195.65	172.56	154.85	128.25	108.43	178.37	Sound	82.11	Sound	40.8	Sound	
1333	91	70	347.029	19	3672	253.08	209.44	186.55	159.49	138.85	123.00	110.51	91.87	78.23	66.53	Sound	47.7	Sound	28.34	Sound	
1334	85	66	315.678	16	957	420.26	287.05	234.83	189.02	161.33	142.19	127.46	105.00	88.17	185.43	Sound	73.5	Sound	33.87	Sound	
1335	102	69	386.467	15	2864	279.60	216.50	184.38	150.88	128.77	113.29	101.60	84.24	71.35	95.22	Sound	55.61	Sound	27.17	Sound	
1336	83	70	316.521	21	1100	364.19	259.01	218.82	180.93	155.85	137.92	124.15	103.45	87.96	145.37	Sound	62.97	Sound	31.7	Sound	
1337	67	61	240.161	17	1507	445.51	343.25	294.09	242.26	206.77	181.15	161.47	132.19	110.77	151.42	Sound	87.32	Sound	45.3	Sound	
1338	68	67	254.257	21	1971	357.02	287.30	254.40	217.15	189.06	167.49	150.42	124.78	105.95	102.62	Sound	65.34	Sound	38.64	Sound	
1339	100	67	373.907	20	3768	232.06	191.87	171.36	147.07	128.31	113.70	102.08	84.60	71.80	60.7	Sound	43.05	Sound	26.23	Sound	
1340	100	67	373.907	15	3819	269.03	216.20	187.15	154.84	132.37	116.22	103.94	85.85	72.59	81.88	Sound	54.78	Sound	28.43	Sound	
1341	65	64	238.081	14	2263	446.27	352.50	301.39	246.43	209.50	183.42	163.67	134.45	113.03	144.88	Sound	91.89	Sound	45.83	Sound	
1342	77	67	287.908	18	2004	350.06	274.68	238.15	198.58	170.74	150.41	134.77	111.55	94.46	111.91	Sound	67.41	Sound	35.97	Sound	
1343	81	60	288.193	15	2742	357.50	285.34	246.09	202.68	172.47	150.64	133.93	109.26	91.36	111.41	Sound	73.62	Sound	38.54	Sound	
1344	62	70	236.437	17	1431	452.58	346.50	296.31	244.31	209.40	184.64	165.83	137.85	117.07	156.27	Sound	86.91	Sound	43.57	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1345	82	66	304.536	16	985	427.72	295.55	242.67	195.55	166.86	147.03	131.79	108.60	91.24	185.05	Sound	75.81	Sound	35.07	Sound
1346	71	69	269.011	14	2704	387.81	307.96	264.02	216.52	184.61	162.19	145.30	120.37	101.98	123.79	Sound	79.41	Sound	39.31	Sound
1347	77	70	293.640	19	2462	317.47	255.99	225.39	190.75	165.27	146.16	131.29	109.18	92.95	92.08	Sound	60.12	Sound	33.98	Sound
1348	65	66	241.400	19	2519	366.46	302.94	269.63	230.20	200.07	176.84	158.48	131.00	110.94	96.83	Sound	69.56	Sound	41.59	Sound
1349	85	65	313.516	17	1267	382.16	275.79	230.68	187.68	160.20	140.94	126.20	104.00	87.49	151.48	Sound	70.48	Sound	34	Sound
1350	80	62	288.866	14	2456	377.88	294.85	250.69	204.10	173.20	151.44	134.94	110.44	92.51	127.19	Sound	77.49	Sound	38.26	Sound
1351	98	67	366.429	20	1112	335.60	232.32	193.76	158.69	136.15	120.21	107.95	89.44	75.58	141.84	Sound	57.61	Sound	28.2	Sound
1352	86	69	325.845	16	3338	297.69	241.24	210.50	175.69	150.91	132.83	119.00	98.63	83.70	87.19	Sound	59.59	Sound	31.91	Sound
1353	84	69	318.267	20	2485	291.17	233.73	206.10	174.98	151.92	134.47	120.80	100.40	85.41	85.07	Sound	54.18	Sound	31.12	Sound
1354	100	64	366.278	20	1948	282.89	215.72	186.26	155.50	133.86	117.93	105.58	87.10	73.50	96.63	Sound	52.4	Sound	28.28	Sound
1355	63	66	233.973	17	3481	368.77	312.23	279.28	238.71	207.26	182.91	163.67	134.99	114.17	89.49	Sound	72.02	Sound	43.59	Sound
1356	97	64	355.290	19	1904	297.74	226.52	194.70	161.65	138.77	122.11	109.25	90.06	75.92	103.04	Sound	55.93	Sound	29.52	Sound
1357	96	68	361.352	16	1777	321.48	237.56	199.54	162.39	138.64	122.13	109.57	90.74	76.68	121.94	Sound	60.9	Sound	29.07	Sound
1358	63	68	237.137	16	2723	398.74	327.05	286.99	240.63	206.98	182.13	163.02	134.85	114.29	111.75	Sound	80.01	Sound	43.96	Sound
1359	93	62	335.807	19	2337	293.76	231.71	202.01	169.35	145.75	128.16	114.46	94.03	79.10	91.75	Sound	56.26	Sound	31.29	Sound
1360	68	64	249.069	21	1088	432.20	320.36	274.63	228.74	196.96	173.66	155.58	128.45	108.40	157.57	Sound	77.67	Sound	41.38	Sound
1361	86	67	321.560	19	1666	331.20	250.60	215.00	178.40	153.31	135.18	121.24	100.43	85.03	116.2	Sound	61.69	Sound	32.07	Sound
1362	81	68	304.891	17	2364	330.34	261.18	226.29	188.21	161.57	142.27	127.49	105.61	89.51	104.05	Sound	64.72	Sound	34.08	Sound
1363	80	60	284.635	18	2504	335.68	271.16	237.90	199.91	171.93	150.85	134.39	109.91	92.15	97.78	Sound	65.97	Sound	37.54	Sound
1364	87	70	331.775	17	3601	279.07	229.10	201.89	170.29	147.07	129.76	116.38	96.61	82.16	77.18	Sound	54.82	Sound	30.69	Sound
1365	94	62	339.417	17	3881	271.60	224.33	198.15	167.24	144.09	126.56	112.85	92.51	77.77	73.45	Sound	54.06	Sound	31.24	Sound
1366	80	69	303.111	18	1405	370.30	274.22	232.49	191.14	163.86	144.57	129.86	107.85	91.44	137.81	Sound	68.63	Sound	34	Sound
1367	92	64	336.976	16	1288	369.93	263.12	218.05	176.20	150.10	131.95	118.03	96.98	81.32	151.88	Sound	67.95	Sound	32.07	Sound
1368	63	63	229.126	18	2770	384.36	321.05	286.12	243.99	211.56	186.47	166.62	136.95	115.40	98.24	Sound	74.56	Sound	44.94	Sound
1369	77	64	282.034	19	2377	331.94	268.00	236.00	199.54	172.49	152.03	136.00	112.09	94.62	95.94	Sound	63.51	Sound	36.49	Sound
1370	71	68	267.250	15	3763	349.75	290.26	255.25	214.02	183.92	161.66	144.58	119.48	101.21	94.5	Sound	71.33	Sound	39.34	Sound
1371	103	60	366.467	18	2527	277.53	217.69	188.60	156.92	134.42	117.83	104.97	85.85	71.93	88.93	Sound	54.18	Sound	29.45	Sound
1372	75	60	266.845	17	2959	348.66	287.12	253.21	213.29	183.47	160.87	143.21	116.99	98.04	95.45	Sound	69.74	Sound	40.26	Sound
1373	87	63	316.412	15	2595	335.82	263.47	225.56	184.95	157.46	137.88	122.99	100.91	84.74	110.26	Sound	68.1	Sound	34.47	Sound
1374	73	61	261.668	21	1128	414.07	306.37	262.40	218.25	187.59	165.04	147.49	121.15	101.77	151.67	Sound	74.81	Sound	40.1	Sound
1375	96	68	361.352	15	1366	352.96	248.65	204.54	164.60	140.43	123.86	111.19	91.92	77.46	148.42	Sound	64.11	Sound	29.24	Sound
1376	75	63	272.769	14	3842	357.86	294.31	256.58	212.90	181.67	158.89	141.48	115.91	97.39	101.28	Sound	74.91	Sound	40.19	Sound
1377	96	65	354.089	17	2032	307.98	234.29	199.79	164.27	140.42	123.42	110.42	91.05	76.74	108.19	Sound	59.37	Sound	30	Sound
1378	85	61	304.682	17	742	458.62	301.95	245.12	196.99	167.79	147.35	131.48	107.27	89.32	213.5	Warning	77.33	Sound	36.31	Sound
1379	83	60	295.309	14	2883	359.34	284.81	243.82	199.30	169.05	147.50	131.11	106.89	89.29	115.52	Sound	74.77	Sound	37.94	Sound
1380	66	62	238.314	14	3704	401.41	333.18	291.85	243.11	207.67	181.54	161.47	132.01	110.76	109.56	Sound	84.18	Sound	46.2	Sound
1381	77	68	289.834	16	3621	319.94	264.63	233.17	196.21	169.03	148.78	133.16	110.12	93.34	86.77	Sound	64.14	Sound	35.87	Sound
1382	96	63	349.144	20	3868	243.29	203.21	182.26	156.97	137.05	121.32	108.68	89.56	75.59	61.03	Sound	45.21	Sound	28.37	Sound
1383	91	68	342.531	17	2767	291.06	231.26	200.80	167.27	143.67	126.51	113.36	93.90	79.59	90.26	Sound	57.13	Sound	30.31	Sound
1384	87	67	325.299	16	1712	351.34	262.24	221.09	180.22	153.81	135.35	121.32	100.30	84.66	130.25	Sound	67.28	Sound	32.49	Sound
1385	100	68	376.408	21	3453	230.13	188.91	168.71	145.11	126.87	112.64	101.28	84.14	71.56	61.42	Sound	41.84	Sound	25.59	Sound
1386	79	66	293.394	16	719	481.36	315.67	255.12	204.72	174.89	154.27	138.29	113.78	95.39	226.24	Warning	80.23	Sound	36.6	Sound

Sl No	Actual/ Seed Value					Deflection Values							Basin Parameters							
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1387	62	62	223.871	14	1645	503.72	386.34	326.10	264.33	224.19	196.14	174.84	143.09	119.78	177.62	Sound	101.91	Warning	49.35	Sound
1388	96	64	351.627	15	2656	307.67	239.00	203.76	166.66	141.89	124.37	111.07	91.30	76.77	103.91	Sound	61.87	Sound	30.82	Sound
1389	79	67	295.387	18	1217	393.67	286.20	241.02	197.35	168.93	148.89	133.57	110.55	93.40	152.65	Sound	72.09	Sound	35.36	Sound
1390	78	70	297.453	20	1793	334.30	259.34	225.52	189.45	163.80	144.88	130.24	108.44	92.32	108.78	Sound	61.72	Sound	33.56	Sound
1391	77	69	291.745	17	1422	388.65	288.55	243.87	199.64	170.84	150.63	135.27	112.27	95.11	144.78	Sound	73.03	Sound	35.57	Sound
1392	103	68	387.700	17	3737	246.26	199.67	174.92	146.76	126.39	111.33	99.73	82.57	70.02	71.34	Sound	48.53	Sound	26.662	Sound
1393	68	61	243.746	14	1000	530.17	375.89	308.27	246.67	209.27	183.41	163.48	133.26	110.97	221.9	Warning	99	Sound	45.79	Sound
1394	95	69	359.945	16	3412	274.45	220.54	191.69	159.49	136.85	120.44	107.92	89.47	75.91	82.76	Sound	54.84	Sound	28.93	Sound
1395	76	62	274.423	18	2838	333.78	274.42	242.73	205.51	177.49	156.12	139.35	114.35	96.20	91.05	Sound	65.24	Sound	38.14	Sound
1396	62	70	236.437	19	1077	466.07	345.52	294.22	243.15	208.99	184.62	166.00	138.16	117.40	171.85	Sound	85.23	Sound	42.99	Sound
1397	101	65	372.531	18	2538	272.59	213.36	184.78	153.88	132.15	116.26	104.02	85.82	72.45	87.81	Sound	52.63	Sound	28.13	Sound
1398	88	66	326.819	16	1585	357.48	263.73	221.38	180.01	153.52	135.04	120.97	99.82	84.10	136.1	Sound	67.86	Sound	32.55	Sound
1399	67	67	250.518	15	1107	489.78	353.65	293.29	236.65	201.68	177.61	159.26	131.51	110.76	196.49	Sound	91.61	Sound	42.42	Sound
1400	62	69	234.911	19	3770	337.59	290.66	263.85	229.81	202.17	179.93	161.88	134.45	114.35	73.74	Sound	61.68	Sound	40.29	Sound
1401	102	66	378.813	21	2583	248.60	196.81	173.10	146.90	127.51	112.78	101.20	83.83	71.06	75.5	Sound	45.59	Sound	26.31	Sound
1402	87	65	320.893	16	2103	337.90	259.93	221.69	181.85	155.19	136.27	121.85	100.41	84.59	116.21	Sound	66.5	Sound	33.34	Sound
1403	92	65	339.335	18	876	395.97	264.30	216.29	174.88	149.46	131.74	118.05	97.21	81.61	179.68	Sound	66.83	Sound	31.41	Sound
1404	99	66	367.671	16	962	376.64	250.22	202.99	163.03	139.23	122.79	110.07	90.60	75.99	173.65	Sound	63.76	Sound	29.16	Sound
1405	76	60	270.403	15	3379	358.20	294.09	257.07	214.04	182.83	159.75	141.96	115.76	96.87	101.13	Sound	74.24	Sound	40.87	Sound
1406	80	67	299.126	16	1719	373.70	282.38	239.18	195.47	166.87	146.79	131.54	108.76	91.85	134.52	Sound	72.31	Sound	35.33	Sound
1407	100	65	368.843	15	2638	296.74	228.94	194.64	158.96	135.37	118.77	106.18	87.44	73.61	102.1	Sound	59.27	Sound	29.19	Sound
1408	85	66	315.678	18	2390	312.71	248.01	215.98	180.66	155.44	136.87	122.53	101.24	85.63	96.73	Sound	60.54	Sound	32.91	Sound
1409	66	65	243.436	14	2989	412.16	334.39	289.57	239.06	203.84	178.52	159.29	131.02	110.39	122.59	Sound	85.73	Sound	44.55	Sound
1410	68	66	252.542	15	2648	396.40	319.49	276.93	229.30	196.00	171.97	153.67	126.70	106.97	119.47	Sound	80.93	Sound	42.33	Sound
1411	81	66	300.822	20	3265	283.19	236.00	211.51	182.10	159.10	141.03	126.58	104.76	88.79	71.68	Sound	52.41	Sound	32.52	Sound
1412	97	60	345.120	14	3433	306.21	243.19	208.39	170.45	144.60	126.16	112.13	91.42	76.38	97.82	Sound	63.79	Sound	32.47	Sound
1413	101	70	385.164	20	1243	312.04	218.44	182.91	150.18	129.06	114.16	102.75	85.55	72.63	129.13	Sound	53.85	Sound	26.31	Sound
1414	71	63	258.221	17	3569	340.96	286.80	255.64	217.63	188.39	165.83	148.04	121.54	102.34	85.32	Sound	67.25	Sound	40.35	Sound
1415	80	69	303.111	21	1742	325.54	251.60	219.21	184.80	160.10	141.71	127.39	105.99	90.18	106.33	Sound	59.11	Sound	32.71	Sound
1416	78	60	277.519	19	967	434.21	308.23	258.24	211.01	180.10	158.01	140.95	115.26	96.33	175.97	Sound	78.14	Sound	39.15	Sound
1417	81	60	288.193	17	3860	308.62	258.87	230.36	195.68	169.01	148.43	132.18	107.97	90.50	78.26	Sound	61.35	Sound	36.83	Sound
1418	89	61	319.020	19	1997	318.48	247.74	214.76	179.21	153.91	135.18	120.63	98.92	83.07	103.72	Sound	60.85	Sound	33.28	Sound
1419	67	69	253.856	17	1976	395.94	313.16	271.38	225.78	193.92	170.85	153.22	127.12	107.89	124.56	Sound	77.46	Sound	40.7	Sound
1420	76	68	286.070	15	2890	352.10	282.58	244.48	202.22	172.94	151.94	136.00	112.51	95.26	107.62	Sound	71.54	Sound	36.94	Sound
1421	86	69	325.845	14	3998	306.50	248.51	215.19	177.79	151.87	133.36	119.38	98.84	83.78	91.31	Sound	63.32	Sound	32.49	Sound
1422	95	67	355.212	21	3400	241.29	199.03	178.11	153.46	134.27	119.20	107.14	88.90	75.50	63.18	Sound	43.84	Sound	27.13	Sound
1423	88	64	322.325	21	721	419.91	272.93	223.43	181.79	155.77	137.39	123.15	101.49	85.29	196.48	Sound	67.66	Sound	32.62	Sound
1424	94	61	336.943	14	839	435.52	283.98	227.32	181.05	154.05	135.21	120.47	97.87	81.17	208.2	Warning	73.27	Sound	33.58	Sound
1425	64	67	239.301	14	1440	490.22	366.29	306.08	247.15	210.24	184.89	165.67	136.80	115.29	184.14	Sound	95.84	Sound	44.57	Sound
1426	96	61	344.112	17	3202	281.83	227.77	199.16	166.57	142.89	125.27	111.60	91.35	76.65	82.67	Sound	56.27	Sound	31.29	Sound
1427	81	70	308.894	18	1557	354.65	265.95	226.55	186.80	160.30	141.49	127.16	105.77	89.84	128.1	Sound	66.25	Sound	33.14	Sound
1428	63	64	230.755	19	2530	379.27	315.19	281.17	240.49	209.08	184.68	165.31	136.24	115.05	98.1	Sound	72.09	Sound	43.77	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1429	74	64	271.046	16	1799	399.22	307.66	262.57	215.42	183.75	161.22	144.04	118.48	99.67	136.65	Sound	78.82	Sound	39.71	Sound	
1430	84	69	318.267	21	3502	259.10	216.90	195.41	169.48	148.91	132.56	119.37	99.34	84.60	63.69	Sound	46.5	Sound	29.54	Sound	
1431	65	65	239.748	16	1146	489.65	360.54	302.41	245.75	209.47	184.12	164.79	135.74	114.17	187.24	Sound	92.94	Sound	44.68	Sound	
1432	101	64	369.941	15	2230	308.42	232.84	196.23	159.41	135.60	118.96	106.30	87.37	73.38	112.19	Sound	60.63	Sound	29.3	Sound	
1433	82	67	306.604	21	1492	338.78	255.42	220.40	184.48	159.29	140.75	126.37	104.84	88.91	118.38	Sound	61.11	Sound	32.92	Sound	
1434	64	65	236.059	17	2062	415.57	333.36	290.59	242.67	208.39	183.17	163.74	134.96	113.92	124.98	Sound	82.2	Sound	44.65	Sound	
1435	63	69	238.700	15	1207	496.03	365.14	304.90	246.86	210.55	185.57	166.63	138.12	116.78	191.13	Sound	94.35	Sound	43.92	Sound	
1436	77	69	291.745	17	3181	317.35	260.68	229.77	193.81	167.34	147.57	132.26	109.64	93.11	87.58	Sound	62.43	Sound	35.08	Sound	
1437	70	69	265.222	17	2094	377.64	299.19	259.47	215.99	185.54	163.47	146.59	121.62	103.23	118.17	Sound	73.93	Sound	38.95	Sound	
1438	66	61	236.577	20	3192	341.87	291.07	263.39	228.75	200.63	177.90	159.36	131.04	110.31	78.48	Sound	62.76	Sound	41.27	Sound	
1439	86	66	319.391	21	3561	257.90	216.23	194.91	169.06	148.44	131.98	118.65	98.36	83.44	62.99	Sound	46.47	Sound	29.79	Sound	
1440	91	65	335.647	16	2468	314.10	245.16	210.35	173.23	147.95	129.88	116.11	95.67	80.64	103.75	Sound	62.4	Sound	31.84	Sound	
1441	103	67	385.124	21	1199	311.37	216.98	181.96	149.79	128.75	113.74	102.17	84.73	71.69	129.41	Sound	53.21	Sound	26.58	Sound	
1442	83	61	297.513	17	2329	340.13	269.47	233.56	193.99	165.98	145.44	129.59	106.09	88.97	106.57	Sound	67.58	Sound	36.39	Sound	
1443	91	65	335.647	15	2593	320.27	249.43	212.89	174.30	148.50	130.26	116.42	95.87	80.74	107.38	Sound	64.39	Sound	32.08	Sound	
1444	71	69	269.011	20	2701	322.29	266.33	237.82	204.15	178.21	158.08	142.09	118.08	100.48	84.47	Sound	59.61	Sound	36.12	Sound	
1445	62	66	230.259	20	760	519.93	365.88	306.86	251.93	216.12	190.66	171.06	141.51	119.47	213.07	Warning	90.74	Sound	45.06	Sound	
1446	100	65	368.843	14	2900	300.09	231.91	196.41	159.66	135.69	118.98	106.33	87.51	73.63	103.68	Sound	60.72	Sound	29.36	Sound	
1447	80	65	295.074	19	3550	289.52	242.84	217.59	186.92	162.95	144.17	129.18	106.63	90.19	71.93	Sound	54.64	Sound	33.77	Sound	
1448	64	62	231.093	20	1274	444.50	340.83	294.87	246.38	211.99	186.52	166.71	137.08	115.34	149.63	Sound	82.88	Sound	45.28	Sound	
1449	99	60	352.236	16	3395	282.05	227.29	197.68	164.24	140.32	122.72	109.16	89.11	74.59	84.37	Sound	57.36	Sound	31.16	Sound	
1450	101	62	364.693	15	2009	320.41	239.07	200.55	162.42	137.97	120.87	107.83	88.28	73.87	119.86	Sound	62.58	Sound	30.14	Sound	
1451	85	65	313.516	14	3836	320.27	259.75	224.90	185.65	158.28	138.62	123.69	101.74	85.72	95.37	Sound	66.62	Sound	34.59	Sound	
1452	62	66	230.259	16	3510	385.56	324.97	289.05	245.29	212.01	186.64	166.81	137.46	116.18	96.51	Sound	77.04	Sound	45.2	Sound	
1453	81	70	308.894	21	2532	288.65	233.80	207.63	177.76	155.11	137.69	123.90	103.21	87.99	81.02	Sound	52.52	Sound	31.21	Sound	
1454	83	64	304.011	19	2974	296.33	243.31	215.86	183.70	159.29	140.55	125.76	103.64	87.52	80.47	Sound	56.57	Sound	33.53	Sound	
1455	92	60	327.330	21	2596	277.04	223.67	198.22	169.09	146.84	129.57	115.80	95.04	79.89	78.82	Sound	51.38	Sound	31.04	Sound	
1456	83	64	304.011	21	2745	287.06	235.28	209.93	180.30	157.34	139.37	124.99	103.25	87.33	77.13	Sound	52.59	Sound	32.35	Sound	
1457	80	67	299.126	17	2380	334.90	265.65	230.48	191.84	164.68	144.91	129.76	107.31	90.83	104.42	Sound	65.8	Sound	34.92	Sound	
1458	81	67	302.865	16	2038	354.93	273.87	233.90	192.12	164.15	144.33	129.27	106.88	90.33	121.03	Sound	69.75	Sound	34.88	Sound	
1459	94	66	349.102	16	2464	304.68	236.57	202.55	166.60	142.32	125.04	111.88	92.35	77.94	102.13	Sound	60.23	Sound	30.44	Sound	
1460	100	62	361.082	15	2009	322.83	241.21	202.44	164.00	139.31	122.04	108.87	89.13	74.59	120.39	Sound	63.13	Sound	30.44	Sound	
1461	103	61	369.203	19	1852	292.70	220.60	188.89	156.30	133.86	117.52	104.89	86.00	72.15	103.81	Sound	55.03	Sound	28.97	Sound	
1462	97	63	352.781	15	2322	317.08	242.18	205.02	166.92	141.94	124.37	111.01	91.08	76.41	112.06	Sound	63.08	Sound	30.93	Sound	
1463	90	69	341.000	15	735	436.67	277.42	221.46	177.14	151.72	134.23	120.61	99.57	83.66	215.21	Warning	69.74	Sound	31.11	Sound	
1464	102	64	373.604	18	3319	254.19	205.49	180.42	151.84	130.87	115.16	102.93	84.75	71.50	73.77	Sound	49.55	Sound	27.94	Sound	
1465	100	67	373.907	16	3363	268.09	214.22	185.71	154.15	132.06	116.08	103.88	85.85	72.62	82.38	Sound	53.65	Sound	28.18	Sound	
1466	62	63	225.489	14	2629	451.07	364.14	314.52	259.01	220.48	192.81	171.77	140.80	118.25	136.55	Sound	94.04	Sound	48.71	Sound	
1467	99	66	367.671	19	3848	240.42	198.81	176.97	151.12	131.35	116.10	104.05	86.01	72.84	63.45	Sound	45.62	Sound	27.3	Sound	
1468	102	65	376.219	16	1890	308.07	228.50	192.17	156.37	133.30	117.14	104.83	86.36	72.66	115.9	Sound	58.87	Sound	28.47	Sound	
1469	75	62	270.812	20	2190	341.02	275.09	242.95	206.27	178.69	157.57	140.88	115.85	97.59	98.07	Sound	64.26	Sound	37.81	Sound	
1470	77	66	285.967	21	2953	293.94	244.49	219.58	189.80	166.32	147.72	132.74	110.01	93.31	74.36	Sound	53.26	Sound	33.58	Sound	

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1471	92	61	329.774	20	1349	340.64	249.29	211.91	175.02	149.97	131.78	117.70	96.58	81.02	128.73	Sound	61.94	Sound	32.27	Sound	
1472	97	61	347.696	16	1481	349.38	253.00	210.90	170.67	145.09	127.15	113.39	92.67	77.39	138.48	Sound	65.81	Sound	31.7	Sound	
1473	76	62	274.423	14	2078	408.17	314.19	265.60	215.47	182.77	159.88	142.51	116.63	97.64	142.57	Sound	82.83	Sound	40.26	Sound	
1474	97	66	360.244	15	1059	379.35	256.19	208.00	166.71	142.24	125.39	112.38	92.45	77.51	171.35	Sound	65.76	Sound	29.86	Sound	
1475	91	68	342.531	21	2388	272.75	216.52	190.66	162.03	140.81	124.70	112.05	93.08	79.13	82.09	Sound	49.85	Sound	28.76	Sound	
1476	84	69	318.267	16	944	418.20	284.24	232.20	186.97	159.87	141.25	126.96	105.14	88.68	186	Sound	72.33	Sound	32.91	Sound	
1477	100	60	355.794	19	3935	246.23	204.84	182.77	156.22	135.60	119.49	106.64	87.33	73.31	63.46	Sound	47.17	Sound	28.96	Sound	
1478	82	62	296.088	14	2740	361.81	285.02	243.37	198.69	168.69	147.46	131.35	107.50	90.08	118.44	Sound	74.68	Sound	37.34	Sound	
1479	66	68	248.429	17	2994	364.26	302.31	267.76	226.80	196.13	172.97	154.92	128.20	108.73	96.5	Sound	71.63	Sound	41.21	Sound	
1480	80	65	295.074	19	2362	321.28	257.79	226.42	191.06	165.08	145.54	130.29	107.55	90.92	94.86	Sound	61.34	Sound	34.79	Sound	
1481	85	67	317.821	21	934	384.88	265.13	221.46	181.94	156.33	138.11	124.08	102.88	87.01	163.42	Sound	65.13	Sound	32.25	Sound	
1482	98	67	366.429	21	2774	249.36	200.07	176.94	150.88	131.30	116.29	104.44	86.64	73.56	72.42	Sound	45.64	Sound	26.86	Sound	
1483	88	63	320.049	15	1237	398.35	282.01	232.28	186.74	158.82	139.48	124.62	102.09	85.36	166.07	Sound	73.46	Sound	34.2	Sound	
1484	102	61	365.619	15	1885	325.13	240.42	200.99	162.45	137.89	120.73	107.61	87.91	73.42	124.14	Sound	63.1	Sound	30.28	Sound	
1485	70	69	265.222	15	788	512.17	346.22	281.19	225.56	192.79	170.36	153.10	126.64	106.68	230.98	Warning	88.4	Sound	39.69	Sound	
1486	69	67	257.996	14	759	540.76	362.62	292.55	233.72	199.53	176.07	157.90	129.98	109.00	248.21	Warning	93.02	Sound	41.63	Sound	
1487	65	69	246.278	18	1673	411.02	321.41	278.30	231.93	199.52	175.97	157.91	131.10	111.33	132.72	Sound	78.78	Sound	41.61	Sound	
1488	79	62	285.255	14	2802	370.64	293.90	251.70	205.91	174.89	152.86	136.13	111.41	93.38	118.94	Sound	76.81	Sound	38.76	Sound	
1489	82	60	291.751	20	1192	385.49	282.09	239.77	197.95	169.51	148.84	132.81	108.77	91.11	145.72	Sound	70.26	Sound	36.7	Sound	
1490	62	70	236.437	19	2337	377.93	310.49	275.64	234.94	204.24	180.82	162.44	135.04	114.99	102.29	Sound	71.4	Sound	41.8	Sound	
1491	65	62	234.704	14	3595	408.87	338.93	296.67	246.97	210.92	184.37	163.99	134.08	112.49	112.2	Sound	85.75	Sound	46.93	Sound	
1492	102	60	362.909	15	3802	277.74	223.98	194.10	160.45	136.70	119.40	106.13	86.57	72.41	83.64	Sound	57.4	Sound	30.57	Sound	
1493	103	65	379.908	19	1946	281.76	212.90	182.53	151.33	129.91	114.39	102.44	84.58	71.40	99.23	Sound	52.62	Sound	27.47	Sound	
1494	84	63	305.501	19	984	403.23	281.98	235.11	191.85	164.01	144.28	129.07	106.11	89.06	168.12	Sound	71.1	Sound	34.94	Sound	
1495	101	63	367.328	14	3226	294.69	230.75	196.52	160.21	136.06	119.06	106.17	87.06	73.05	98.17	Sound	60.46	Sound	29.89	Sound	
1496	92	69	348.578	16	2229	311.60	238.76	203.36	166.82	142.62	125.59	112.68	93.47	79.21	108.24	Sound	60.74	Sound	29.94	Sound	
1497	78	62	281.644	19	2200	339.67	271.81	238.41	200.82	173.19	152.37	136.09	111.79	94.08	101.26	Sound	65.22	Sound	37.1	Sound	
1498	65	66	241.400	20	1351	422.24	324.31	280.85	235.04	202.67	178.81	160.31	132.68	112.31	141.39	Sound	78.18	Sound	42.36	Sound	
1499	68	69	257.645	17	2935	355.60	293.42	259.19	219.04	189.28	166.95	149.64	124.02	105.33	96.41	Sound	69.91	Sound	39.64	Sound	
1500	63	63	229.126	20	2370	377.37	312.96	279.80	240.22	209.38	185.19	165.84	136.64	115.32	97.57	Sound	70.42	Sound	43.54	Sound	
1501	83	67	310.343	16	1454	379.44	278.43	233.28	189.56	161.75	142.41	127.68	105.54	89.03	146.16	Sound	71.53	Sound	34.07	Sound	
1502	86	64	314.999	21	1527	330.96	249.48	215.21	179.99	155.19	136.87	122.61	101.24	85.48	115.75	Sound	60.02	Sound	32.58	Sound	
1503	71	68	267.250	15	1079	469.23	334.05	275.72	222.14	189.47	167.06	149.96	124.01	104.54	193.51	Sound	86.25	Sound	39.51	Sound	
1504	102	70	388.977	15	3644	262.84	209.14	180.24	148.72	127.19	111.90	100.33	83.29	70.71	82.6	Sound	53.05	Sound	26.86	Sound	
1505	65	68	244.665	20	1848	382.53	305.84	269.21	228.20	197.92	175.06	157.16	130.44	110.81	113.32	Sound	71.29	Sound	40.76	Sound	
1506	86	61	308.267	19	955	405.29	281.46	234.08	190.67	162.77	142.96	127.66	104.55	87.45	171.21	Sound	71.31	Sound	35.11	Sound	
1507	97	66	360.244	15	1468	348.03	248.25	205.03	165.13	140.68	123.84	110.96	91.44	76.85	143	Sound	64.35	Sound	29.72	Sound	
1508	92	67	343.994	20	3742	247.30	206.13	184.76	159.12	139.08	123.35	110.78	91.81	77.92	62.54	Sound	45.68	Sound	28.3	Sound	
1509	92	63	334.596	16	2593	311.78	244.98	210.76	173.80	148.35	130.03	116.03	95.26	80.06	101.02	Sound	62.41	Sound	32.32	Sound	
1510	80	63	290.953	19	920	425.88	296.78	247.16	201.57	172.31	151.59	135.62	111.49	93.56	178.72	Sound	74.85	Sound	36.69	Sound	
1511	72	60	256.171	15	973	501.50	354.30	291.56	234.07	198.63	173.95	154.93	126.15	104.96	209.94	Warning	92.93	Sound	43.7	Sound	
1512	93	64	340.639	18	1983	311.07	238.43	204.75	169.46	145.19	127.63	114.13	94.01	79.20	106.32	Sound	59.56	Sound	31.06	Sound	

Sl No	Actual/ Seed Value					Deflection Values								Basin Parameters						
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1513	101	65	372.531	21	3450	232.49	191.09	170.72	146.82	128.25	113.70	102.05	84.43	71.51	61.77	Sound	42.47	Sound	26.2	Sound
1514	89	66	330.533	21	2139	289.18	227.34	199.38	168.83	146.40	129.45	116.14	96.21	81.54	89.8	Sound	52.98	Sound	30.26	Sound
1515	96	69	363.734	17	1690	315.77	232.75	196.18	160.38	137.22	121.01	108.68	90.20	76.40	119.59	Sound	58.96	Sound	28.54	Sound
1516	87	60	309.540	18	3717	285.71	238.51	212.46	180.97	156.67	137.81	122.85	100.47	84.28	73.25	Sound	55.79	Sound	33.82	Sound
1517	96	63	349.144	15	1855	337.26	250.34	209.61	169.66	144.21	126.47	112.94	92.63	77.62	127.65	Sound	65.4	Sound	31.27	Sound
1518	92	65	339.335	18	1468	338.58	248.21	209.63	171.82	146.96	129.32	115.81	95.53	80.49	128.95	Sound	62.67	Sound	31.15	Sound
1519	96	64	351.627	15	1521	351.96	253.50	210.02	169.26	143.99	126.51	113.13	92.90	77.87	141.94	Sound	66.03	Sound	30.86	Sound
1520	103	60	366.467	16	2417	296.97	228.80	195.18	159.90	136.05	118.98	105.91	86.47	72.28	101.79	Sound	59.13	Sound	30.14	Sound
1521	76	63	276.406	17	3732	320.29	268.83	239.36	203.56	176.11	154.99	138.35	113.58	95.65	80.93	Sound	63.25	Sound	37.76	Sound
1522	103	69	390.256	14	986	371.42	242.13	193.86	154.82	132.48	117.16	105.26	86.88	72.99	177.56	Sound	61.38	Sound	27.22	Sound
1523	102	64	373.604	20	3920	230.40	191.35	171.20	147.12	128.32	113.58	101.79	84.00	70.99	59.2	Sound	42.88	Sound	26.53	Sound
1524	84	69	318.267	16	733	450.94	291.69	234.83	188.43	161.33	142.69	128.26	106.06	89.28	216.11	Warning	73.5	Sound	33.07	Sound
1525	74	65	272.943	17	1769	387.23	299.45	257.03	212.22	181.58	159.57	142.73	117.68	99.24	130.2	Sound	75.45	Sound	38.85	Sound
1526	69	62	249.147	15	1195	485.15	354.99	295.67	238.66	202.73	177.71	158.58	129.77	108.50	189.48	Sound	92.94	Sound	44.15	Sound
1527	67	64	245.406	21	1738	380.27	302.61	266.66	226.58	196.66	173.79	155.73	128.61	108.72	113.61	Sound	70	Sound	40.93	Sound
1528	63	70	240.251	21	1424	406.68	315.66	275.50	232.60	201.68	178.63	160.69	133.88	114.07	131.18	Sound	73.82	Sound	40.99	Sound
1529	102	69	386.467	21	2739	240.42	191.24	168.55	143.37	124.68	110.49	99.34	82.64	70.34	71.87	Sound	43.87	Sound	25.342	Sound
1530	102	63	370.965	18	1941	294.29	222.20	189.68	156.36	133.76	117.50	105.00	86.33	72.59	104.61	Sound	55.92	Sound	28.76	Sound
1531	76	61	272.422	14	2547	392.81	309.83	264.68	216.10	183.36	160.15	142.51	116.41	97.39	128.13	Sound	81.32	Sound	40.85	Sound
1532	65	60	231.266	19	1548	431.78	338.91	294.83	246.62	211.89	186.01	165.84	135.76	113.85	136.95	Sound	82.94	Sound	46.05	Sound
1533	95	68	357.588	16	1350	348.34	247.01	204.53	165.40	141.23	124.56	111.82	92.53	78.07	143.81	Sound	63.3	Sound	29.41	Sound
1534	96	64	351.627	14	3209	304.89	239.74	204.56	167.03	141.96	124.31	110.94	91.14	76.60	100.33	Sound	62.6	Sound	31.02	Sound
1535	98	70	373.723	15	2997	283.54	221.62	189.49	155.49	132.82	116.90	104.88	87.09	73.90	94.05	Sound	56.67	Sound	27.94	Sound
1536	87	63	316.412	20	3514	268.28	224.14	201.07	173.18	151.21	133.86	119.92	98.82	83.41	67.21	Sound	49.86	Sound	31.29	Sound
1537	85	61	304.682	15	2160	361.57	278.83	236.93	193.23	164.15	143.55	127.86	104.51	87.44	124.64	Sound	72.78	Sound	36.29	Sound
1538	64	64	234.418	21	1639	399.53	317.41	279.52	237.37	205.97	182.00	163.09	134.68	113.85	120.01	Sound	73.55	Sound	42.88	Sound
1539	76	68	286.070	19	1325	384.07	285.60	243.44	201.23	172.83	152.49	136.90	113.59	96.26	140.63	Sound	70.61	Sound	35.93	Sound
1540	94	66	349.102	18	3416	265.02	216.53	191.03	161.51	139.58	123.04	110.14	90.97	76.98	73.99	Sound	51.45	Sound	29.44	Sound
1541	100	62	361.082	14	3317	297.17	233.91	199.65	162.96	138.34	120.94	107.73	88.17	73.88	97.52	Sound	61.31	Sound	30.61	Sound
1542	75	70	286.013	15	2046	380.51	293.30	249.32	203.83	174.00	153.21	137.52	114.21	96.87	131.19	Sound	75.32	Sound	36.48	Sound
1543	103	67	385.124	19	1653	291.98	214.52	182.04	150.05	128.74	113.53	101.86	84.38	71.37	109.94	Sound	53.3	Sound	26.88	Sound
1544	100	68	376.408	18	3517	248.15	201.68	177.53	149.85	129.50	114.25	102.42	84.85	72.00	70.62	Sound	48.03	Sound	27.08	Sound
1545	78	66	289.681	18	3689	299.37	251.27	224.51	192.03	166.92	147.46	132.06	109.04	92.29	74.86	Sound	57.59	Sound	34.86	Sound
1546	67	62	241.925	17	2008	411.86	328.54	285.62	237.85	203.79	178.72	159.38	130.70	109.81	126.24	Sound	81.83	Sound	44.41	Sound
1547	86	66	319.391	20	3631	263.56	220.69	198.21	171.01	149.59	132.68	119.10	98.58	83.56	65.35	Sound	48.62	Sound	30.49	Sound
1548	80	67	299.126	19	2196	323.64	256.88	224.62	188.94	163.14	143.94	129.04	106.86	90.58	99.02	Sound	61.48	Sound	34.1	Sound
1549	68	64	249.069	14	1451	476.15	354.50	295.78	238.47	202.51	177.68	158.79	130.39	109.36	180.37	Sound	93.27	Sound	43.72	Sound
1550	83	70	316.521	14	3519	322.00	258.42	222.66	183.30	156.48	137.52	123.24	102.24	86.76	99.34	Sound	66.18	Sound	33.24	Sound
1551	65	69	246.278	15	3735	372.88	311.55	274.96	231.33	199.14	175.20	156.79	129.73	110.05	97.92	Sound	75.82	Sound	42.35	Sound
1552	67	60	238.382	19	3181	350.61	297.05	267.34	230.47	201.01	177.56	158.63	129.97	109.14	83.27	Sound	66.33	Sound	42.38	Sound
1553	70	66	259.970	18	3126	338.27	282.35	251.60	214.64	186.32	164.51	147.31	121.63	102.94	86.67	Sound	65.28	Sound	39.01	Sound
1554	72	70	274.572	19	2961	318.34	263.97	235.34	201.36	175.38	155.39	139.62	116.06	98.83	83	Sound	59.96	Sound	35.76	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1555	103	61	369.203	18	846	379.93	247.59	201.04	161.92	138.05	121.29	108.27	88.41	73.68	178.89	Sound	62.99	Sound	29.78	Sound
1556	68	60	241.940	20	3833	321.21	277.37	252.71	221.03	194.68	173.02	155.11	127.50	107.22	68.5	Sound	58.03	Sound	39.57	Sound
1557	64	62	231.093	15	3827	392.71	330.89	293.20	247.28	212.61	186.33	165.87	135.66	113.90	99.51	Sound	80.59	Sound	46.74	Sound
1558	82	65	302.451	20	1582	343.95	261.60	225.67	188.32	162.16	142.95	128.07	105.83	89.43	118.28	Sound	63.51	Sound	34.09	Sound
1559	86	65	317.205	21	3637	257.97	216.91	195.76	169.98	149.31	132.74	119.29	98.76	83.67	62.21	Sound	46.45	Sound	30.02	Sound
1560	71	64	260.057	15	2698	386.74	311.44	269.80	223.20	190.57	166.97	148.96	122.40	103.03	116.94	Sound	79.23	Sound	41.61	Sound
1561	99	70	377.537	16	2195	294.27	222.58	188.62	154.30	131.91	116.27	104.43	86.77	73.61	105.65	Sound	56.71	Sound	27.48	Sound
1562	68	60	241.940	16	1650	446.15	345.20	295.00	241.95	205.91	180.07	160.27	130.86	109.40	151.15	Sound	89.09	Sound	45.64	Sound
1563	71	63	258.221	17	1804	402.41	314.30	270.83	224.11	191.70	168.21	150.18	123.39	103.77	131.58	Sound	79.13	Sound	41.52	Sound
1564	87	64	318.662	20	2922	279.82	229.01	203.56	173.87	151.18	133.62	119.68	98.74	83.44	76.26	Sound	52.38	Sound	31.5	Sound
1565	82	70	312.707	21	2175	298.45	236.79	208.49	177.22	154.11	136.62	122.91	102.39	87.27	89.96	Sound	54.38	Sound	31.2	Sound
1566	76	62	274.423	17	2551	353.14	285.35	249.51	208.73	179.15	157.17	140.15	114.92	96.57	103.63	Sound	70.36	Sound	39	Sound
1567	71	64	260.057	21	2518	329.32	272.04	243.56	209.83	183.43	162.62	145.89	120.54	101.96	85.76	Sound	60.13	Sound	37.54	Sound
1568	91	70	347.029	15	1279	369.17	258.86	212.61	171.10	146.14	129.11	116.11	96.31	81.38	156.56	Sound	66.47	Sound	30.03	Sound
1569	87	67	325.299	20	959	381.71	262.74	218.70	178.95	153.51	135.55	121.73	100.85	85.21	163.01	Sound	65.19	Sound	31.78	Sound
1570	87	64	318.662	16	3961	292.59	241.98	213.15	179.17	154.07	135.28	120.71	99.20	83.59	79.44	Sound	59.08	Sound	33.36	Sound
1571	64	70	244.064	18	2332	292.59	241.98	213.15	179.17	154.07	135.28	120.71	99.20	83.59	79.44	Sound	59.08	Sound	33.36	Sound
1572	101	63	367.328	18	2034	292.66	222.78	190.77	157.57	134.87	118.47	105.85	87.04	73.20	101.89	Sound	55.9	Sound	29.02	Sound
1573	102	63	370.965	16	2242	298.83	227.52	193.23	158.00	134.62	118.05	105.40	86.54	72.65	105.6	Sound	58.61	Sound	29.22	Sound
1574	67	66	248.828	16	758	532.43	363.98	297.85	239.77	204.63	180.36	161.67	133.19	111.85	234.58	Warning	93.22	Sound	42.96	Sound
1575	63	60	224.150	21	2263	378.86	314.42	281.99	243.16	212.42	187.98	168.22	138.17	116.20	96.87	Sound	69.57	Sound	44.2	Sound
1576	92	64	336.976	17	2204	313.24	242.56	208.29	171.99	147.10	129.17	115.44	95.02	80.01	104.95	Sound	61.19	Sound	31.66	Sound
1577	70	61	250.915	19	3955	319.45	274.68	249.05	216.39	189.71	168.11	150.48	123.59	103.96	70.4	Sound	59.34	Sound	39.23	Sound
1578	67	61	240.161	21	1973	373.69	302.97	269.00	229.89	199.90	176.57	157.95	129.86	109.33	104.69	Sound	69.1	Sound	41.95	Sound
1579	69	64	252.732	20	814	478.31	335.17	280.66	230.12	197.17	173.69	155.58	128.26	107.95	197.65	Sound	83.49	Sound	41.59	Sound
1580	63	62	227.482	21	2579	361.54	303.67	273.87	237.52	208.33	184.89	165.81	136.68	115.32	87.67	Sound	65.54	Sound	42.52	Sound
1581	101	70	385.164	15	3675	264.33	210.76	181.80	150.11	128.40	112.96	101.28	84.07	71.37	82.53	Sound	53.4	Sound	27.12	Sound
1582	85	63	309.138	17	785	445.27	295.49	240.50	193.56	165.09	145.24	129.86	106.39	88.91	204.77	Warning	75.41	Sound	35.23	Sound
1583	71	69	269.011	18	2101	362.96	288.85	251.95	211.13	181.97	160.53	144.02	119.54	101.54	111.01	Sound	69.98	Sound	37.95	Sound
1584	70	68	263.486	19	2917	330.17	274.58	245.09	209.88	182.80	161.84	145.25	120.41	102.26	85.08	Sound	62.29	Sound	37.55	Sound
1585	72	62	259.979	19	1429	404.74	309.14	266.08	221.00	189.57	166.57	148.79	122.23	102.74	138.66	Sound	76.51	Sound	40.78	Sound
1586	65	68	244.665	19	867	486.50	345.82	290.06	237.67	203.80	179.90	161.60	134.04	113.43	196.44	Sound	86.26	Sound	42.2	Sound
1587	67	62	241.925	14	2202	444.43	349.47	298.15	243.28	206.52	180.54	160.83	131.63	110.29	146.28	Sound	91.63	Sound	45.69	Sound
1588	93	61	333.358	17	1447	353.79	258.45	217.04	176.71	150.48	131.92	117.67	96.28	80.52	136.75	Sound	66.56	Sound	32.81	Sound
1589	82	65	302.451	21	3415	271.65	228.06	205.68	178.46	156.70	139.28	125.15	103.60	87.77	65.97	Sound	48.98	Sound	31.55	Sound
1590	90	64	329.650	16	2036	334.13	255.08	216.89	177.52	151.35	132.82	118.69	97.63	82.10	117.24	Sound	65.54	Sound	32.66	Sound
1591	63	61	225.823	21	3837	328.21	285.97	262.41	231.70	205.59	183.69	165.31	136.54	115.17	65.8	Sound	56.82	Sound	40.28	Sound
1592	80	60	284.635	15	905	472.94	324.41	264.51	211.76	179.82	157.58	140.35	114.15	94.85	208.43	Warning	84.69	Sound	39.47	Sound
1593	82	62	296.088	18	2030	343.38	269.09	233.09	194.01	166.37	146.06	130.35	107.00	89.92	110.29	Sound	66.72	Sound	36.02	Sound
1594	65	70	247.878	18	3649	336.56	286.23	257.47	221.82	193.78	171.82	154.34	128.15	109.05	79.09	Sound	63.69	Sound	39.44	Sound
1595	67	70	255.505	21	3945	295.54	255.44	233.59	205.73	182.55	163.45	147.66	123.24	105.13	61.95	Sound	51.04	Sound	34.89	Sound
1596	103	63	374.602	21	873	356.06	233.66	191.89	156.28	133.85	117.95	105.63	86.91	72.95	164.17	Sound	58.04	Sound	28.22	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1597	85	60	302.425	15	3185	332.89	268.60	232.83	192.51	164.02	143.26	127.35	103.88	86.89	100.06	Sound	68.81	Sound	36.67	Sound	
1598	84	62	303.309	17	3861	296.26	247.29	219.56	186.18	160.78	141.34	126.05	103.32	86.87	76.7	Sound	58.78	Sound	34.73	Sound	
1599	62	70	236.437	21	2958	337.02	285.76	258.96	225.93	199.26	177.79	160.32	133.64	113.97	78.06	Sound	59.7	Sound	38.94	Sound	
1600	83	68	312.419	21	3060	272.43	225.28	201.83	174.11	152.47	135.47	121.84	101.23	86.10	70.6	Sound	49.36	Sound	30.63	Sound	
1601	103	66	382.527	15	1697	320.79	231.82	192.30	155.14	132.14	116.28	104.17	85.86	72.21	128.49	Sound	60.16	Sound	27.97	Sound	
1602	74	69	280.378	21	1523	357.83	274.28	238.20	200.35	173.41	153.45	137.95	114.78	97.65	119.63	Sound	64.79	Sound	35.46	Sound	
1603	64	60	227.708	17	1956	434.73	348.22	303.23	252.71	216.38	189.50	168.68	137.83	115.44	131.5	Sound	86.85	Sound	47.7	Sound	
1604	67	60	238.382	21	2461	354.12	294.59	264.48	228.29	199.55	176.65	158.10	129.87	109.23	89.64	Sound	64.93	Sound	41.45	Sound	
1605	77	68	289.834	14	1916	395.70	299.21	251.19	203.34	173.05	152.21	136.47	112.90	95.34	144.51	Sound	78.14	Sound	36.58	Sound	
1606	76	69	287.956	19	1438	373.04	280.60	240.22	199.14	171.22	151.15	135.78	112.83	95.79	132.82	Sound	69	Sound	35.44	Sound	
1607	76	66	282.253	16	2989	342.13	278.34	243.27	203.21	174.41	153.24	136.98	112.98	95.46	98.86	Sound	68.86	Sound	37.43	Sound	
1608	72	68	271.014	18	2261	354.63	284.49	249.00	209.18	180.41	159.10	142.62	118.19	100.27	105.63	Sound	68.59	Sound	37.79	Sound	
1609	99	62	357.472	19	2801	267.40	214.06	187.79	158.20	136.44	120.04	107.21	88.07	74.12	79.61	Sound	51.35	Sound	29.23	Sound	
1610	84	64	307.674	21	1912	314.82	246.18	215.41	182.01	157.57	139.12	124.64	102.93	86.98	99.41	Sound	57.84	Sound	32.93	Sound	
1611	83	60	295.309	14	2582	368.19	288.29	245.44	199.87	169.41	147.86	131.47	107.18	89.50	122.75	Sound	76.03	Sound	37.94	Sound	
1612	72	66	267.397	20	3337	307.40	259.78	234.32	203.02	178.02	158.09	142.00	117.56	99.66	73.08	Sound	56.3	Sound	36.02	Sound	
1613	82	68	308.655	17	3461	298.27	245.74	216.90	183.15	158.16	139.41	124.87	103.35	87.65	81.37	Sound	58.74	Sound	33.29	Sound	
1614	71	61	254.499	20	1133	430.18	319.24	272.77	225.98	193.80	170.31	152.11	124.82	104.76	157.41	Sound	78.97	Sound	41.69	Sound	
1615	93	62	335.807	18	2683	291.05	232.44	202.96	169.97	146.09	128.31	114.50	93.98	79.02	88.09	Sound	56.87	Sound	31.59	Sound	
1616	82	69	310.689	21	1648	325.21	248.39	215.42	181.01	156.61	138.58	124.59	103.66	88.18	109.79	Sound	58.81	Sound	32.02	Sound	
1617	65	64	238.081	15	3833	382.77	321.68	284.68	239.91	206.35	181.05	161.42	132.48	111.58	98.09	Sound	78.33	Sound	44.93	Sound	
1618	90	68	338.767	18	2525	291.99	231.07	201.07	168.14	144.77	127.62	114.42	94.84	80.44	90.92	Sound	56.3	Sound	30.35	Sound	
1619	69	69	261.433	18	1646	395.01	305.79	263.71	219.13	188.34	166.10	149.08	123.79	105.09	131.3	Sound	75.37	Sound	39.26	Sound	
1620	79	63	287.316	14	1270	440.81	315.87	259.99	208.43	177.03	155.40	138.80	113.64	94.99	180.82	Sound	82.96	Sound	38.23	Sound	
1621	99	70	377.537	20	1692	287.16	213.01	182.09	151.21	130.26	115.17	103.58	86.26	73.37	105.07	Sound	51.83	Sound	26.68	Sound	
1622	98	67	366.429	15	2541	300.19	230.63	195.76	159.80	136.21	119.70	107.20	88.59	74.80	104.43	Sound	59.55	Sound	29.01	Sound	
1623	89	70	339.402	17	3980	267.80	221.60	196.02	165.89	143.48	126.65	113.59	94.27	80.18	71.78	Sound	52.54	Sound	29.89	Sound	
1624	103	67	385.124	21	1797	273.19	204.60	176.10	147.16	126.99	112.20	100.74	83.58	70.86	97.09	Sound	49.11	Sound	26.25	Sound	
1625	72	67	269.213	18	2579	345.14	281.31	247.93	209.46	181.03	159.65	143.01	118.30	100.24	97.21	Sound	66.9	Sound	38.02	Sound	
1626	97	62	350.250	14	1485	365.64	260.46	213.94	171.34	145.46	127.58	113.84	93.01	77.59	151.7	Sound	68.48	Sound	31.62	Sound	
1627	77	65	284.009	14	3837	346.01	283.37	246.55	204.33	174.43	152.77	136.27	112.05	94.43	99.46	Sound	72.12	Sound	38.16	Sound	
1628	84	65	309.828	14	2531	354.21	274.98	233.33	189.89	161.40	141.50	126.44	104.07	87.57	120.88	Sound	71.93	Sound	34.96	Sound	
1629	101	66	375.099	19	3849	236.85	195.44	173.81	148.29	128.83	113.85	102.03	84.34	71.42	63.04	Sound	44.98	Sound	26.8	Sound	
1630	67	65	247.125	20	1253	424.80	321.57	276.90	230.79	198.65	175.11	156.89	129.65	109.54	147.9	Sound	78.25	Sound	41.76	Sound	
1631	71	61	254.499	18	3947	326.33	278.92	251.38	216.69	188.92	166.82	149.01	122.13	102.63	74.95	Sound	62.46	Sound	39.91	Sound	
1632	67	67	250.518	16	1896	417.01	326.53	280.58	231.40	197.88	173.95	155.75	128.76	108.87	136.43	Sound	82.7	Sound	42.13	Sound	
1633	91	62	328.585	16	3884	287.67	236.77	208.04	174.41	149.68	131.21	116.90	95.74	80.43	79.63	Sound	58.36	Sound	32.78	Sound	
1634	95	67	355.212	18	2590	280.34	221.27	192.32	160.65	138.22	121.77	109.10	90.29	76.47	88.02	Sound	54.1	Sound	29.12	Sound	
1635	65	62	234.704	16	870	536.64	379.96	314.35	253.68	215.83	189.42	169.11	138.40	115.66	222.29	Warning	98.52	Sound	46.72	Sound	
1636	62	69	234.911	20	3699	329.28	284.16	258.96	226.85	200.42	178.88	161.23	134.14	114.18	70.32	Sound	58.54	Sound	39.19	Sound	
1637	88	65	324.581	19	1774	323.82	247.03	212.57	176.66	151.76	133.64	119.66	98.81	83.43	111.25	Sound	60.81	Sound	32.1	Sound	
1638	66	67	246.779	19	3089	342.18	288.09	258.62	222.66	194.44	172.29	154.60	127.99	108.56	83.56	Sound	64.18	Sound	39.84	Sound	
1639	73	68	274.778	17	882	464.34	321.83	265.61	215.05	183.88	162.29	145.75	120.65	101.80	198.73	Sound	81.73	Sound	38.13	Sound	

Sl No	Actual/ Seed Value					Deflection Values								Basin Parameters						
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1640	78	63	283.679	19	3828	293.16	248.62	223.91	193.27	168.85	149.44	133.80	110.15	92.90	69.25	Sound	55.06	Sound	35.05	Sound
1641	74	60	263.287	19	2751	337.58	279.19	248.43	211.80	183.59	161.68	144.26	118.13	99.16	89.15	Sound	64.84	Sound	39.33	Sound
1642	77	64	282.034	18	1766	368.49	285.27	245.94	204.10	175.01	153.85	137.55	113.30	95.48	122.55	Sound	70.93	Sound	37.46	Sound
1643	103	63	374.602	16	1777	314.65	231.52	194.12	157.62	134.19	117.76	105.20	86.34	72.39	120.53	Sound	59.93	Sound	28.99	Sound
1644	65	62	234.704	17	789	539.46	377.59	312.51	252.87	215.42	189.16	168.95	138.36	115.70	226.95	Warning	97.09	Sound	46.47	Sound
1645	96	67	358.951	14	2474	316.87	240.91	202.68	164.21	139.68	122.74	109.94	90.80	76.58	114.19	Sound	63	Sound	29.74	Sound
1646	99	60	352.236	17	3538	270.51	220.47	193.50	162.30	139.34	122.11	108.69	88.80	74.40	77.01	Sound	54.16	Sound	30.65	Sound
1647	91	65	335.647	19	1364	341.11	248.46	210.16	172.84	148.09	130.42	116.84	96.45	81.32	130.95	Sound	62.07	Sound	31.25	Sound
1648	84	64	307.674	20	2097	313.96	247.85	216.96	182.96	158.12	139.44	124.83	102.98	86.97	97	Sound	58.84	Sound	33.29	Sound
1649	100	66	371.385	19	2692	261.80	207.48	181.30	152.39	131.50	115.95	103.87	85.89	72.70	80.5	Sound	49.8	Sound	27.63	Sound
1650	94	62	339.417	14	1814	357.25	263.02	218.52	175.74	149.07	130.61	116.51	95.28	79.62	138.73	Sound	69.45	Sound	32.56	Sound
1651	69	68	259.722	16	3930	341.67	287.74	255.86	217.13	187.78	165.49	148.11	122.42	103.77	85.81	Sound	68.08	Sound	39.67	Sound
1652	65	63	236.400	18	2642	379.78	314.73	279.45	237.47	205.53	181.03	161.72	132.92	112.00	100.33	Sound	73.92	Sound	43.81	Sound
1653	72	70	274.572	20	3851	289.71	247.47	224.41	195.59	172.28	153.54	138.33	115.17	98.15	65.3	Sound	52.13	Sound	33.95	Sound
1654	91	61	326.189	21	1333	337.79	247.70	211.44	175.51	150.76	132.62	118.52	97.34	81.75	126.35	Sound	60.68	Sound	32.24	Sound
1655	65	68	244.665	19	2527	361.85	298.75	265.78	226.90	197.30	174.57	156.64	129.86	110.28	96.07	Sound	68.48	Sound	40.66	Sound
1656	99	63	360.055	18	772	397.81	255.34	206.39	166.14	141.87	124.90	111.71	91.55	76.49	191.42	Sound	64.52	Sound	30.16	Sound
1657	98	63	356.418	16	2818	291.28	229.42	197.58	163.05	139.20	122.01	108.87	89.38	75.13	93.7	Sound	58.38	Sound	30.33	Sound
1658	96	67	358.951	19	2515	273.08	215.46	187.94	157.78	136.13	120.09	107.66	89.16	75.57	85.14	Sound	51.81	Sound	28.47	Sound
1659	94	70	358.469	17	883	385.15	253.45	205.82	165.86	142.08	125.72	113.13	93.85	79.26	179.33	Sound	63.74	Sound	28.95	Sound
1660	64	66	237.687	18	2928	367.82	307.73	274.53	234.46	203.64	179.84	161.05	132.98	112.54	93.29	Sound	70.89	Sound	42.59	Sound
1661	78	61	279.591	21	2743	305.88	253.07	226.67	195.26	170.53	150.94	135.14	111.16	93.62	79.21	Sound	56.14	Sound	35.39	Sound
1662	97	65	357.777	19	862	378.31	249.43	203.98	165.25	141.38	124.68	111.77	92.10	77.38	174.33	Sound	62.6	Sound	29.61	Sound
1663	89	64	325.988	18	2563	300.48	239.47	208.94	174.95	150.48	132.35	118.30	97.42	82.16	91.54	Sound	58.46	Sound	32.18	Sound
1664	98	68	368.880	19	1277	325.03	230.07	192.69	157.77	135.28	119.42	107.28	88.98	75.29	132.34	Sound	57.41	Sound	28	Sound
1665	75	64	274.709	20	1235	396.36	294.48	251.79	208.86	179.43	158.04	141.50	116.73	98.43	144.57	Sound	72.36	Sound	37.93	Sound
1666	95	60	338.004	18	3018	281.62	227.87	200.08	168.23	144.72	126.99	113.14	92.53	77.58	81.54	Sound	55.36	Sound	31.58	Sound
1667	82	62	296.088	16	1284	407.93	296.16	247.12	200.14	170.26	149.34	133.30	109.16	91.33	160.81	Sound	76.86	Sound	36.96	Sound
1668	65	61	232.992	14	3280	419.97	345.42	301.11	249.71	212.84	185.86	165.20	134.85	112.94	118.86	Sound	88.27	Sound	47.64	Sound
1669	100	63	363.692	21	876	362.28	239.50	197.18	160.76	137.70	121.34	108.66	89.42	75.07	165.1	Sound	59.48	Sound	29.04	Sound
1670	81	66	300.822	17	2297	336.78	265.86	230.16	191.24	164.00	144.21	129.05	106.56	90.05	106.62	Sound	66.16	Sound	34.95	Sound
1671	82	70	312.707	16	977	420.54	288.95	236.99	191.30	163.78	144.89	130.41	108.29	91.56	183.55	Sound	73.21	Sound	33.37	Sound
1672	69	63	250.947	16	1119	477.31	347.95	290.77	235.73	200.67	176.15	157.38	129.14	108.23	186.54	Sound	90.1	Sound	43.29	Sound
1673	86	62	310.531	20	1758	328.28	252.68	218.94	183.13	157.63	138.71	123.97	101.94	85.78	109.34	Sound	61.31	Sound	33.66	Sound
1674	83	68	312.419	21	2331	293.41	234.96	207.64	176.98	154.02	136.47	122.63	101.87	86.61	85.77	Sound	53.62	Sound	31.39	Sound
1675	64	64	234.418	14	2136	457.49	359.67	306.87	250.55	212.95	186.47	166.41	136.71	114.91	150.62	Sound	93.92	Sound	46.54	Sound
1676	98	65	361.466	15	3873	275.90	222.91	193.42	160.26	136.95	120.08	107.21	88.24	74.39	82.48	Sound	56.47	Sound	29.74	Sound
1677	77	65	284.009	16	2110	370.28	289.38	248.42	204.65	174.81	153.46	137.18	113.03	95.28	121.86	Sound	73.61	Sound	37.63	Sound
1678	71	63	258.221	18	866	480.27	337.30	280.61	228.18	194.78	171.25	153.15	125.79	105.48	199.66	Sound	85.83	Sound	41.63	Sound
1679	75	64	274.709	19	2003	354.03	280.85	245.47	206.29	177.86	156.63	140.11	115.48	97.46	108.56	Sound	67.61	Sound	37.75	Sound
1680	84	64	307.674	21	3146	274.33	227.96	204.62	176.72	154.70	137.24	123.16	101.78	86.10	69.71	Sound	49.92	Sound	31.54	Sound
1681	82	61	293.929	21	1607	342.91	263.35	228.75	192.09	165.68	145.89	130.38	107.13	90.09	114.16	Sound	63.07	Sound	35.3	Sound

Sl No	Actual/ Seed Value					Deflection Values										Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)		
1682	100	63	363.692	20	730	392.88	248.93	201.51	162.90	139.34	122.77	109.90	90.25	75.56	191.37	Sound	62.17	Sound	29.44	Sound	
1683	94	70	358.469	19	1575	310.67	228.98	194.57	160.60	138.00	121.92	109.62	91.24	77.52	116.1	Sound	56.57	Sound	28.38	Sound	
1684	103	66	382.527	19	2055	275.84	209.87	180.42	149.88	128.79	113.49	101.70	84.11	71.12	95.42	Sound	51.63	Sound	27.09	Sound	
1685	103	67	385.124	21	2802	239.90	191.52	169.02	143.88	125.10	110.77	99.47	82.51	70.05	70.88	Sound	43.92	Sound	25.634	Sound	
1686	84	63	305.501	19	2898	297.48	243.44	215.64	183.22	158.70	139.90	125.08	102.92	86.78	81.84	Sound	56.94	Sound	33.62	Sound	
1687	94	65	346.712	14	3385	304.28	241.02	206.35	168.92	143.71	125.91	112.44	92.53	77.91	97.93	Sound	62.64	Sound	31.27	Sound	
1688	68	63	247.310	21	2506	342.36	284.22	255.00	220.09	192.54	170.70	153.08	126.31	106.70	87.36	Sound	62.46	Sound	39.46	Sound	
1689	90	65	331.958	16	2304	322.08	249.58	213.51	175.47	149.80	131.52	117.59	96.90	81.65	108.57	Sound	63.71	Sound	32.21	Sound	
1690	96	70	366.096	21	2367	260.27	204.49	179.34	151.96	131.97	116.94	105.19	87.64	74.68	80.93	Sound	47.37	Sound	26.78	Sound	
1691	68	61	243.746	17	3404	360.99	303.96	271.03	230.73	199.58	175.48	156.41	127.98	107.45	89.96	Sound	71.45	Sound	43.17	Sound	
1692	62	67	231.822	16	3377	386.55	324.44	287.97	243.92	210.70	185.53	165.93	136.95	115.92	98.58	Sound	77.27	Sound	44.77	Sound	
1693	77	64	282.034	15	1808	398.66	303.41	256.51	208.74	177.59	155.75	139.16	114.38	96.10	142.15	Sound	78.92	Sound	38.43	Sound	
1694	97	61	347.696	21	3966	236.31	198.61	179.16	155.38	136.25	120.86	108.32	89.16	75.12	57.15	Sound	42.91	Sound	27.93	Sound	
1695	103	63	374.602	16	3079	274.58	217.26	187.47	154.93	132.33	115.99	103.48	84.95	71.42	87.11	Sound	55.14	Sound	28.85	Sound	
1696	77	60	273.961	14	3612	362.70	296.48	257.61	212.98	181.26	158.13	140.44	114.44	95.68	105.09	Sound	76.35	Sound	40.82	Sound	
1697	77	62	278.033	17	3362	327.16	271.73	240.67	203.62	175.64	154.33	137.63	112.81	94.84	86.49	Sound	65.03	Sound	38.01	Sound	
1698	95	67	355.212	17	2778	283.23	224.20	194.34	161.65	138.73	122.08	109.32	90.41	76.52	88.89	Sound	55.61	Sound	29.41	Sound	
1699	82	63	298.227	19	3165	296.14	245.29	218.46	186.54	161.98	142.95	127.85	105.20	88.71	77.68	Sound	56.48	Sound	34.13	Sound	
1700	63	60	224.150	14	3135	437.64	359.77	313.50	259.83	221.31	193.10	171.47	139.71	116.82	124.14	Sound	92.19	Sound	49.84	Sound	
1701	68	60	241.940	19	2089	385.83	312.47	275.44	232.88	201.01	176.72	157.59	129.02	108.27	110.39	Sound	74.43	Sound	43.42	Sound	
1702	70	68	263.486	16	3245	353.10	291.65	256.80	215.96	185.99	163.70	146.51	121.17	102.71	96.3	Sound	70.81	Sound	39.48	Sound	
1703	85	69	322.056	14	3753	313.61	252.95	218.47	180.14	153.79	135.06	120.92	100.14	84.87	95.14	Sound	64.68	Sound	32.87	Sound	
1704	62	68	233.373	19	2410	379.37	313.21	278.64	237.88	206.85	183.01	164.22	136.14	115.61	100.73	Sound	71.79	Sound	42.63	Sound	
1705	85	60	302.425	18	2584	318.28	256.24	224.48	188.40	161.94	142.07	126.57	103.51	86.78	93.8	Sound	62.54	Sound	35.37	Sound	
1706	68	68	255.958	20	971	446.61	322.21	272.65	224.99	193.37	170.78	153.43	127.37	107.94	173.96	Sound	79.28	Sound	39.94	Sound	
1707	98	64	358.953	14	867	410.92	266.12	212.69	169.58	144.66	127.38	113.87	93.05	77.53	198.23	Sound	68.03	Sound	30.79	Sound	
1708	98	66	363.958	21	2443	259.90	205.33	180.44	153.03	132.79	117.44	105.38	87.29	73.99	79.46	Sound	47.65	Sound	27.41	Sound	
1709	73	69	276.589	18	2897	327.93	269.81	238.85	202.64	175.57	155.10	139.13	115.41	98.07	89.08	Sound	63.28	Sound	36.44	Sound	
1710	74	66	274.825	18	2268	351.37	281.58	246.31	206.75	178.13	156.89	140.45	116.03	98.15	105.06	Sound	68.18	Sound	37.68	Sound	
1711	95	64	347.964	16	2049	320.32	242.98	206.08	168.42	143.56	126.00	112.61	92.62	77.87	114.24	Sound	62.52	Sound	30.95	Sound	
1712	96	69	363.734	14	2728	306.09	235.04	198.57	161.32	137.37	120.84	108.38	89.82	76.01	107.52	Sound	61.2	Sound	28.99	Sound	
1713	70	70	266.945	18	1089	435.59	315.95	265.89	217.77	186.67	164.86	148.24	123.29	104.61	169.7	Sound	79.22	Sound	38.43	Sound	
1714	82	60	291.751	17	2393	343.19	273.42	237.54	197.60	169.08	148.05	131.79	107.69	90.19	105.65	Sound	68.46	Sound	37.29	Sound	
1715	92	64	336.976	18	2133	307.53	238.42	205.67	170.75	146.43	128.73	115.09	94.80	79.89	101.86	Sound	59.24	Sound	31.34	Sound	
1716	73	60	259.729	15	2805	385.41	311.80	270.61	223.97	190.89	166.74	148.21	120.89	101.12	114.8	Sound	79.72	Sound	42.68	Sound	
1717	88	61	315.436	20	2906	282.99	231.77	206.02	175.88	152.73	134.75	120.43	98.90	83.20	76.97	Sound	53.29	Sound	32.3	Sound	
1718	81	65	298.762	20	3725	275.41	232.73	209.91	181.82	159.37	141.46	126.98	104.98	88.87	65.5	Sound	50.54	Sound	32.39	Sound	
1719	85	69	322.056	17	2857	302.20	242.72	211.75	177.08	152.36	134.26	120.37	99.83	84.76	90.45	Sound	59.39	Sound	31.99	Sound	
1720	103	64	377.266	16	1701	316.25	230.88	193.05	156.60	133.39	117.18	104.80	86.15	72.32	123.2	Sound	59.66	Sound	28.59	Sound	
1721	97	67	362.690	16	3283	275.97	220.67	191.36	158.88	136.13	119.65	107.07	88.49	74.86	84.61	Sound	55.23	Sound	29.06	Sound	
1722	81	64	296.685	16	744	473.65	312.25	252.72	202.72	172.94	152.27	136.23	111.68	93.34	220.93	Warning	79.78	Sound	36.71	Sound	
1723	75	61	268.837	19	944	446.78	317.53	266.18	217.63	185.88	163.22	145.73	119.40	99.96	180.6	Sound	80.3	Sound	40.15	Sound	

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1724	91	67	340.255	17	3198	282.62	228.53	199.96	167.56	144.18	126.92	113.61	93.93	79.53	82.66	Sound	55.78	Sound	30.57	Sound
1725	86	69	325.845	18	2721	294.59	236.32	206.85	173.81	149.96	132.32	118.70	98.51	83.69	87.74	Sound	56.89	Sound	31.26	Sound
1726	87	62	314.142	15	3727	311.28	254.22	221.68	184.29	157.46	137.78	122.67	100.41	84.28	89.6	Sound	64.22	Sound	34.79	Sound
1727	84	66	311.964	18	2985	298.23	243.06	214.21	180.92	156.29	137.76	123.31	101.85	86.18	84.02	Sound	57.92	Sound	32.98	Sound
1728	63	65	232.371	17	985	508.85	370.05	310.35	252.83	215.82	189.85	169.98	140.09	117.88	198.5	Sound	94.53	Sound	45.84	Sound
1729	101	66	375.099	19	3210	248.14	200.66	176.86	149.70	129.56	114.33	102.43	84.68	71.70	71.28	Sound	47.3	Sound	27.13	Sound
1730	103	70	392.791	20	1578	285.37	207.86	176.50	146.00	125.64	111.09	99.94	83.23	70.75	108.87	Sound	50.86	Sound	25.702	Sound
1731	79	64	289.360	14	3404	350.41	283.10	244.64	201.58	171.70	150.27	133.99	110.03	92.55	105.77	Sound	72.94	Sound	37.71	Sound
1732	84	69	318.267	19	3297	277.70	229.32	204.05	174.25	151.58	134.19	120.49	100.02	85.06	73.65	Sound	52.47	Sound	31.09	Sound
1733	65	68	244.665	21	2175	357.06	292.05	260.42	223.68	195.42	173.44	155.93	129.54	110.16	96.64	Sound	65	Sound	39.49	Sound
1734	92	68	346.295	21	1734	357.06	292.05	260.42	223.68	195.42	173.44	155.93	129.54	110.16	96.64	Sound	65	Sound	39.49	Sound
1735	75	65	276.632	16	2510	362.40	289.94	251.46	208.70	178.65	156.82	140.11	115.41	97.35	110.94	Sound	72.81	Sound	38.54	Sound
1736	69	61	247.330	15	889	526.36	368.47	302.37	242.61	206.08	180.69	161.12	131.41	109.47	223.99	Warning	96.29	Sound	44.96	Sound
1737	90	69	341.000	16	1667	340.83	251.57	211.24	171.92	146.85	129.45	116.24	96.42	81.59	129.59	Sound	64.39	Sound	30.61	Sound
1738	74	70	282.199	20	1740	350.13	272.48	237.25	199.48	172.53	152.61	137.19	114.22	97.25	112.88	Sound	64.72	Sound	35.34	Sound
1739	82	67	306.604	14	2328	362.98	279.25	236.08	191.79	163.16	143.31	128.32	105.98	89.42	126.9	Sound	72.92	Sound	34.84	Sound
1740	75	64	274.709	15	2958	363.04	293.50	254.73	211.04	180.28	157.95	140.90	115.77	97.45	108.31	Sound	74.45	Sound	39.38	Sound
1741	78	69	295.533	19	1717	348.35	267.91	231.32	192.84	166.08	146.62	131.67	109.40	92.93	117.03	Sound	65.24	Sound	34.41	Sound
1742	75	68	282.306	16	3086	338.80	276.48	242.03	202.51	174.05	153.13	137.07	113.41	96.11	96.77	Sound	67.98	Sound	36.98	Sound
1743	80	60	284.635	20	2637	313.38	256.83	228.34	194.93	169.21	149.20	133.25	109.24	91.77	85.04	Sound	59.13	Sound	35.96	Sound
1744	70	61	250.915	20	1265	420.49	318.20	273.88	227.97	195.80	172.11	153.70	126.15	105.94	146.61	Sound	78.08	Sound	42.1	Sound
1745	91	64	333.313	15	2888	314.42	248.22	213.10	175.12	149.24	130.77	116.73	95.95	80.72	101.32	Sound	63.86	Sound	32.51	Sound
1746	90	64	329.650	20	3257	265.24	218.88	195.27	167.34	145.75	128.92	115.51	95.31	80.55	69.97	Sound	49.52	Sound	30.24	Sound
1747	79	69	299.322	21	2282	304.15	244.20	216.06	184.36	160.56	142.37	128.02	106.49	90.66	88.09	Sound	55.5	Sound	32.54	Sound
1748	76	70	289.826	14	1980	391.86	297.40	250.06	202.67	172.65	152.05	136.53	113.34	96.01	141.8	Sound	77.41	Sound	36.12	Sound
1749	95	60	338.004	14	3898	302.69	244.15	210.75	173.32	147.25	128.45	114.12	93.02	77.75	91.94	Sound	63.5	Sound	33.13	Sound
1750	68	68	255.958	15	2703	389.58	314.15	272.39	225.70	193.11	169.66	151.84	125.60	106.36	117.19	Sound	79.28	Sound	41.27	Sound
1751	84	62	303.309	17	3435	304.63	251.37	221.94	187.23	161.29	141.65	126.31	103.54	87.04	82.69	Sound	60.65	Sound	34.98	Sound
1752	86	67	321.560	15	3448	309.39	249.92	216.86	179.76	153.77	135.01	120.73	99.70	84.31	92.53	Sound	63.09	Sound	33.04	Sound
1753	77	70	293.640	16	983	437.56	303.83	249.88	201.67	172.44	152.39	137.06	113.76	96.18	187.68	Sound	77.44	Sound	35.38	Sound
1754	84	66	311.964	19	1043	389.23	273.89	228.90	187.15	160.28	141.31	126.74	104.77	88.36	160.33	Sound	68.62	Sound	33.54	Sound
1755	73	64	267.383	19	1483	391.84	299.60	258.01	214.49	184.20	162.09	145.02	119.55	100.80	133.83	Sound	73.81	Sound	39.18	Sound
1756	65	70	247.878	21	3067	322.39	273.06	247.32	215.68	190.15	169.64	152.96	127.50	108.73	75.07	Sound	57.17	Sound	37.19	Sound
1757	76	62	274.423	17	2748	346.82	282.53	247.95	208.08	178.82	156.94	139.93	114.73	96.43	98.87	Sound	69.13	Sound	38.89	Sound
1758	62	68	233.373	16	2505	411.59	335.24	293.20	245.15	210.63	185.30	165.88	137.24	116.31	118.39	Sound	82.57	Sound	44.75	Sound
1759	98	63	356.418	20	3410	247.59	203.61	181.35	155.16	134.98	119.28	106.78	87.97	74.23	66.24	Sound	46.37	Sound	28.2	Sound
1760	63	63	229.126	16	897	541.11	386.47	320.69	259.19	220.65	193.78	173.17	142.03	118.93	220.42	Warning	100.04	Warning	47.48	Sound
1761	83	68	312.419	18	3344	289.06	238.40	211.26	179.38	155.43	137.25	123.04	101.91	86.49	77.8	Sound	55.83	Sound	32.39	Sound
1762	93	67	347.734	19	2973	267.49	216.26	190.60	161.35	139.70	123.36	110.59	91.56	77.63	76.89	Sound	50.9	Sound	29.11	Sound
1763	79	66	293.394	15	1951	379.07	289.75	245.42	200.03	170.39	149.65	133.93	110.48	93.13	133.65	Sound	75.03	Sound	36.46	Sound
1764	79	66	293.394	19	1840	344.57	267.95	232.33	194.15	167.16	147.32	131.99	109.16	92.35	112.24	Sound	65.17	Sound	35.17	Sound
1765	87	66	323.105	16	3664	294.14	241.00	211.35	177.05	152.13	133.69	119.49	98.54	83.27	82.79	Sound	59.22	Sound	32.64	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1766	73	69	276.589	15	3148	354.06	287.71	250.39	208.12	178.32	156.76	140.37	116.27	98.61	103.67	Sound	72.07	Sound	37.95	Sound
1767	68	65	250.813	16	1008	489.85	351.18	291.82	236.13	201.27	177.04	158.50	130.50	109.64	198.03	Sound	90.55	Sound	42.77	Sound
1768	95	61	340.527	19	2080	300.37	232.88	201.60	168.08	144.29	126.72	113.08	92.74	77.86	98.77	Sound	57.31	Sound	31.21	Sound
1769	87	70	331.775	20	2568	279.72	224.27	197.66	167.79	145.70	129.02	115.98	96.53	82.23	82.06	Sound	51.96	Sound	29.72	Sound
1770	100	60	355.794	16	1095	373.50	256.22	209.80	168.58	143.27	125.58	111.89	91.11	75.79	163.7	Sound	66.53	Sound	31.38	Sound
1771	65	63	236.400	18	2986	368.58	309.17	276.10	235.91	204.77	180.57	161.37	132.63	111.77	92.48	Sound	71.33	Sound	43.4	Sound
1772	74	63	269.132	18	1244	419.79	311.09	263.72	216.49	185.03	162.56	145.30	119.45	100.37	156.07	Sound	78.69	Sound	39.73	Sound
1773	79	63	287.316	21	991	404.53	287.70	242.95	200.51	172.13	151.62	135.75	111.85	94.13	161.58	Sound	70.82	Sound	36.38	Sound
1774	91	64	333.313	20	3559	257.08	213.91	191.54	164.72	143.74	127.26	114.06	94.12	79.55	65.54	Sound	47.8	Sound	29.68	Sound
1775	78	67	291.648	20	1842	337.42	263.58	229.80	193.30	167.06	147.54	132.36	109.71	93.04	107.62	Sound	62.74	Sound	34.7	Sound
1776	63	61	225.823	21	2159	381.35	314.61	281.44	242.16	211.35	187.01	167.41	137.69	115.96	99.91	Sound	70.09	Sound	43.94	Sound
1777	95	62	343.028	20	2477	277.62	220.84	193.90	163.83	141.60	124.75	111.52	91.70	77.23	83.72	Sound	52.3	Sound	30.08	Sound
1778	99	66	367.671	15	2585	298.55	229.81	195.20	159.37	135.78	119.23	106.69	88.01	74.20	103.35	Sound	59.42	Sound	29.09	Sound
1779	77	63	280.043	19	3423	304.36	255.71	229.27	197.01	171.66	151.74	135.78	111.75	94.25	75.09	Sound	57.61	Sound	35.88	Sound
1780	100	64	366.278	21	1167	325.61	228.07	191.57	157.71	135.37	119.34	106.94	88.24	74.34	134.04	Sound	56.2	Sound	28.43	Sound
1781	90	64	329.650	19	3230	273.17	224.33	199.04	169.39	146.89	129.61	115.98	95.58	80.71	74.13	Sound	52.15	Sound	30.91	Sound
1782	63	65	232.371	18	2607	385.29	319.38	283.65	241.20	208.96	184.28	164.87	135.93	114.88	101.64	Sound	74.69	Sound	44.09	Sound
1783	62	64	227.092	19	2430	387.76	321.43	286.41	244.70	212.62	187.77	168.05	138.50	116.96	101.35	Sound	73.79	Sound	44.57	Sound
1784	100	67	373.907	21	2326	258.34	201.97	176.75	149.45	129.55	114.59	102.88	85.34	72.43	81.59	Sound	47.2	Sound	26.67	Sound
1785	91	65	335.647	18	3152	278.75	226.74	199.63	168.44	145.40	128.06	114.55	94.47	79.82	79.12	Sound	54.23	Sound	30.85	Sound
1786	96	70	366.096	20	2640	258.42	205.35	180.32	152.60	132.34	117.14	105.30	87.65	74.65	78.1	Sound	47.98	Sound	27.04	Sound
1787	66	62	238.314	20	1139	449.38	337.23	289.37	240.45	206.49	181.62	162.34	133.47	112.23	160.01	Sound	82.88	Sound	44.15	Sound
1788	85	64	311.336	20	2648	292.17	237.07	209.93	178.72	155.13	137.02	122.70	101.23	85.53	82.24	Sound	54.8	Sound	32.43	Sound
1789	77	65	284.009	16	1410	409.33	303.09	254.74	207.22	176.63	155.24	138.92	114.44	96.28	154.59	Sound	78.11	Sound	37.71	Sound
1790	102	69	386.467	15	2858	279.74	216.55	184.41	150.89	128.77	113.30	101.60	84.24	71.36	95.33	Sound	55.64	Sound	27.17	Sound
1791	94	66	349.102	21	2074	380.64	218.02	190.31	160.57	139.02	122.86	110.22	91.30	77.37	90.33	Sound	51.29	Sound	28.8	Sound
1792	66	63	240.036	20	2262	369.10	303.03	269.70	230.59	200.53	177.19	158.61	130.66	110.26	99.4	Sound	69.17	Sound	41.92	Sound
1793	102	62	368.304	14	1990	328.39	242.14	201.28	161.91	137.33	120.32	107.33	87.78	73.35	127.11	Sound	63.95	Sound	30	Sound
1794	82	68	308.655	14	901	452.44	302.88	244.24	195.16	166.72	147.26	132.18	109.00	91.55	208.2	Warning	77.52	Sound	34.54	Sound
1795	68	60	241.940	20	2709	350.87	293.41	263.25	226.64	197.67	174.70	156.17	128.10	107.64	87.62	Sound	65.58	Sound	41.5	Sound
1796	78	68	293.598	16	3017	330.51	267.96	233.85	195.18	167.58	147.42	131.98	109.21	92.55	96.66	Sound	66.27	Sound	35.6	Sound
1797	97	70	369.910	20	1415	307.68	222.21	188.11	155.33	133.63	118.16	106.31	88.53	75.24	119.57	Sound	54.48	Sound	27.32	Sound
1798	94	65	346.712	18	745	412.09	264.47	213.79	172.21	147.25	129.86	116.38	95.73	80.25	198.3	Sound	66.54	Sound	30.87	Sound
1799	89	64	325.988	15	2459	331.97	257.84	219.80	179.77	153.05	134.16	119.81	98.48	82.81	112.17	Sound	66.75	Sound	33.24	Sound
1800	89	68	335.003	14	1888	355.09	262.96	219.01	176.62	150.35	132.36	118.73	98.20	82.85	136.08	Sound	68.66	Sound	31.62	Sound
1801	78	62	281.644	20	1278	386.17	287.43	245.88	203.91	175.01	153.92	137.58	113.11	95.09	140.29	Sound	70.87	Sound	37.43	Sound
1802	63	61	225.823	14	2292	465.37	370.36	317.69	260.12	220.86	192.86	171.57	140.14	117.28	147.68	Sound	96.83	Sound	49.29	Sound
1803	102	60	362.909	19	1205	337.07	237.18	198.13	161.65	137.94	121.03	107.96	88.27	73.75	138.94	Sound	60.19	Sound	29.98	Sound
1804	90	67	336.516	19	965	378.69	258.70	214.07	174.29	149.30	131.78	118.32	97.92	82.62	164.62	Sound	64.77	Sound	30.98	Sound
1805	69	61	247.330	20	3411	325.20	277.43	251.29	218.46	191.72	170.06	152.37	125.30	105.49	73.91	Sound	59.57	Sound	39.35	Sound
1806	66	60	234.824	16	851	540.76	381.61	315.31	254.14	215.91	189.15	168.53	137.36	114.40	225.45	Warning	99.4	Sound	47.38	Sound
1807	92	62	332.196	19	3354	269.47	222.04	197.27	168.03	145.67	128.41	114.74	94.26	79.36	72.2	Sound	51.6	Sound	30.93	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1808	98	66	363.958	16	2936	282.97	223.31	192.52	159.11	136.08	119.54	106.92	88.24	74.51	90.45	Sound	56.44	Sound	29.16	Sound
1809	103	70	392.791	18	3523	239.77	193.92	170.35	143.59	124.09	109.58	98.36	81.73	69.54	69.42	Sound	46.26	Sound	25.732	Sound
1810	87	69	329.633	17	2685	301.51	239.77	208.27	173.58	149.17	131.43	117.85	97.77	82.99	93.24	Sound	59.1	Sound	31.32	Sound
1811	89	61	319.020	14	2713	342.54	267.32	227.28	184.98	156.88	137.05	121.99	99.65	83.34	115.26	Sound	70.4	Sound	34.89	Sound
1812	72	62	259.979	17	2360	374.93	302.16	263.88	220.54	189.22	165.99	148.01	121.37	101.99	111.05	Sound	74.66	Sound	41.21	Sound
1813	98	63	356.418	18	2980	270.81	217.43	190.30	159.71	137.44	120.83	107.91	88.71	74.72	80.51	Sound	52.86	Sound	29.53	Sound
1814	66	62	238.314	21	2544	350.64	292.71	263.25	227.69	199.38	176.79	158.48	130.60	110.17	87.39	Sound	63.87	Sound	40.9	Sound
1815	85	68	319.947	18	1368	359.26	262.72	221.71	181.78	155.71	137.32	123.27	102.20	86.49	137.55	Sound	66	Sound	32.44	Sound
1816	77	65	284.009	21	2653	304.24	250.31	223.72	192.48	168.17	149.11	133.83	110.73	93.78	80.52	Sound	55.55	Sound	34.34	Sound
1817	69	61	247.330	17	3129	364.18	303.82	269.66	228.54	197.24	173.25	154.39	126.33	106.05	94.52	Sound	72.42	Sound	42.85	Sound
1818	62	65	228.682	19	1842	413.88	332.33	291.99	246.46	212.97	187.76	168.09	138.75	117.30	121.89	Sound	79.02	Sound	44.88	Sound
1819	101	70	385.164	16	2594	278.13	214.51	183.20	150.56	128.81	113.48	101.88	84.65	71.85	94.93	Sound	54.39	Sound	26.93	Sound
1820	96	61	344.112	17	1792	326.37	245.05	207.86	170.16	145.03	127.08	113.32	92.75	77.66	118.51	Sound	62.83	Sound	31.71	Sound
1821	91	69	344.789	17	2949	284.81	227.79	198.36	165.64	142.44	125.51	112.53	93.34	79.25	86.45	Sound	55.92	Sound	29.91	Sound
1822	94	66	349.102	15	847	413.17	269.15	216.30	173.03	147.80	130.38	116.84	96.00	80.36	196.87	Sound	68.5	Sound	30.96	Sound
1823	97	68	365.116	17	1379	333.44	237.78	198.10	161.01	137.65	121.40	109.00	90.28	76.26	135.34	Sound	60.45	Sound	28.65	Sound
1824	90	68	338.767	21	2927	259.88	211.86	188.64	161.83	141.29	125.36	112.69	93.62	79.61	71.24	Sound	47.35	Sound	28.6	Sound
1825	77	66	285.967	15	2830	354.70	284.11	245.55	202.87	173.29	152.05	135.89	112.06	94.60	109.15	Sound	72.26	Sound	37.4	Sound
1826	82	61	293.929	17	1775	367.62	281.78	240.93	198.21	169.11	148.16	132.08	108.13	90.59	126.69	Sound	71.82	Sound	37.03	Sound
1827	72	69	272.800	19	2391	338.13	274.11	241.89	205.07	177.76	157.16	141.09	117.15	99.61	96.24	Sound	64.13	Sound	36.67	Sound
1828	81	69	306.900	17	1106	401.62	284.05	236.00	191.63	163.91	144.70	130.03	107.87	91.22	165.62	Sound	72.09	Sound	33.88	Sound
1829	73	69	276.589	15	960	471.03	327.11	267.86	215.31	183.87	162.37	145.90	120.78	101.86	203.17	Warning	83.99	Sound	37.97	Sound
1830	81	62	292.477	14	3885	338.41	276.78	240.60	199.11	169.67	148.26	131.92	107.90	90.51	97.81	Sound	70.93	Sound	37.75	Sound
1831	98	60	348.678	17	2169	307.84	236.93	202.89	167.03	142.46	124.70	111.06	90.75	75.92	104.95	Sound	60.43	Sound	31.4	Sound
1832	72	67	269.213	14	915	499.48	343.22	278.85	223.05	190.23	167.78	150.47	123.96	104.07	220.63	Warning	88.62	Sound	39.76	Sound
1833	72	62	259.979	18	2931	344.90	286.10	254.12	215.97	186.88	164.50	146.85	120.50	101.38	90.78	Sound	67.24	Sound	40.03	Sound
1834	80	68	301.127	16	3767	307.85	254.66	224.40	188.84	162.68	143.20	128.16	105.99	89.84	83.45	Sound	61.72	Sound	34.52	Sound
1835	77	65	284.009	19	824	447.78	306.76	254.05	206.81	176.96	155.96	139.79	115.29	97.00	193.73	Sound	77.09	Sound	37.17	Sound
1836	91	70	347.029	14	1375	371.82	261.57	214.06	171.64	146.49	129.42	116.37	96.46	81.44	157.76	Sound	67.57	Sound	30.12	Sound
1837	96	62	346.639	16	3897	275.89	225.92	198.02	165.66	142.05	124.49	110.91	90.85	76.31	77.87	Sound	55.97	Sound	31.14	Sound
1838	78	70	297.453	16	1919	363.97	279.16	237.87	195.22	166.97	147.12	132.10	109.76	93.15	126.1	Sound	70.9	Sound	34.87	Sound
1839	98	67	366.429	18	2262	283.86	219.24	188.87	156.77	134.59	118.56	106.25	87.96	74.45	94.99	Sound	54.28	Sound	28.34	Sound
1840	80	60	284.635	14	861	490.31	331.11	267.56	213.27	181.08	158.70	141.28	114.70	95.13	222.75	Warning	86.48	Sound	39.8	Sound
1841	93	69	352.367	14	1502	360.16	256.27	210.50	168.92	144.04	127.10	114.18	94.51	79.72	149.66	Sound	66.46	Sound	29.86	Sound
1842	79	64	289.360	21	2417	308.06	250.22	222.39	190.34	165.79	146.74	131.55	108.66	91.89	85.67	Sound	56.6	Sound	34.24	Sound
1843	75	67	280.430	19	1955	350.01	275.98	240.67	202.01	174.27	153.74	137.83	114.15	96.74	109.34	Sound	66.4	Sound	36.44	Sound
1844	100	70	381.350	17	2780	267.64	209.94	181.31	150.49	129.21	113.90	102.24	84.97	72.20	86.33	Sound	52.1	Sound	26.97	Sound
1845	64	64	234.418	20	3775	329.36	284.81	259.74	227.56	200.85	178.92	160.85	132.98	112.46	69.62	Sound	58.89	Sound	40	Sound
1846	82	62	296.088	20	2417	329.36	284.81	259.74	227.56	200.85	178.92	160.85	132.98	112.46	69.62	Sound	58.89	Sound	40	Sound
1847	97	64	355.290	21	2030	279.37	215.88	188.01	158.30	136.84	120.76	108.19	89.34	75.47	91.36	Sound	51.17	Sound	28.65	Sound
1848	96	64	351.627	17	3379	272.85	221.24	193.78	162.42	139.63	122.68	109.57	90.15	75.99	79.07	Sound	54.15	Sound	30.06	Sound
1849	95	62	343.028	16	2660	304.39	239.22	205.80	169.67	144.74	126.77	113.02	92.62	77.72	98.59	Sound	61.06	Sound	31.72	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1850	64	70	244.064	19	3515	333.32	284.26	256.83	222.64	195.33	173.64	156.20	129.86	110.58	76.49	Sound	61.5	Sound	39.13	Sound
1851	94	66	349.102	16	1561	341.79	249.10	208.19	168.93	144.07	126.77	113.57	93.71	78.90	133.6	Sound	64.12	Sound	30.5	Sound
1852	101	65	372.531	19	999	350.36	236.25	194.63	158.11	135.27	119.25	106.89	88.13	74.10	155.73	Sound	59.36	Sound	28.38	Sound
1853	76	66	282.253	14	1300	442.86	319.00	263.07	211.23	179.73	158.15	141.67	116.68	98.02	179.79	Sound	83.34	Sound	38.06	Sound
1854	79	65	291.386	17	1913	361.53	280.05	240.54	198.69	170.03	149.42	133.64	110.19	92.93	120.99	Sound	70.51	Sound	36.39	Sound
1855	90	67	336.516	21	3019	259.17	212.23	189.32	162.65	142.08	126.05	113.26	93.96	79.80	69.85	Sound	47.24	Sound	28.82	Sound
1856	83	68	312.419	14	3732	321.93	260.35	225.15	185.79	158.59	139.18	124.50	102.93	87.11	96.78	Sound	66.56	Sound	34.09	Sound
1857	80	66	297.108	15	3415	330.01	268.54	233.82	194.32	166.30	145.92	130.36	107.45	90.74	96.19	Sound	67.52	Sound	35.94	Sound
1858	85	66	315.678	15	3331	316.66	255.40	221.44	183.40	156.78	137.56	122.92	101.35	85.57	95.22	Sound	64.66	Sound	33.86	Sound
1859	75	69	284.167	17	2071	359.57	282.09	243.62	202.18	173.52	152.87	137.12	113.78	96.55	115.95	Sound	70.1	Sound	36.4	Sound
1860	67	64	245.406	21	1134	431.08	322.48	277.39	231.55	199.52	175.94	157.62	130.14	109.86	153.69	Sound	77.87	Sound	41.9	Sound
1861	75	70	286.013	19	2959	308.82	254.97	226.85	193.75	168.59	149.32	134.15	111.52	94.96	81.97	Sound	58.26	Sound	34.44	Sound
1862	84	67	314.082	18	1109	387.35	274.30	228.89	186.59	159.65	140.78	126.33	104.53	88.22	158.46	Sound	69.24	Sound	33.32	Sound
1863	72	67	269.213	20	2980	314.57	262.68	235.64	203.09	177.59	157.55	141.50	117.28	99.54	78.93	Sound	58.05	Sound	36.09	Sound
1864	83	68	312.419	19	3758	272.73	228.71	204.95	176.16	153.73	136.23	122.30	101.38	86.11	67.78	Sound	51.22	Sound	31.43	Sound
1865	82	68	308.655	18	2063	329.68	257.30	222.60	185.36	159.36	140.46	125.96	104.42	88.54	107.08	Sound	63.24	Sound	33.4	Sound
1866	100	69	378.889	21	3909	221.37	184.07	165.33	142.98	125.41	111.55	100.41	83.55	71.15	56.04	Sound	39.92	Sound	25	Sound
1867	95	66	352.816	21	1167	333.26	235.02	197.91	163.22	140.29	123.84	111.15	92.04	77.79	135.35	Sound	57.62	Sound	29.14	Sound
1868	81	61	290.344	15	1960	383.82	294.18	249.36	203.05	172.45	150.84	134.36	109.83	91.86	134.46	Sound	76.91	Sound	38.09	Sound
1869	78	62	281.644	17	3830	314.10	263.82	234.96	199.84	172.84	152.02	135.60	111.14	93.45	79.14	Sound	62.12	Sound	37.24	Sound
1870	101	70	385.164	17	1725	300.89	220.47	185.44	151.46	129.64	114.42	102.85	85.49	72.50	115.45	Sound	55.8	Sound	26.79	Sound
1871	91	67	340.255	14	3533	305.16	243.25	208.90	171.45	146.09	128.15	114.61	94.63	79.94	96.26	Sound	62.81	Sound	31.48	Sound
1872	87	63	316.412	16	1582	367.51	272.51	229.13	186.32	158.63	139.18	124.33	102.05	85.59	138.38	Sound	70.5	Sound	34.3	Sound
1873	103	65	379.908	17	3966	247.28	202.29	177.91	149.68	128.92	113.39	101.34	83.50	70.51	69.37	Sound	48.99	Sound	27.58	Sound
1874	96	68	361.352	15	3241	286.43	226.87	195.11	160.67	137.24	120.60	107.99	89.37	75.64	91.32	Sound	57.87	Sound	29.25	Sound
1875	102	61	365.619	17	813	393.53	254.19	205.17	164.64	140.28	123.23	109.94	89.64	74.58	188.36	Sound	64.89	Sound	30.34	Sound
1876	70	61	250.915	15	3717	371.18	309.67	272.94	228.99	196.32	171.81	152.80	124.78	104.60	98.24	Sound	76.62	Sound	43.52	Sound
1877	86	64	314.999	17	2873	308.47	248.68	217.25	181.70	156.06	137.10	122.45	100.75	84.93	91.22	Sound	61.19	Sound	33.61	Sound
1878	81	62	292.477	21	2986	289.11	240.22	215.58	186.09	162.76	144.23	129.26	106.50	89.83	73.53	Sound	52.82	Sound	33.5	Sound
1879	65	64	238.081	17	3063	375.76	313.94	278.90	236.73	204.67	180.16	160.93	132.34	111.60	96.86	Sound	74.23	Sound	43.74	Sound
1880	92	64	336.976	16	3006	299.02	238.81	206.93	171.59	146.78	128.75	114.94	94.52	79.60	92.09	Sound	60.15	Sound	31.84	Sound
1881	62	68	233.373	18	1020	489.47	359.20	303.52	249.02	213.33	188.12	168.87	140.01	118.50	185.95	Sound	90.19	Sound	44.46	Sound
1882	86	60	305.982	17	1964	348.00	268.95	230.69	190.13	162.21	141.99	126.44	103.32	86.45	117.31	Sound	68.48	Sound	35.77	Sound
1883	63	64	230.755	19	1576	428.90	337.40	293.89	246.32	212.14	186.78	167.07	137.72	116.20	135.01	Sound	81.75	Sound	45.07	Sound
1884	83	67	310.343	16	3893	298.84	247.30	217.95	183.40	157.94	138.94	124.26	102.61	86.85	80.89	Sound	60.01	Sound	33.68	Sound
1885	96	64	351.627	18	3474	262.99	215.13	189.88	160.53	138.64	122.07	109.11	89.83	75.80	73.11	Sound	51.24	Sound	29.53	Sound
1886	88	70	335.588	21	724	406.99	261.87	213.71	173.94	149.50	132.43	119.30	99.30	84.17	193.28	Sound	64.21	Sound	30.2	Sound
1887	67	60	238.382	15	2358	428.39	343.36	296.71	244.73	208.35	181.97	161.78	131.97	110.37	131.68	Sound	88.36	Sound	46.57	Sound
1888	73	65	269.255	18	2864	336.90	277.74	246.04	208.72	180.61	159.21	142.43	117.44	99.24	90.86	Sound	65.43	Sound	38.18	Sound
1889	94	66	349.102	19	1467	324.42	237.58	201.36	165.82	142.18	125.30	112.33	92.90	78.46	123.06	Sound	59.18	Sound	29.85	Sound
1890	90	64	329.650	18	3640	272.91	225.87	200.45	170.28	147.41	129.90	116.13	95.60	80.67	72.46	Sound	53.04	Sound	31.28	Sound
1891	63	66	233.973	20	1672	406.81	323.06	283.53	239.68	207.50	183.26	164.30	135.97	115.17	123.28	Sound	76.03	Sound	43.2	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1892	96	64	351.627	19	1854	302.22	229.38	196.98	163.44	140.28	123.44	110.45	91.04	76.75	105.24	Sound	56.7	Sound	29.83	Sound
1893	78	66	289.681	20	3873	278.84	237.18	214.60	186.51	163.86	145.66	130.89	108.40	91.89	64.24	Sound	50.74	Sound	32.97	Sound
1894	74	67	276.691	19	3447	305.55	257.13	230.78	198.65	173.45	153.68	137.90	114.16	96.83	74.77	Sound	57.33	Sound	35.55	Sound
1895	63	65	232.371	19	3579	345.88	296.80	268.90	233.61	204.99	181.98	163.30	134.88	114.10	76.98	Sound	63.91	Sound	41.69	Sound
1896	103	61	369.203	20	1840	286.74	216.60	186.31	155.01	133.12	117.01	104.49	85.76	72.02	100.43	Sound	53.19	Sound	28.63	Sound
1897	93	60	330.888	15	3691	300.32	243.77	211.91	175.61	149.74	130.80	116.26	94.82	79.32	88.41	Sound	62.17	Sound	33.48	Sound
1898	71	61	254.499	15	3138	381.32	312.64	273.13	227.35	194.27	169.87	151.10	123.45	103.46	108.19	Sound	78.86	Sound	43.17	Sound
1899	96	68	361.352	14	2023	329.71	243.95	203.10	163.77	139.41	122.74	110.10	91.06	76.83	126.61	Sound	63.69	Sound	29.31	Sound
1900	91	64	333.313	17	2745	298.92	238.17	206.99	172.41	147.86	129.86	116.00	95.46	80.44	91.93	Sound	59.13	Sound	31.86	Sound
1901	99	68	372.644	14	3135	291.55	226.98	192.88	157.21	133.85	117.59	105.34	87.15	73.67	98.67	Sound	59.03	Sound	28.51	Sound
1902	83	63	301.864	17	762	456.85	302.81	246.37	198.26	169.10	148.77	133.02	108.98	91.07	210.48	Warning	77.27	Sound	36.08	Sound
1903	68	69	257.645	14	2696	401.36	320.10	274.99	225.84	192.61	169.19	151.55	125.54	106.37	126.37	Sound	82.38	Sound	41.06	Sound
1904	79	60	281.077	15	1360	430.03	315.18	262.62	211.87	179.71	157.23	140.01	114.13	95.12	167.41	Sound	82.91	Sound	39.7	Sound
1905	93	66	345.388	15	882	411.53	270.76	218.19	174.62	149.11	131.52	117.86	96.87	81.12	193.34	Sound	69.08	Sound	31.25	Sound
1906	68	67	254.257	15	2533	397.87	318.88	275.69	227.88	194.76	171.00	152.95	126.33	106.81	122.18	Sound	80.93	Sound	41.81	Sound
1907	94	64	344.301	14	3382	306.36	242.86	207.99	170.25	144.78	126.74	113.08	92.89	78.10	98.37	Sound	63.21	Sound	31.7	Sound
1908	69	64	252.732	17	1500	428.18	327.29	279.61	230.10	196.63	172.68	154.36	127.05	106.94	148.57	Sound	82.98	Sound	42.27	Sound
1909	72	69	272.800	18	2912	330.94	272.83	241.75	205.27	177.92	157.19	141.00	116.96	99.39	89.19	Sound	63.83	Sound	36.92	Sound
1910	75	67	280.430	19	3411	303.27	254.62	228.28	196.28	171.28	151.72	136.12	112.69	95.58	74.99	Sound	57	Sound	35.16	Sound
1911	94	65	346.712	21	1894	289.86	222.49	193.28	162.47	140.41	123.96	111.13	91.91	77.75	96.58	Sound	52.87	Sound	29.28	Sound
1912	95	70	362.283	19	2438	272.73	213.97	186.23	156.18	134.82	119.13	107.02	89.04	75.77	86.5	Sound	51.41	Sound	27.8	Sound
1913	85	67	317.821	17	3005	302.13	244.47	213.97	179.34	154.33	135.86	121.62	100.54	85.13	88.16	Sound	59.64	Sound	32.71	Sound
1914	82	65	302.451	19	1000	403.24	283.23	236.55	193.28	165.44	145.76	130.62	107.78	90.76	166.69	Sound	71.11	Sound	34.82	Sound
1915	78	63	283.679	20	1543	363.20	277.92	240.27	200.71	172.75	152.10	136.05	112.06	94.42	122.93	Sound	67.52	Sound	36.7	Sound
1916	90	62	324.974	16	888	422.36	283.29	230.42	184.93	157.48	138.36	123.54	100.93	84.15	191.94	Sound	72.94	Sound	33.94	Sound
1917	66	67	246.779	17	1069	475.35	346.72	291.13	237.42	202.90	178.74	160.30	132.58	111.92	184.22	Sound	88.23	Sound	42.6	Sound
1918	71	60	252.613	20	2413	350.27	288.03	256.47	219.24	190.45	167.99	150.05	123.02	103.35	93.8	Sound	66.02	Sound	40.4	Sound
1919	100	69	378.889	21	3777	223.40	185.07	165.96	143.30	125.58	111.66	100.49	83.61	71.20	57.44	Sound	40.38	Sound	25.09	Sound
1920	89	69	337.211	16	2180	321.24	246.50	210.07	172.39	147.38	129.78	116.44	96.59	81.86	111.17	Sound	62.69	Sound	30.94	Sound
1921	85	62	306.920	21	3034	277.89	230.09	206.18	177.71	155.31	137.56	123.26	101.55	85.65	71.71	Sound	50.87	Sound	32.05	Sound
1922	73	60	259.729	19	3135	329.96	276.90	248.07	212.88	185.18	163.35	145.85	119.46	100.30	81.89	Sound	62.89	Sound	39.33	Sound
1923	74	70	282.199	16	3395	330.74	272.49	239.65	201.40	173.51	152.87	137.01	113.66	96.61	91.09	Sound	66.14	Sound	36.5	Sound
1924	103	66	382.527	16	2743	276.99	215.49	184.65	151.97	129.83	114.06	102.06	84.24	71.10	92.34	Sound	54.82	Sound	27.77	Sound
1925	98	70	373.723	18	1622	305.66	223.96	189.15	155.22	133.08	117.51	105.65	87.88	74.58	116.51	Sound	56.07	Sound	27.43	Sound
1926	92	60	327.330	21	2161	291.70	230.06	201.92	170.87	147.81	130.21	116.31	95.43	80.18	89.78	Sound	54.11	Sound	31.5	Sound
1927	85	62	306.920	20	1003	392.65	276.01	231.33	189.65	162.32	142.77	127.65	104.87	87.99	161.32	Sound	69.01	Sound	34.67	Sound
1928	97	60	345.120	16	767	424.13	273.15	219.53	175.57	149.40	131.07	116.75	94.86	78.68	204.6	Warning	70.13	Sound	32.65	Sound
1929	65	62	234.704	17	3981	357.84	306.49	275.72	236.87	206.01	181.67	162.19	132.95	111.80	82.12	Sound	69.71	Sound	43.82	Sound
1930	85	65	313.516	17	3500	294.86	242.89	214.33	180.84	155.95	137.22	122.64	101.04	85.32	80.53	Sound	58.38	Sound	33.31	Sound
1931	77	64	282.034	19	2725	320.44	262.75	232.96	198.14	171.77	151.54	135.60	111.75	94.36	87.48	Sound	61.19	Sound	36.17	Sound
1932	70	70	266.945	21	3526	294.36	250.87	227.89	199.32	176.05	157.22	141.83	118.25	100.86	66.47	Sound	51.84	Sound	34.22	Sound
1933	92	69	348.578	17	1891	316.18	238.45	202.71	166.50	142.55	125.65	112.80	93.63	79.36	113.47	Sound	60.16	Sound	29.75	Sound

Sl No	Actual/ Seed Value					Deflection Values									Basin Parameters					
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1934	86	61	308.267	17	2636	321.17	257.11	223.85	186.58	159.84	140.09	124.81	102.17	85.71	97.32	Sound	64.01	Sound	35.03	Sound
1935	98	66	363.958	21	1823	283.15	214.47	185.38	155.32	134.11	118.44	106.26	88.02	74.54	97.77	Sound	51.27	Sound	27.85	Sound
1936	102	68	383.936	18	3698	241.45	196.89	173.58	146.70	126.85	111.94	100.34	83.13	70.54	67.87	Sound	46.73	Sound	26.51	Sound
1937	98	69	371.311	19	1934	285.86	216.39	185.69	154.17	132.62	117.07	105.15	87.38	74.19	100.17	Sound	53.07	Sound	27.47	Sound
1938	73	64	267.383	17	2280	369.44	295.56	257.33	214.63	184.16	161.75	144.48	118.89	100.20	112.11	Sound	73.17	Sound	39.68	Sound
1939	92	63	334.596	19	1079	368.03	257.42	214.64	175.16	149.74	131.73	117.84	96.88	81.32	153.39	Sound	64.9	Sound	31.9	Sound
1940	63	69	238.700	20	1261	433.02	329.62	284.51	237.71	205.07	181.22	162.84	135.40	115.07	148.51	Sound	79.44	Sound	42.23	Sound
1941	88	65	324.581	17	1782	339.88	256.96	218.60	179.47	153.37	134.81	120.63	99.46	83.81	121.28	Sound	65.23	Sound	32.74	Sound
1942	96	63	349.144	16	2508	304.32	236.91	203.02	166.97	142.42	124.85	111.42	91.48	76.87	101.3	Sound	60.6	Sound	31	Sound
1943	101	60	359.351	20	2229	276.87	215.90	188.00	157.74	135.82	119.39	106.53	87.30	73.26	88.87	Sound	52.18	Sound	29.29	Sound
1944	96	62	346.639	17	1431	344.63	249.71	209.12	170.08	144.92	127.17	113.55	93.07	77.94	135.51	Sound	64.2	Sound	31.37	Sound
1945	72	67	269.213	17	3144	339.02	280.50	248.06	209.79	181.24	159.71	142.95	118.12	100.04	90.96	Sound	66.82	Sound	38.29	Sound
1946	87	66	323.105	14	3162	325.96	258.21	221.10	181.04	154.11	135.12	120.77	99.56	83.96	104.86	Sound	66.99	Sound	33.34	Sound
1947	80	67	299.126	21	802	422.36	285.49	236.90	194.03	166.64	147.24	132.29	109.66	92.70	185.46	Sound	70.26	Sound	34.35	Sound
1948	78	65	287.697	19	3645	293.14	247.11	221.95	191.11	166.82	147.68	132.36	109.27	92.42	71.19	Sound	55.13	Sound	34.46	Sound
1949	89	66	330.533	17	3530	282.38	231.53	203.87	171.72	148.02	130.29	116.54	96.17	81.32	78.51	Sound	55.85	Sound	31.48	Sound
1950	81	63	294.590	14	1205	438.01	310.25	254.40	203.71	173.09	151.99	135.76	111.11	92.82	183.61	Sound	81.31	Sound	37.33	Sound
1951	100	67	373.907	21	1488	295.76	215.68	183.82	152.67	131.50	116.16	104.31	86.53	73.32	111.94	Sound	52.32	Sound	27.19	Sound
1952	85	62	306.920	16	1258	399.44	287.45	239.12	193.40	164.53	144.34	128.85	105.50	88.23	160.32	Sound	74.59	Sound	35.68	Sound
1953	86	69	325.845	15	1741	358.51	265.97	222.73	180.57	154.00	135.69	121.82	100.99	85.41	135.78	Sound	68.73	Sound	32.18	Sound
1954	76	63	276.406	17	3884	317.29	267.30	238.44	203.14	175.91	154.87	138.26	113.51	95.59	78.85	Sound	62.53	Sound	37.65	Sound
1955	103	70	392.791	19	1835	278.50	207.29	176.78	146.22	125.70	111.04	99.83	83.09	70.62	101.72	Sound	51.08	Sound	25.866	Sound
1956	81	66	300.822	15	1396	403.36	293.46	243.99	197.03	167.80	147.62	132.24	109.02	91.71	159.37	Sound	76.19	Sound	35.56	Sound
1957	93	69	352.367	15	1189	372.50	257.46	210.51	169.14	144.46	127.59	114.65	94.90	80.02	161.99	Sound	66.05	Sound	29.81	Sound
1958	88	65	324.581	16	1991	339.56	258.95	220.09	180.16	153.68	134.96	120.71	99.47	83.77	119.47	Sound	66.41	Sound	32.97	Sound
1959	85	70	324.148	19	1776	322.51	245.92	211.64	176.07	151.59	133.91	120.34	100.15	85.17	110.87	Sound	60.05	Sound	31.25	Sound
1960	81	60	288.193	17	1693	377.98	288.68	246.46	202.49	172.62	151.11	134.58	109.97	91.97	131.52	Sound	73.84	Sound	38.04	Sound
1961	82	67	306.604	14	3310	335.77	268.76	231.26	190.07	162.00	142.10	127.07	104.91	88.63	104.51	Sound	69.26	Sound	34.93	Sound
1962	102	62	368.304	21	1925	277.14	211.40	183.16	153.57	132.43	116.66	104.35	85.88	72.32	93.98	Sound	50.73	Sound	28.08	Sound
1963	74	65	272.943	15	1991	399.15	308.70	262.72	214.69	182.85	160.42	143.40	118.09	99.43	136.43	Sound	79.87	Sound	39.45	Sound
1964	89	68	335.003	14	1233	393.07	273.51	223.06	178.62	152.35	134.43	120.67	99.64	83.83	170.01	Sound	70.71	Sound	31.68	Sound
1965	101	69	382.678	15	3877	262.74	210.90	182.48	150.98	129.18	113.56	101.73	84.29	71.47	80.26	Sound	53.3	Sound	27.45	Sound
1966	101	69	382.678	17	3802	247.41	201.24	176.57	148.35	127.87	112.71	101.03	83.77	71.14	70.84	Sound	48.7	Sound	26.84	Sound
1967	97	62	350.250	14	3175	307.26	241.49	205.99	168.05	142.66	124.72	111.10	90.93	76.19	101.27	Sound	63.33	Sound	31.56	Sound
1968	80	70	305.080	16	1955	355.46	272.39	232.02	190.38	162.83	143.47	128.82	107.04	90.83	123.44	Sound	69.19	Sound	34.01	Sound
1969	74	64	271.046	18	1417	402.49	303.80	259.34	213.83	183.03	160.89	143.90	118.53	99.81	143.15	Sound	76.31	Sound	39.13	Sound
1970	83	66	308.250	20	3539	272.40	228.32	205.16	177.08	154.93	137.44	123.38	102.13	86.57	67.24	Sound	50.23	Sound	31.55	Sound
1971	87	70	331.775	17	2889	294.37	235.89	205.60	171.84	147.87	130.37	116.96	97.16	82.60	88.77	Sound	57.73	Sound	30.91	Sound
1972	98	67	366.429	21	3724	230.19	191.12	171.53	148.19	129.85	115.36	103.72	86.07	73.10	58.66	Sound	41.68	Sound	26.13	Sound
1973	96	63	349.144	16	2158	315.75	241.11	205.01	167.76	142.95	125.34	111.91	91.88	77.15	110.74	Sound	62.06	Sound	31.04	Sound
1974	90	69	341.000	14	945	414.70	274.97	221.15	176.69	151.09	133.59	120.02	99.12	83.34	193.55	Sound	70.06	Sound	31.07	Sound
1975	86	65	317.205	18	2189	319.07	250.15	216.79	180.63	155.14	136.49	122.12	100.75	85.06	102.28	Sound	61.65	Sound	33.02	Sound

Sl No	Actual/ Seed Value					Deflection Values								Basin Parameters						
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	BLI (D0-D300)		MLI (D300-D600)		LLI (D600-D900)	
1976	64	67	239.301	18	3099	360.59	303.12	271.05	232.05	201.87	178.47	159.94	132.26	112.09	89.54	Sound	69.18	Sound	41.93	Sound
1977	64	64	234.418	17	3538	367.54	311.62	278.90	238.44	206.93	182.43	163.02	134.05	113.05	88.64	Sound	71.97	Sound	43.91	Sound
1978	76	62	274.423	17	3101	336.88	277.91	245.35	206.96	178.27	156.56	139.61	114.44	96.21	91.53	Sound	67.08	Sound	38.66	Sound
1979	100	63	363.692	21	2051	274.19	211.49	184.05	154.84	133.75	117.96	105.59	87.05	73.43	90.14	Sound	50.3	Sound	28.16	Sound
1980	83	64	304.011	15	1131	423.07	297.60	244.64	196.61	167.34	147.12	131.58	107.98	90.41	178.43	Sound	77.3	Sound	35.76	Sound
1981	64	61	229.408	14	971	559.09	398.25	327.10	261.87	222.13	194.65	173.50	141.46	117.82	231.99	Warning	104.97	Warning	48.63	Sound
1982	97	65	357.777	14	3122	302.28	236.45	201.30	164.17	139.58	122.33	109.29	89.95	75.71	100.98	Sound	61.72	Sound	30.29	Sound
1983	83	70	316.521	19	3299	278.53	230.14	204.84	175.00	152.31	134.90	121.20	100.76	85.79	73.69	Sound	52.53	Sound	31.11	Sound
1984	98	60	348.678	17	1708	327.69	243.88	206.17	168.40	143.38	125.55	111.85	91.37	76.34	121.52	Sound	62.79	Sound	31.53	Sound
1985	63	64	230.755	21	734	517.13	362.10	304.12	250.35	214.89	189.43	169.76	140.08	118.01	213.01	Warning	89.23	Sound	45.13	Sound
1986	69	67	257.996	15	3825	358.56	299.03	263.62	221.49	190.44	167.34	149.54	123.36	104.35	94.94	Sound	73.18	Sound	40.9	Sound
1987	71	64	260.057	17	3193	347.84	289.30	256.45	217.22	187.61	165.08	147.45	121.26	102.25	91.39	Sound	68.84	Sound	40.16	Sound
1988	75	63	272.769	20	2712	320.28	264.49	236.02	202.28	176.13	155.71	139.42	114.86	96.93	84.26	Sound	59.89	Sound	36.71	Sound
1989	63	63	229.126	20	1273	446.94	343.05	296.94	248.25	213.74	188.20	168.34	138.65	116.84	150	Sound	83.2	Sound	45.4	Sound
1990	74	60	263.287	18	2257	365.29	294.20	257.78	216.38	186.00	163.18	145.37	118.89	99.67	107.51	Sound	71.78	Sound	40.63	Sound
1991	62	62	223.871	17	3879	373.30	320.30	288.40	248.02	215.83	190.38	169.98	139.35	117.18	84.9	Sound	72.57	Sound	45.85	Sound
1992	80	62	288.866	16	1172	425.55	305.75	254.20	205.55	174.87	153.42	136.96	112.13	93.77	171.35	Sound	79.33	Sound	37.91	Sound
1993	72	61	258.084	15	3363	371.39	306.14	268.17	223.74	191.36	167.36	148.86	121.60	101.92	103.22	Sound	76.81	Sound	42.5	Sound
1994	65	63	236.400	19	3246	350.28	297.53	268.18	231.66	202.48	179.25	160.51	132.14	111.46	82.1	Sound	65.7	Sound	41.97	Sound
1995	83	67	310.343	17	907	423.18	288.33	236.65	191.19	163.41	144.17	129.38	106.87	89.97	186.53	Sound	73.24	Sound	34.03	Sound
1996	95	67	355.212	17	856	392.51	257.38	208.77	168.07	143.74	126.91	113.91	94.00	79.01	183.74	Sound	65.03	Sound	29.83	Sound
1997	89	61	319.020	16	2346	331.86	259.17	222.35	182.90	155.86	136.40	121.50	99.40	83.26	109.51	Sound	66.49	Sound	34.36	Sound
1998	66	69	250.067	19	800	491.05	342.46	285.38	233.17	199.97	176.69	158.87	131.96	111.76	205.67	Warning	85.41	Sound	41.1	Sound
1999	63	62	227.482	17	2556	406.94	335.52	296.12	249.73	215.09	188.89	168.43	138.07	116.07	110.82	Sound	81.03	Sound	46.66	Sound
2000	92	69	348.578	20	3426	250.11	206.20	183.94	157.75	137.64	122.06	109.71	91.17	77.58	66.17	Sound	46.3	Sound	27.93	Sound
2001	95	70	362.283	20	3507	241.39	198.66	177.08	151.79	132.43	117.49	105.65	87.92	74.91	64.31	Sound	44.65	Sound	26.78	Sound

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1301	89	70	339.402	14	1262	386.16	268.96	219.43	175.80	150.11	132.65	119.28	98.85	83.42	89.73	72.07	343.28	13.48	1732.81
1302	85	64	311.336	16	2939	319.34	256.66	223.03	185.35	158.67	139.19	124.24	102.16	86.05	86.60	66.02	319.53	16.05	2899.69
1303	93	60	330.888	20	3427	261.80	217.17	194.13	166.55	144.97	127.99	114.36	93.78	78.80	93.08	62.52	336.67	19.19	3295.11
1304	96	66	356.530	15	2958	296.41	232.77	199.39	163.66	139.56	122.47	109.52	90.33	76.20	95.42	67.46	355.11	15.62	2706.94
1305	89	63	323.686	19	2249	304.63	240.20	209.41	175.59	151.20	133.03	118.91	97.85	82.44	89.81	65.29	329.92	18.41	2587.54
1306	66	70	251.691	17	3265	352.59	294.67	261.91	222.65	192.98	170.45	152.88	126.85	107.89	64.49	72.63	251.04	17.42	3284.72
1307	97	70	369.910	20	3604	236.02	194.38	173.32	148.61	129.67	115.04	103.46	86.09	73.35	95.84	70.40	362.96	19.08	3305.76
1308	62	67	231.822	15	3329	401.89	334.18	294.15	246.81	212.08	186.32	166.51	137.37	116.21	58.34	69.69	222.19	15.17	3238.41
1309	64	65	236.059	20	2091	380.89	310.49	275.52	235.03	204.28	180.60	161.86	133.74	113.17	61.32	67.97	229.89	19.54	2680.94
1310	63	67	235.561	17	3970	355.43	304.20	273.64	235.27	205.00	181.27	162.38	134.12	113.59	60.02	68.70	226.51	18.28	3558.76
1311	83	60	295.309	20	3413	285.12	239.19	214.91	185.30	161.75	143.01	127.87	104.90	88.15	84.83	62.02	305.16	19.57	3339.60
1312	99	60	352.236	21	3380	244.40	201.72	180.47	155.26	135.46	119.79	107.16	88.00	74.00	97.33	62.87	353.22	19.61	3262.84
1313	91	70	347.029	20	3446	250.33	206.60	184.38	158.23	138.13	122.57	110.24	91.73	78.16	91.44	70.75	347.33	19.18	3280.78
1314	68	69	257.645	18	1997	379.71	301.90	263.23	220.51	190.04	167.64	150.40	124.84	106.05	67.28	72.12	260.35	17.66	2381.83
1315	88	63	320.049	16	1393	376.64	273.54	228.29	184.97	157.46	138.23	123.50	101.33	84.91	89.13	65.28	326.79	15.99	1541.90
1316	94	66	349.102	19	2893	268.86	216.60	190.59	161.10	139.34	122.94	110.14	91.06	77.09	93.65	67.66	349.12	18.42	2984.24
1317	103	63	374.602	18	3561	249.47	203.23	179.03	151.07	130.31	114.63	102.38	84.16	70.90	99.75	65.00	366.33	17.79	3226.33
1318	72	64	263.720	17	2694	358.45	292.58	257.05	216.00	185.88	163.37	145.91	120.03	101.19	72.77	66.01	268.21	17.00	2896.56
1319	78	61	279.591	16	2470	362.37	289.17	250.43	207.41	177.10	154.99	138.01	112.88	94.62	79.76	63.05	287.73	15.90	2615.13
1320	80	69	303.111	16	1454	385.31	283.61	237.90	193.51	165.29	145.72	130.86	108.54	91.84	81.79	71.00	311.67	16.06	1520.45
1321	70	65	258.190	21	2248	341.10	278.39	247.95	212.66	185.49	164.33	147.45	121.98	103.30	70.11	67.86	262.47	19.97	2868.51
1322	66	60	234.824	16	2085	431.37	344.47	298.37	247.08	210.87	184.39	164.04	133.92	112.07	64.75	61.46	228.59	15.51	2345.01
1323	65	67	243.040	16	3637	366.44	308.32	274.01	232.38	200.84	176.89	158.20	130.57	110.52	63.10	69.16	238.87	16.54	3442.70
1324	88	68	331.239	16	843	420.71	277.79	224.97	180.71	154.54	136.53	122.61	101.27	85.19	88.90	69.49	334.61	17.02	623.49
1325	62	61	222.239	21	1607	418.41	333.92	294.53	250.29	217.03	191.46	171.20	140.72	118.43	58.20	63.44	209.06	20.10	2242.16
1326	64	70	244.064	14	2471	426.26	338.70	290.47	238.31	203.29	178.70	160.21	132.94	112.79	62.00	73.67	244.06	13.28	2450.88
1327	89	69	337.211	17	1050	381.41	262.81	216.50	175.21	149.90	132.41	119.02	98.68	83.37	89.82	70.19	339.60	17.83	898.65
1328	66	67	246.779	17	781	519.69	359.37	296.36	239.82	204.94	180.76	162.20	134.03	112.90	64.52	69.82	244.70	17.53	-143.68
1329	89	60	316.656	20	3843	262.58	221.34	199.32	172.23	150.54	133.20	119.13	97.75	82.16	90.09	62.18	325.04	19.54	3426.06
1330	78	64	285.697	19	1485	373.46	282.85	242.70	201.27	172.73	151.99	135.99	112.10	94.49	79.57	66.49	294.31	18.41	1771.64
1331	73	60	259.729	18	1782	392.10	307.35	266.22	221.45	189.69	166.27	148.13	121.15	101.50	73.99	62.03	264.20	17.49	2141.88
1332	68	67	254.257	19	984	456.13	329.36	277.76	228.18	195.65	172.56	154.85	128.25	108.43	67.30	70.03	255.88	19.04	620.65
1333	91	70	347.029	19	3672	253.08	209.44	186.55	159.49	138.85	123.00	110.51	91.87	78.23	91.44	70.67	347.17	18.58	3341.60
1334	85	66	315.678	16	957	420.26	287.05	234.83	189.02	161.33	142.19	127.46	105.00	88.17	86.41	67.91	321.96	16.59	777.81
1335	102	69	386.467	15	2864	279.60	216.50	184.38	150.88	128.77	113.29	101.60	84.24	71.35	99.36	69.63	374.32	15.66	2678.27
1336	83	70	316.521	21	1100	364.19	259.01	218.82	180.93	155.85	137.92	124.15	103.45	87.96	84.45	72.00	323.80	20.24	1141.98
1337	67	61	240.161	17	1507	445.51	343.25	294.09	242.26	206.77	181.15	161.47	132.19	110.77	66.17	62.91	236.84	16.46	1651.04
1338	68	67	254.257	21	1971	357.02	287.30	254.40	217.15	189.06	167.49	150.42	124.78	105.95	67.20	70.39	256.68	19.94	2600.73
1339	100	67	373.907	20	3768	232.06	191.87	171.36	147.07	128.31	113.70	102.08	84.60	71.80	97.84	68.05	365.53	19.26	3285.76
1340	100	67	373.907	15	3819	269.03	216.20	187.15	154.84	132.37	116.22	103.94	85.85	72.59	98.11	68.09	366.64	15.69	3128.36
1341	65	64	238.081	14	2263	446.27	352.50	301.39	246.43	209.50	183.42	163.67	134.45	113.03	63.54	66.66	235.06	12.85	2347.58

SI No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1342	77	67	287.908	18	2004	350.06	274.68	238.15	198.58	170.74	150.41	134.77	111.55	94.46	78.54	69.33	296.49	17.53	2374.49
1343	81	60	288.193	15	2742	357.50	285.34	246.09	202.68	172.47	150.64	133.93	109.26	91.36	82.98	62.15	297.81	14.78	2767.41
1344	62	70	236.437	17	1431	452.58	346.50	296.31	244.31	209.40	184.64	165.83	137.85	117.07	58.26	73.92	230.51	16.66	1478.81
1345	82	66	304.536	16	985	427.72	295.55	242.67	195.55	166.86	147.03	131.79	108.60	91.24	83.60	68.08	311.88	16.44	780.31
1346	71	69	269.011	14	2704	387.81	307.96	264.02	216.52	184.61	162.19	145.30	120.37	101.98	71.85	71.81	276.73	13.69	2598.12
1347	77	70	293.640	19	2462	317.47	255.99	225.39	190.75	165.27	146.16	131.29	109.18	92.95	78.43	72.09	301.75	18.42	2834.80
1348	65	66	241.400	19	2519	366.46	302.94	269.63	230.20	200.07	176.84	158.48	131.00	110.94	62.92	68.65	237.14	19.00	2930.95
1349	85	65	313.516	17	1267	382.16	275.79	230.68	187.68	160.20	140.94	126.20	104.00	87.49	86.51	66.94	320.64	17.23	1277.87
1350	80	62	288.866	14	2456	377.88	294.85	250.69	204.10	173.20	151.44	134.94	110.44	92.51	82.09	64.38	298.96	13.66	2438.70
1351	98	67	366.429	20	1112	335.60	232.32	193.76	158.69	136.15	120.21	107.95	89.44	75.58	96.51	68.39	360.98	19.71	1180.70
1352	86	69	325.845	16	3338	297.69	241.24	210.50	175.69	150.91	132.83	119.00	98.63	83.70	87.44	70.31	331.57	16.33	3054.03
1353	84	69	318.267	20	2485	291.17	233.73	206.10	174.98	151.92	134.47	120.80	100.40	85.41	85.37	70.85	324.97	19.01	2839.73
1354	100	64	366.278	20	1948	282.89	215.72	186.26	155.50	133.86	117.93	105.58	87.10	73.50	97.80	66.20	361.48	18.83	2404.85
1355	63	66	233.973	17	3481	368.77	312.23	279.28	238.71	207.26	182.91	163.67	134.99	114.17	59.91	67.92	224.46	17.83	3405.58
1356	97	64	355.290	19	1904	297.74	226.52	194.70	161.65	138.77	122.11	109.25	90.06	75.92	95.86	66.14	354.12	18.24	2303.91
1357	96	68	361.352	16	1777	321.48	237.56	199.54	162.39	138.64	122.13	109.57	90.74	76.68	95.28	69.25	358.28	16.14	2038.83
1358	63	68	237.137	16	2723	398.74	327.05	286.99	240.63	206.98	182.13	163.02	134.85	114.29	59.96	71.03	231.00	15.92	2928.74
1359	93	62	335.807	19	2337	293.76	231.71	202.01	169.35	145.75	128.16	114.46	94.03	79.10	92.94	64.45	339.82	18.25	2690.89
1360	68	64	249.069	21	1088	432.20	320.36	274.63	228.74	196.96	173.66	155.58	128.45	108.40	67.30	67.15	250.20	20.18	1129.48
1361	86	67	321.560	19	1666	331.20	250.60	215.00	178.40	153.31	135.18	121.24	100.43	85.03	87.23	68.96	327.87	18.47	2001.43
1362	81	68	304.891	17	2364	330.34	261.18	226.29	188.21	161.57	142.27	127.49	105.61	89.51	82.71	69.98	313.32	16.74	2626.66
1363	80	60	284.635	18	2504	335.68	271.16	237.90	199.91	171.93	150.85	134.39	109.91	92.15	81.71	62.15	293.34	17.63	2814.58
1364	87	70	331.775	17	3601	279.07	229.10	201.89	170.29	147.07	129.76	116.38	96.61	82.16	88.19	70.96	335.62	17.26	3233.24
1365	94	62	339.417	17	3881	271.60	224.33	198.15	167.24	144.09	126.56	112.85	92.51	77.77	93.75	64.00	342.00	17.19	3371.24
1366	80	69	303.111	18	1405	370.30	274.22	232.49	191.14	163.86	144.57	129.86	107.85	91.44	81.72	70.91	311.44	17.89	1547.45
1367	92	64	336.976	16	1288	369.93	263.12	218.05	176.20	150.10	131.95	118.03	96.98	81.32	92.30	66.04	340.14	16.23	1437.61
1368	63	63	229.126	18	2770	384.36	321.05	286.12	243.99	211.56	186.47	166.62	136.95	115.40	59.88	64.74	217.87	18.27	3121.07
1369	77	64	282.034	19	2377	331.94	268.00	236.00	199.54	172.49	152.03	136.00	112.09	94.62	78.48	66.34	290.20	18.34	2817.33
1370	71	68	267.250	15	3763	349.75	290.26	255.25	214.02	183.92	161.66	144.58	119.48	101.21	71.68	70.04	272.52	15.50	3297.51
1371	103	60	366.467	18	2527	277.53	217.69	188.60	156.92	134.42	117.83	104.97	85.85	71.93	99.81	62.85	361.93	17.47	2763.66
1372	75	60	266.845	17	2959	348.66	287.12	253.21	213.29	183.47	160.87	143.21	116.99	98.04	76.35	61.61	272.27	17.14	3049.52
1373	87	63	316.412	15	2595	335.82	263.47	225.56	184.95	157.46	137.88	122.99	100.91	84.74	88.46	65.15	324.37	15.20	2552.85
1374	73	61	261.668	21	1128	414.07	306.37	262.40	218.25	187.59	165.04	147.49	121.15	101.77	73.92	63.72	267.56	20.03	1247.23
1375	96	68	361.352	15	1366	352.96	248.65	204.54	164.60	140.43	123.86	111.19	91.92	77.46	95.15	69.45	357.88	15.31	1664.96
1376	75	63	272.769	14	3842	357.86	294.31	256.58	212.90	181.67	158.89	141.48	115.91	97.39	76.66	64.80	280.11	14.27	3246.90
1377	96	65	354.089	17	2032	307.98	234.29	199.79	164.27	140.42	123.42	110.42	91.05	76.74	95.26	66.80	353.19	16.92	2288.67
1378	85	61	304.682	17	742	458.62	301.95	245.12	196.99	167.79	147.35	131.48	107.27	89.32	86.57	62.87	311.66	18.19	93.79
1379	83	60	295.309	14	2883	359.34	284.81	243.82	199.30	169.05	147.50	131.11	106.89	89.29	85.07	62.27	305.70	13.81	2739.95
1380	66	62	238.314	14	3704	401.41	333.18	291.85	243.11	207.67	181.54	161.47	132.01	110.76	64.82	63.50	233.38	14.01	3305.42
1381	77	68	289.834	16	3621	319.94	264.63	233.17	196.21	169.03	148.78	133.16	110.12	93.34	78.59	69.74	297.46	16.54	3239.04
1382	96	63	349.144	20	3868	243.29	203.21	182.26	156.97	137.05	121.32	108.68	89.56	75.59	95.26	64.96	349.81	19.27	3408.76

Sl No	Actual/ Seed Value					Deflection Values										Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	
1383	91	68	342.531	17	2767	291.06	231.26	200.80	167.27	143.67	126.51	113.36	93.90	79.59	91.51	69.31	344.61	16.99	2816.66	
1384	87	67	325.299	16	1712	351.34	262.24	221.09	180.22	153.81	135.35	121.32	100.30	84.66	88.34	68.72	331.26	16.21	1846.76	
1385	100	68	376.408	21	3453	230.13	188.91	168.71	145.11	126.87	112.64	101.28	84.14	71.56	97.85	69.01	367.65	19.50	3262.57	
1386	79	66	293.394	16	719	481.36	315.67	255.12	204.72	174.89	154.27	138.29	113.78	95.39	80.58	68.01	300.40	16.99	109.56	
1387	62	62	223.871	14	1645	503.72	386.34	326.10	264.33	224.19	196.14	174.84	143.09	119.78	58.66	64.57	212.12	11.95	1717.78	
1388	96	64	351.627	15	2656	307.67	239.00	203.76	166.66	141.89	124.37	111.07	91.30	76.77	95.44	65.93	351.92	15.44	2576.42	
1389	79	67	295.387	18	1217	393.67	286.20	241.02	197.35	168.93	148.89	133.57	110.55	93.40	80.66	69.08	303.50	18.12	1180.37	
1390	78	70	297.453	20	1793	334.30	259.34	225.52	189.45	163.80	144.88	130.24	108.44	92.32	79.47	72.40	306.33	18.86	2314.03	
1391	77	69	291.745	17	1422	388.65	288.55	243.87	199.64	170.84	150.63	135.27	112.27	95.11	78.57	71.16	300.05	17.13	1451.19	
1392	103	68	387.700	17	3737	246.26	199.67	174.92	146.76	126.39	111.33	99.73	82.57	70.02	99.77	68.69	374.00	17.19	3221.56	
1393	68	61	243.746	14	1000	530.17	375.89	308.27	246.67	209.27	183.41	163.48	133.26	110.97	67.31	64.28	242.89	11.25	1114.22	
1394	95	69	359.945	16	3412	274.45	220.54	191.69	159.49	136.85	120.44	107.92	89.47	75.91	94.58	69.84	357.09	16.44	3023.53	
1395	76	62	274.423	18	2838	333.78	274.42	242.73	205.51	177.49	156.12	139.35	114.35	96.20	77.43	63.89	281.16	17.97	3029.78	
1396	62	70	236.437	19	1077	466.07	345.52	294.22	243.15	208.99	184.62	166.00	138.16	117.40	58.14	74.02	230.24	18.93	832.75	
1397	101	65	372.531	18	2538	272.59	213.36	184.78	153.88	132.15	116.26	104.02	85.82	72.45	98.49	66.68	364.96	17.79	2676.11	
1398	88	66	326.819	16	1585	357.48	263.73	221.38	180.01	153.52	135.04	120.97	99.82	84.10	89.16	67.79	332.31	16.24	1720.64	
1399	67	67	250.518	15	1107	489.78	353.65	293.29	236.65	201.68	177.61	159.26	131.51	110.76	66.05	70.37	251.59	14.05	905.26	
1400	62	69	234.911	19	3770	337.59	290.66	263.85	229.81	202.17	179.93	161.88	134.45	114.35	58.64	71.08	226.45	20.36	3447.32	
1401	102	66	378.813	21	2583	248.60	196.81	173.10	146.90	127.51	112.78	101.20	83.83	71.06	99.02	67.77	369.32	19.35	2868.34	
1402	87	65	320.893	16	2103	337.90	259.93	221.69	181.85	155.19	136.27	121.85	100.41	84.59	88.40	67.02	328.16	15.92	2287.72	
1403	92	65	339.335	18	876	395.97	264.30	216.29	174.88	149.46	131.74	118.05	97.21	81.61	92.29	66.57	341.20	18.90	557.36	
1404	99	66	367.671	16	962	376.64	250.22	202.99	163.03	139.23	122.79	110.07	90.60	75.99	97.17	67.38	360.98	16.95	1041.41	
1405	76	60	270.403	15	3379	358.20	294.09	257.07	214.04	182.83	159.75	141.96	115.76	96.87	77.64	61.69	277.17	15.07	3169.81	
1406	80	67	299.126	16	1719	373.70	282.38	239.18	195.47	166.87	146.79	131.54	108.76	91.85	81.86	69.09	308.04	16.00	1840.97	
1407	100	65	368.843	15	2638	296.74	228.94	194.64	158.96	135.37	118.77	106.18	87.44	73.61	98.11	66.69	363.45	15.53	2563.85	
1408	85	66	315.678	18	2390	312.71	248.01	215.98	180.66	155.44	136.87	122.53	101.24	85.63	86.38	68.02	322.89	17.59	2690.77	
1409	66	65	243.436	14	2989	412.16	334.39	289.57	239.06	203.84	178.52	159.29	131.02	110.39	65.06	67.41	242.50	13.51	2862.07	
1410	68	66	252.542	15	2648	396.40	319.49	276.93	229.30	196.00	171.97	153.67	126.70	106.97	67.72	68.52	254.61	14.78	2685.92	
1411	81	66	300.822	20	3265	283.19	236.00	211.51	182.10	159.10	141.03	126.58	104.76	88.79	82.71	67.79	308.92	19.70	3196.12	
1412	97	60	345.120	14	3433	306.21	243.19	208.39	170.45	144.60	126.16	112.13	91.42	76.38	96.25	62.63	348.05	14.43	2951.00	
1413	101	70	385.164	20	1243	312.04	218.44	182.91	150.18	129.06	114.16	102.75	85.55	72.63	98.40	70.47	372.32	19.63	1426.60	
1414	71	63	258.221	17	3569	340.96	286.80	255.64	217.63	188.39	165.83	148.04	121.54	102.34	71.52	64.40	260.31	17.67	3346.13	
1415	80	69	303.111	21	1742	325.54	251.60	219.21	184.80	160.10	141.71	127.39	105.99	90.18	81.44	71.56	311.87	19.53	2285.10	
1416	78	60	277.519	19	967	434.21	308.23	258.24	211.01	180.10	158.01	140.95	115.26	96.33	79.73	62.09	285.13	19.08	640.78	
1417	81	60	288.193	17	3860	308.62	258.87	230.36	195.68	169.01	148.43	132.18	107.97	90.50	82.71	61.59	295.95	17.53	3421.51	
1418	89	61	319.020	19	1997	318.48	247.74	214.76	179.21	153.91	135.18	120.63	98.92	83.07	89.83	63.54	326.24	18.39	2357.43	
1419	67	69	253.856	17	1976	395.94	313.16	271.38	225.78	193.92	170.85	153.22	127.12	107.89	66.07	72.05	255.82	16.65	2292.25	
1420	76	68	286.070	15	2890	352.10	282.58	244.48	202.22	172.94	151.94	136.00	112.51	95.26	77.70	70.14	295.00	15.18	2754.25	
1421	86	69	325.845	14	3998	306.50	248.51	215.19	177.79	151.87	133.36	119.38	98.84	83.78	87.73	70.25	332.55	14.79	3129.68	
1422	95	67	355.212	21	3400	241.29	199.03	178.11	153.46	134.27	119.20	107.14	88.90	75.50	94.48	68.39	353.86	19.75	3229.35	
1423	88	64	322.325	21	721	419.91	272.93	223.43	181.79	155.77	137.39	123.15	101.49	85.29	89.11	66.30	328.92	21.38	-20.65	

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1424	94	61	336.943	14	839	435.52	283.98	227.32	181.05	154.05	135.21	120.47	97.87	81.17	93.60	64.16	340.55	13.46	1400.47
1425	64	67	239.301	14	1440	490.22	366.29	306.08	247.15	210.24	184.89	165.67	136.80	115.29	61.72	70.99	237.02	12.04	1505.26
1426	96	61	344.112	17	3202	281.83	227.77	199.16	166.57	142.89	125.27	111.60	91.35	76.65	95.23	63.35	346.01	17.01	3061.29
1427	81	70	308.894	18	1557	354.65	265.95	226.55	186.80	160.30	141.49	127.16	105.77	89.84	82.68	71.74	316.69	17.93	1736.74
1428	63	64	230.755	19	2530	379.27	315.19	281.17	240.49	209.08	184.68	165.31	136.24	115.05	59.88	66.19	220.94	19.06	3008.89
1429	74	64	271.046	16	1799	399.22	307.66	262.57	215.42	183.75	161.22	144.04	118.48	99.67	75.37	66.31	278.19	15.62	1982.30
1430	84	69	318.267	21	3502	259.10	216.90	195.41	169.48	148.91	132.56	119.37	99.34	84.60	85.72	70.29	325.30	20.18	3286.98
1431	65	65	239.748	16	1146	489.65	360.54	302.41	245.75	209.47	184.12	164.79	135.74	114.17	63.17	67.80	235.62	15.47	878.55
1432	101	64	369.941	15	2230	308.42	232.84	196.23	159.41	135.60	118.96	106.30	87.37	73.38	98.70	66.05	364.17	15.32	2362.57
1433	82	67	306.604	21	1492	338.78	255.42	220.40	184.48	159.29	140.75	126.37	104.84	88.91	83.49	69.58	315.40	19.63	1944.43
1434	64	65	236.059	17	2062	415.57	333.36	290.59	242.67	208.39	183.17	163.74	134.96	113.92	61.51	67.70	229.89	16.56	2457.38
1435	63	69	238.700	15	1207	496.03	365.14	304.90	246.86	210.55	185.57	166.63	138.12	116.78	59.94	73.12	234.75	13.90	1024.40
1436	77	69	291.745	17	3181	317.35	260.68	229.77	193.81	167.34	147.57	132.26	109.64	93.11	78.54	70.87	299.69	17.08	3138.15
1437	70	69	265.222	17	2094	377.64	299.19	259.47	215.99	185.54	163.47	146.59	121.62	103.23	70.19	71.79	270.59	16.65	2413.90
1438	66	61	236.577	20	3192	341.87	291.07	263.39	228.75	200.63	177.90	159.36	131.04	110.31	65.02	62.14	232.17	20.62	3262.44
1439	86	66	319.391	21	3561	257.90	216.23	194.91	169.06	148.44	131.98	118.65	98.36	83.44	87.52	67.69	326.81	20.14	3319.89
1440	91	65	335.647	16	2468	314.10	245.16	210.35	173.23	147.95	129.88	116.11	95.67	80.64	91.66	66.81	339.87	16.14	2559.65
1441	103	67	385.124	21	1199	311.37	216.98	181.96	149.79	128.75	113.74	102.17	84.73	71.69	99.68	68.47	373.09	19.87	1477.85
1442	83	61	297.513	17	2329	340.13	269.47	233.56	193.99	165.98	145.44	129.59	106.09	88.97	84.73	63.23	306.73	16.67	2601.73
1443	91	65	335.647	15	2593	320.27	249.43	212.89	174.30	148.50	130.26	116.42	95.87	80.74	91.74	66.88	340.22	15.29	2551.22
1444	71	69	269.011	20	2701	322.29	266.33	237.82	204.15	178.21	158.08	142.09	118.08	100.48	71.40	71.51	274.53	19.54	3049.87
1445	62	66	230.259	20	760	519.93	365.88	306.86	251.93	216.12	190.66	171.06	141.51	119.47	58.12	69.35	220.31	20.46	-208.25
1446	100	65	368.843	14	2900	300.09	231.91	196.41	159.66	135.69	118.98	106.33	87.51	73.63	98.19	66.92	364.27	14.41	2714.99
1447	80	65	295.074	19	3550	289.52	242.84	217.59	186.92	162.95	144.17	129.18	106.63	90.19	81.69	66.70	302.86	19.12	3305.82
1448	64	62	231.093	20	1274	444.50	340.83	294.87	246.38	211.99	186.52	166.71	137.08	115.34	61.40	64.62	223.04	19.27	1524.79
1449	99	60	352.236	16	3395	282.05	227.29	197.68	164.24	140.32	122.72	109.16	89.11	74.59	97.38	62.52	352.20	16.23	3105.68
1450	101	62	364.693	15	2009	320.41	239.07	200.55	162.42	137.97	120.87	107.83	88.28	73.87	98.69	64.48	360.67	15.29	2192.73
1451	85	65	313.516	14	3836	320.27	259.75	224.90	185.65	158.28	138.62	123.69	101.74	85.72	86.87	66.80	322.25	14.45	3154.36
1452	62	66	230.259	16	3510	385.56	324.97	289.05	245.29	212.01	186.64	166.81	137.46	116.18	58.32	68.04	218.83	16.61	3403.07
1453	81	70	308.894	21	2532	288.65	233.80	207.63	177.76	155.11	137.69	123.90	103.21	87.99	82.63	71.96	317.19	19.52	2987.39
1454	83	64	304.011	19	2974	296.33	243.31	215.86	183.70	159.29	140.55	125.76	103.64	87.52	84.52	66.10	312.11	18.57	3120.06
1455	92	60	327.330	21	2596	277.04	223.67	198.22	169.09	146.84	129.57	115.80	95.04	79.89	92.25	62.96	334.50	19.39	3000.54
1456	83	64	304.011	21	2745	287.06	235.28	209.93	180.30	157.34	139.37	124.99	103.25	87.33	84.56	66.42	313.08	19.85	3055.55
1457	80	67	299.126	17	2380	334.90	265.65	230.48	191.84	164.68	144.91	129.76	107.31	90.83	81.68	69.03	307.39	17.02	2551.00
1458	81	67	302.865	16	2038	354.93	273.87	233.90	192.12	164.15	144.33	129.27	106.88	90.33	82.84	69.05	311.67	16.01	2180.49
1459	94	66	349.102	16	2464	304.68	236.57	202.55	166.60	142.32	125.04	111.88	92.35	77.94	93.90	67.63	349.91	16.18	2534.50
1460	100	62	361.082	15	2009	322.83	241.21	202.44	164.00	139.31	122.04	108.87	89.13	74.59	98.07	64.51	358.50	15.13	2238.36
1461	103	61	369.203	19	1852	292.70	220.60	188.89	156.30	133.86	117.52	104.89	86.00	72.15	99.78	63.64	363.30	18.43	2197.90
1462	97	63	352.781	15	2322	317.08	242.18	205.02	166.92	141.94	124.37	111.01	91.08	76.41	96.10	65.21	352.75	15.31	2383.52
1463	90	69	341.000	15	735	436.67	277.42	221.46	177.14	151.72	134.23	120.61	99.57	83.66	90.49	70.24	342.15	16.36	616.99
1464	102	64	373.604	18	3319	254.19	205.49	180.42	151.84	130.87	115.16	102.93	84.75	71.50	99.10	65.82	365.54	17.80	3114.01

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1465	100	67	373.907	16	3363	268.09	214.22	185.71	154.15	132.06	116.08	103.88	85.85	72.62	97.98	68.08	366.08	16.47	3003.13
1466	62	63	225.489	14	2629	451.07	364.14	314.52	259.01	220.48	192.81	171.77	140.80	118.25	58.77	65.14	214.33	12.96	2684.15
1467	99	66	367.671	19	3848	240.42	198.81	176.97	151.12	131.35	116.10	104.05	86.01	72.84	97.16	67.28	361.42	18.63	3340.77
1468	102	65	376.219	16	1890	308.07	228.50	192.17	156.37	133.30	117.14	104.83	86.36	72.66	99.27	66.63	367.49	16.43	2082.67
1469	75	62	270.812	20	2190	341.02	275.09	242.95	206.27	178.69	157.57	140.88	115.85	97.59	76.14	64.52	277.71	19.21	2705.95
1470	77	66	285.967	21	2953	293.94	244.49	219.58	189.80	166.32	147.72	132.74	110.01	93.31	78.68	68.21	295.02	20.18	3161.87
1471	92	61	329.774	20	1349	340.64	249.29	211.91	175.02	149.97	131.78	117.70	96.58	81.02	92.29	63.67	335.57	19.14	1646.85
1472	97	61	347.696	16	1481	349.38	253.00	210.90	170.67	145.09	127.15	113.39	92.67	77.39	95.98	63.49	348.33	16.24	1682.52
1473	76	62	274.423	14	2078	408.17	314.19	265.60	215.47	182.77	159.88	142.51	116.63	97.64	77.81	64.50	283.14	13.28	2140.43
1474	97	66	360.244	15	1059	379.35	256.19	208.00	166.71	142.24	125.39	112.38	92.45	77.51	95.77	67.77	356.52	15.45	1363.85
1475	91	68	342.531	21	2388	272.75	216.52	190.66	162.03	140.81	124.70	112.05	93.08	79.13	91.32	69.74	344.85	19.42	2820.99
1476	84	69	318.267	16	944	418.20	284.24	232.20	186.97	159.87	141.25	126.96	105.14	88.68	85.48	70.62	324.35	16.68	750.00
1477	100	60	355.794	19	3935	246.23	204.84	182.77	156.22	135.60	119.49	106.64	87.33	73.31	97.91	62.45	354.28	18.73	3357.13
1478	82	62	296.088	14	2740	361.81	285.02	243.37	198.69	168.69	147.46	131.35	107.50	90.08	84.05	64.33	306.21	13.89	2602.94
1479	66	68	248.429	17	2994	364.26	302.31	267.76	226.80	196.13	172.97	154.92	128.20	108.73	64.52	70.62	247.12	17.11	3171.69
1480	80	65	295.074	19	2362	321.28	257.79	226.42	191.06	165.08	145.54	130.29	107.55	90.92	81.55	67.29	303.42	18.48	2721.82
1481	85	67	317.821	21	934	384.88	265.13	221.46	181.94	156.33	138.11	124.08	102.88	87.01	86.38	69.15	324.98	20.63	707.66
1482	98	67	366.429	21	2774	249.36	200.07	176.94	150.88	131.30	116.29	104.44	86.64	73.56	96.42	68.58	361.39	19.41	2995.53
1483	88	63	320.049	15	1237	398.35	282.01	232.28	186.74	158.82	139.48	124.62	102.09	85.36	89.11	65.52	326.98	14.70	1456.47
1484	102	61	365.619	15	1885	325.13	240.42	200.99	162.45	137.89	120.73	107.61	87.91	73.42	99.29	63.76	361.30	15.15	2150.94
1485	70	69	265.222	15	788	512.17	346.22	281.19	225.56	192.79	170.36	153.10	126.64	106.68	69.91	72.30	269.84	14.60	384.82
1486	69	67	257.996	14	759	540.76	362.62	292.55	233.72	199.53	176.07	157.90	129.98	109.00	68.56	70.92	262.01	11.94	783.20
1487	65	69	246.278	18	1673	411.02	321.41	278.30	231.93	199.52	175.97	157.91	131.10	111.33	62.87	72.56	244.83	17.58	2004.28
1488	79	62	285.255	14	2802	370.64	293.90	251.70	205.91	174.89	152.86	136.13	111.41	93.38	81.08	64.27	295.14	13.77	2665.03
1489	82	60	291.751	20	1192	385.49	282.09	239.77	197.95	169.51	148.84	132.81	108.77	91.11	83.68	62.61	301.27	19.27	1327.32
1490	62	70	236.437	19	2337	377.93	310.49	275.64	234.94	204.24	180.82	162.44	135.04	114.99	58.00	73.70	229.08	18.91	2820.49
1491	65	62	234.704	14	3595	408.87	338.93	296.67	246.97	210.92	184.37	163.99	134.08	112.49	63.38	63.49	228.07	13.83	3281.45
1492	102	60	362.909	15	3802	277.74	223.98	194.10	160.45	136.70	119.40	106.13	86.57	72.41	99.37	62.60	359.72	15.57	3148.05
1493	103	65	379.908	19	1946	281.76	212.90	182.53	151.33	129.91	114.39	102.44	84.58	71.40	99.74	66.74	369.75	18.35	2313.92
1494	84	63	305.501	19	984	403.23	281.98	235.11	191.85	164.01	144.28	129.07	106.11	89.06	85.57	65.15	313.33	19.26	715.45
1495	101	63	367.328	14	3226	294.69	230.75	196.52	160.21	136.06	119.06	106.17	87.06	73.05	98.85	65.21	363.13	14.60	2823.35
1496	92	69	348.578	16	2229	311.60	238.76	203.36	166.82	142.62	125.59	112.68	93.47	79.21	92.38	70.15	349.45	16.24	2347.84
1497	78	62	281.644	19	2200	339.67	271.81	238.41	200.82	173.19	152.37	136.09	111.79	94.08	79.50	64.35	289.65	18.51	2601.55
1498	65	66	241.400	20	1351	422.24	324.31	280.85	235.04	202.67	178.81	160.31	132.68	112.31	62.82	69.47	238.39	19.25	1661.72
1499	68	69	257.645	17	2935	355.60	293.42	259.19	219.04	189.28	166.95	149.64	124.02	105.33	67.36	71.53	259.40	17.31	3032.85
1500	63	63	229.126	20	2370	377.37	312.96	279.80	240.22	209.38	185.19	165.84	136.64	115.32	59.85	65.27	218.97	19.97	2887.63
1501	83	67	310.343	16	1454	379.44	278.43	233.28	189.56	161.75	142.41	127.68	105.54	89.03	84.70	69.01	318.28	16.06	1550.65
1502	86	64	314.999	21	1527	330.96	249.48	215.21	179.99	155.19	136.87	122.61	101.24	85.48	87.21	66.74	323.37	19.46	2032.70
1503	71	68	267.250	15	1079	469.23	334.05	275.72	222.14	189.47	167.06	149.96	124.01	104.54	71.43	71.15	273.22	14.28	965.75
1504	102	70	388.977	15	3644	262.84	209.14	180.24	148.72	127.19	111.90	100.33	83.29	70.71	99.39	70.29	375.96	15.64	3063.41
1505	65	68	244.665	20	1848	382.53	305.84	269.21	228.20	197.92	175.06	157.16	130.44	110.81	62.82	71.59	242.88	19.17	2448.13

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1506	86	61	308.267	19	955	405.29	281.46	234.08	190.67	162.77	142.96	127.66	104.55	87.45	87.49	63.16	316.25	19.24	678.82
1507	97	66	360.244	15	1468	348.03	248.25	205.03	165.13	140.68	123.84	110.96	91.44	76.85	95.91	67.81	357.28	15.24	1759.28
1508	92	67	343.994	20	3742	247.30	206.13	184.76	159.12	139.08	123.35	110.78	91.81	77.92	92.27	68.23	345.28	19.43	3330.63
1509	92	63	334.596	16	2593	311.78	244.98	210.76	173.80	148.35	130.03	116.03	95.26	80.06	92.42	65.05	338.95	16.19	2631.96
1510	80	63	290.953	19	920	425.88	296.78	247.16	201.57	172.31	151.59	135.62	111.49	93.56	81.78	65.05	299.02	19.44	475.20
1511	72	60	256.171	15	973	501.50	354.30	291.56	234.07	198.63	173.95	154.93	126.15	104.96	72.74	62.49	259.37	13.65	859.04
1512	93	64	340.639	18	1983	311.07	238.43	204.75	169.46	145.19	127.63	114.13	94.01	79.20	93.02	66.01	343.18	17.79	2250.64
1513	101	65	372.531	21	3450	232.49	191.09	170.72	146.82	128.25	113.70	102.05	84.43	71.51	98.53	66.77	365.64	19.51	3274.26
1514	89	66	330.533	21	2139	289.18	227.34	199.38	168.83	146.40	129.45	116.14	96.21	81.54	89.72	68.34	336.07	19.33	2662.14
1515	96	69	363.734	17	1690	315.77	232.75	196.18	160.38	137.22	121.01	108.68	90.20	76.40	95.23	69.90	359.44	17.16	1937.41
1516	87	60	309.540	18	3717	285.71	238.51	212.46	180.97	156.67	137.81	122.85	100.47	84.28	88.18	61.98	317.07	18.29	3313.42
1517	96	63	349.144	15	1855	337.26	250.34	209.61	169.66	144.21	126.47	112.94	92.63	77.62	95.35	65.37	350.17	15.05	2093.33
1518	92	65	339.335	18	1468	338.58	248.21	209.63	171.82	146.96	129.32	115.81	95.53	80.49	92.28	66.77	341.87	18.08	1638.05
1519	96	64	351.627	15	1521	351.96	253.50	210.02	169.26	143.99	126.51	113.13	92.90	77.87	95.24	66.24	351.49	15.03	1838.53
1520	103	60	366.467	16	2417	296.97	228.80	195.18	159.90	136.05	118.98	105.91	86.47	72.28	99.94	62.74	361.89	16.15	2540.27
1521	76	63	276.406	17	3732	320.29	268.83	239.36	203.56	176.11	154.99	138.35	113.58	95.65	77.41	64.58	282.49	17.60	3381.08
1522	103	69	390.256	14	986	371.42	242.13	193.86	154.82	132.48	117.16	105.26	86.88	72.99	99.55	70.14	375.80	14.41	1689.55
1523	102	64	373.604	20	3920	230.40	191.35	171.20	147.12	128.32	113.58	101.79	84.00	70.99	99.19	65.75	365.97	19.12	3402.51
1524	84	69	318.267	16	733	450.94	291.69	234.83	188.43	161.33	142.69	128.26	106.06	89.28	85.37	70.46	323.40	17.53	196.96
1525	74	65	272.943	17	1769	387.23	299.45	257.03	212.22	181.58	159.57	142.73	117.68	99.24	75.22	67.35	279.90	16.72	2013.17
1526	69	62	249.147	15	1195	485.15	354.99	295.67	238.66	202.73	177.71	158.58	129.77	108.50	68.96	64.53	249.97	13.83	1117.00
1527	67	64	245.406	21	1738	380.27	302.61	266.66	226.58	196.66	173.79	155.73	128.61	108.72	65.83	67.21	245.10	19.86	2379.91
1528	63	70	240.251	21	1424	406.68	315.66	275.50	232.60	201.68	178.63	160.69	133.88	114.07	59.60	74.43	236.71	19.90	1929.98
1529	102	69	386.467	21	2739	240.42	191.24	168.55	143.37	124.68	110.49	99.34	82.64	70.34	99.01	69.93	373.77	19.16	3008.23
1530	102	63	370.965	18	1941	294.29	222.20	189.68	156.36	133.76	117.50	105.00	86.33	72.59	99.18	65.14	364.24	17.73	2252.99
1531	76	61	272.422	14	2547	392.81	309.83	264.68	216.10	183.36	160.15	142.51	116.41	97.39	77.87	63.23	280.95	13.40	2550.44
1532	65	60	231.266	19	1548	431.78	338.91	294.83	246.62	211.89	186.01	165.84	135.76	113.85	62.94	61.95	223.07	18.34	1964.66
1533	95	68	357.588	16	1350	348.34	247.01	204.53	165.40	141.23	124.56	111.82	92.53	78.07	94.47	69.27	355.10	16.36	1561.26
1534	96	64	351.627	14	3209	304.89	239.74	204.56	167.03	141.96	124.31	110.94	91.14	76.60	95.54	66.04	352.66	14.40	2864.86
1535	98	70	373.723	15	2997	283.54	221.62	189.49	155.49	132.82	116.90	104.88	87.09	73.90	96.80	70.59	366.88	15.51	2776.76
1536	87	63	316.412	20	3514	268.28	224.14	201.07	173.18	151.21	133.86	119.92	98.82	83.41	88.27	64.93	323.74	19.59	3287.80
1537	85	61	304.682	15	2160	361.57	278.83	236.93	193.23	164.15	143.55	127.86	104.51	87.44	86.71	63.40	313.99	14.82	2301.12
1538	64	64	234.418	21	1639	399.53	317.41	279.52	237.37	205.97	182.00	163.09	134.68	113.85	61.24	67.29	228.14	20.13	2221.10
1539	76	68	286.070	19	1325	384.07	285.60	243.44	201.23	172.83	152.49	136.90	113.59	96.26	77.37	70.47	294.38	18.61	1478.45
1540	94	66	349.102	18	3416	265.02	216.53	191.03	161.51	139.58	123.04	110.14	90.97	76.98	93.69	67.50	349.02	17.79	3221.72
1541	100	62	361.082	14	3317	297.17	233.91	199.65	162.96	138.34	120.94	107.73	88.17	73.88	98.22	64.38	359.07	14.50	2902.71
1542	75	70	286.013	15	2046	380.51	293.30	249.32	203.83	174.00	153.21	137.52	114.21	96.87	76.62	72.46	295.80	14.62	2191.66
1543	103	67	385.124	19	1653	291.98	214.52	182.04	150.05	128.74	113.53	101.86	84.38	71.37	99.72	68.19	372.61	18.56	1983.86
1544	100	68	376.408	18	3517	248.15	201.68	177.53	149.85	129.50	114.25	102.42	84.85	72.00	97.81	68.80	366.85	17.96	3156.27
1545	78	66	289.681	18	3689	299.37	251.27	224.51	192.03	166.92	147.46	132.06	109.04	92.29	79.57	67.64	296.85	18.40	3367.63
1546	67	62	241.925	17	2008	411.86	328.54	285.62	237.85	203.79	178.72	159.38	130.70	109.81	66.05	64.08	239.09	16.56	2374.10

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1547	86	66	319.391	20	3631	263.56	220.69	198.21	171.01	149.59	132.68	119.10	98.58	83.56	87.41	67.62	326.14	19.47	3350.97
1548	80	67	299.126	19	2196	323.64	256.88	224.62	188.94	163.14	143.94	129.04	106.86	90.58	81.55	69.25	307.44	18.40	2587.79
1549	68	64	249.069	14	1451	476.15	354.50	295.78	238.47	202.51	177.68	158.79	130.39	109.36	67.63	67.25	250.88	12.24	1549.23
1550	83	70	316.521	14	3519	322.00	258.42	222.66	183.30	156.48	137.52	123.24	102.24	86.76	85.08	71.48	325.32	14.39	2995.75
1551	65	69	246.278	15	3735	372.88	311.55	274.96	231.33	199.14	175.20	156.79	129.73	110.05	63.28	71.42	244.15	15.59	3335.89
1552	67	60	238.382	19	3181	350.61	297.05	267.34	230.47	201.01	177.56	158.63	129.97	109.14	66.21	60.96	233.87	19.48	3344.95
1553	70	66	259.970	18	3126	338.27	282.35	251.60	214.64	186.32	164.51	147.31	121.63	102.94	70.06	68.05	262.34	18.36	3191.95
1554	72	70	274.572	19	2961	318.34	263.97	235.34	201.36	175.38	155.39	139.62	116.06	98.83	72.62	72.20	280.34	18.95	3121.40
1555	103	61	369.203	18	846	379.93	247.59	201.04	161.92	138.05	121.29	108.27	88.41	73.68	99.84	63.14	361.70	19.32	530.76
1556	68	60	241.940	20	3833	321.21	277.37	252.71	221.03	194.68	173.02	155.11	127.50	107.22	68.18	60.74	241.38	20.97	3466.52
1557	64	62	231.093	15	3827	392.71	330.89	293.20	247.28	212.61	186.33	165.87	135.66	113.90	61.64	62.92	220.37	15.73	3428.29
1558	82	65	302.451	20	1582	343.95	261.60	225.67	188.32	162.16	142.95	128.07	105.83	89.43	83.53	67.57	311.30	19.01	2004.63
1559	86	65	317.205	21	3637	257.97	216.91	195.76	169.98	149.31	132.74	119.29	98.76	83.67	87.56	66.76	325.05	20.27	3329.62
1560	71	64	260.057	15	2698	386.74	311.44	269.80	223.20	190.57	166.97	148.96	122.40	103.03	71.69	66.25	264.57	14.81	2723.20
1561	99	70	377.537	16	2195	294.27	222.58	188.62	154.30	131.91	116.27	104.43	86.77	73.61	97.35	70.54	368.74	16.28	2365.47
1562	68	60	241.940	16	1650	446.15	345.20	295.00	241.95	205.91	180.07	160.27	130.86	109.40	67.72	61.74	240.10	15.12	1858.71
1563	71	63	258.221	17	1804	402.41	314.30	270.83	224.11	191.70	168.21	150.18	123.39	103.77	71.53	65.27	261.86	16.60	2089.58
1564	87	64	318.662	20	2922	279.82	229.01	203.56	173.87	151.18	133.62	119.68	98.74	83.44	88.14	66.18	325.77	19.16	3078.95
1565	82	70	312.707	21	2175	298.45	236.79	208.49	177.22	154.11	136.62	122.91	102.39	87.27	83.52	72.00	320.54	19.52	2703.68
1566	76	62	274.423	17	2551	353.14	285.35	249.51	208.73	179.15	157.17	140.15	114.92	96.57	77.53	63.96	281.56	16.89	2773.07
1567	71	64	260.057	21	2518	329.32	272.04	243.56	209.83	183.43	162.62	145.89	120.54	101.96	71.45	66.59	264.84	20.31	2968.53
1568	91	70	347.029	15	1279	369.17	258.86	212.61	171.10	146.14	129.11	116.11	96.31	81.38	91.40	71.38	348.07	15.11	1585.88
1569	87	67	325.299	20	959	381.71	262.74	218.70	178.95	153.51	135.55	121.73	100.85	85.21	88.19	68.83	331.04	19.93	761.93
1570	87	64	318.662	16	3961	292.59	241.98	213.15	179.17	154.07	135.28	120.71	99.20	83.59	88.27	65.69	325.07	16.56	3319.56
1571	64	70	244.064	18	2332	292.59	241.98	213.15	179.17	154.07	135.28	120.71	99.20	83.59	88.27	65.69	325.07	16.56	3319.56
1572	101	63	367.328	18	2034	292.66	222.78	190.77	157.57	134.87	118.47	105.85	87.04	73.20	98.56	65.20	362.11	17.64	2342.79
1573	102	63	370.965	16	2242	298.83	227.52	193.23	158.00	134.62	118.05	105.40	86.54	72.65	99.29	65.10	364.43	16.31	2363.28
1574	67	66	248.828	16	758	532.43	363.98	297.85	239.77	204.63	180.36	161.67	133.19	111.85	65.95	68.82	247.78	16.03	-34.18
1575	63	60	224.150	21	2263	378.86	314.42	281.99	243.16	212.42	187.98	168.22	138.17	116.20	60.12	61.66	212.86	20.66	2903.22
1576	92	64	336.976	17	2204	313.24	242.56	208.29	171.99	147.10	129.17	115.44	95.02	80.01	92.33	65.98	340.62	16.95	2417.81
1577	70	61	250.915	19	3955	319.45	274.68	249.05	216.39	189.71	168.11	150.48	123.59	103.96	70.59	61.83	252.12	20.04	3490.96
1578	67	61	240.161	21	1973	373.69	302.97	269.00	229.89	199.90	176.57	157.95	129.86	109.33	66.00	63.48	238.19	19.99	2669.86
1579	69	64	252.732	20	814	478.31	335.17	280.66	230.12	197.17	173.69	155.58	128.26	107.95	68.73	66.67	254.06	20.30	93.50
1580	63	62	227.482	21	2579	361.54	303.67	273.87	237.52	208.33	184.89	165.81	136.68	115.32	60.12	64.09	217.95	20.99	3055.03
1581	101	70	385.164	15	3675	264.33	210.76	181.80	150.11	128.40	112.96	101.28	84.07	71.37	98.75	70.30	373.59	15.69	3073.19
1582	85	63	309.138	17	785	445.27	295.49	240.50	193.56	165.09	145.24	129.86	106.39	88.91	86.44	64.86	315.48	18.19	207.31
1583	71	69	269.011	18	2101	362.96	288.85	251.95	211.13	181.97	160.53	144.02	119.54	101.54	71.38	71.71	274.83	17.59	2504.88
1584	70	68	263.486	19	2917	330.17	274.58	245.09	209.88	182.80	161.84	145.25	120.41	102.26	70.06	70.36	267.13	19.05	3110.47
1585	72	62	259.979	19	1429	404.74	309.14	266.08	221.00	189.57	166.57	148.79	122.23	102.74	72.73	64.33	264.37	18.45	1697.05
1586	65	68	244.665	19	867	486.50	345.82	290.06	237.67	203.80	179.90	161.60	134.04	113.43	62.91	71.30	242.10	19.46	154.85
1587	67	62	241.925	14	2202	444.43	349.47	298.15	243.28	206.52	180.54	160.83	131.63	110.29	66.50	64.23	240.80	12.88	2275.52

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1588	93	61	333.358	17	1447	353.79	258.45	217.04	176.71	150.48	131.92	117.67	96.28	80.52	93.13	63.34	337.64	17.08	1623.51
1589	82	65	302.451	21	3415	271.65	228.06	205.68	178.46	156.70	139.28	125.15	103.60	87.77	83.83	66.93	311.47	20.43	3239.37
1590	90	64	329.650	16	2036	334.13	255.08	216.89	177.52	151.35	132.82	118.69	97.63	82.10	90.85	66.01	335.01	16.13	2192.10
1591	63	61	225.823	21	3837	328.21	285.97	262.41	231.70	205.59	183.69	165.31	136.54	115.17	61.16	61.84	218.17	22.56	3342.60
1592	80	60	284.635	15	905	472.94	324.41	264.51	211.76	179.82	157.58	140.35	114.15	94.85	81.61	62.70	292.66	14.27	875.44
1593	82	62	296.088	18	2030	343.38	269.09	233.09	194.01	166.37	146.06	130.35	107.00	89.92	83.74	64.33	305.40	17.40	2423.80
1594	65	70	247.878	18	3649	336.56	286.23	257.47	221.82	193.78	171.82	154.34	128.15	109.05	63.16	72.18	245.25	18.87	3444.50
1595	67	70	255.505	21	3945	295.54	255.44	233.59	205.73	182.55	163.45	147.66	123.24	105.13	66.98	71.74	259.23	21.71	3393.92
1596	103	63	374.602	21	873	356.06	233.66	191.89	156.28	133.85	117.95	105.63	86.91	72.95	99.84	65.28	366.72	20.78	648.41
1597	85	60	302.425	15	3185	332.89	268.60	232.83	192.51	164.02	143.26	127.35	103.88	86.89	86.75	62.07	311.73	15.18	2966.38
1598	84	62	303.309	17	3861	296.26	247.29	219.56	186.18	160.78	141.34	126.05	103.32	86.87	85.58	63.71	311.06	17.40	3394.28
1599	62	70	236.437	21	2958	337.02	285.76	258.96	225.93	199.26	177.79	160.32	133.64	113.97	58.71	72.99	230.77	21.28	3174.95
1600	83	68	312.419	21	3060	272.43	225.28	201.83	174.11	152.47	135.47	121.84	101.23	86.10	84.60	69.86	320.21	19.89	3189.74
1601	103	66	382.527	15	1697	320.79	231.82	192.30	155.14	132.14	116.28	104.17	85.86	72.21	99.79	67.65	371.41	15.38	2005.10
1602	74	69	280.378	21	1523	357.83	274.28	238.20	200.35	173.41	153.45	137.95	114.78	97.65	74.88	72.12	288.67	19.66	2033.00
1603	64	60	227.708	17	1956	434.73	348.22	303.23	252.71	216.38	189.50	168.68	137.83	115.44	61.62	61.47	217.25	16.25	2421.06
1604	67	60	238.382	21	2461	354.12	294.59	264.48	228.29	199.55	176.65	158.10	129.87	109.23	66.21	61.88	235.91	20.53	3009.19
1605	77	68	289.834	14	1916	395.70	299.21	251.19	203.34	173.05	152.21	136.47	112.90	95.34	78.81	70.77	300.17	13.31	2055.22
1606	76	69	287.956	19	1438	373.04	280.60	240.22	199.14	171.22	151.15	135.78	112.83	95.79	77.34	71.42	296.22	18.59	1670.00
1607	76	66	282.253	16	2989	342.13	278.34	243.27	203.21	174.41	153.24	136.98	112.98	95.46	77.58	68.02	290.25	16.08	2988.94
1608	72	68	271.014	18	2261	354.63	284.49	249.00	209.18	180.41	159.10	142.62	118.19	100.27	72.62	70.62	277.16	17.62	2640.43
1609	99	62	357.472	19	2801	267.40	214.06	187.79	158.20	136.44	120.04	107.21	88.07	74.12	97.17	64.41	355.47	18.33	2926.63
1610	84	64	307.674	21	1912	314.82	246.18	215.41	182.01	157.57	139.12	124.64	102.93	86.98	85.44	66.71	316.82	19.44	2485.14
1611	83	60	295.309	14	2582	368.19	288.29	245.44	199.87	169.41	147.86	131.47	107.18	89.50	84.96	62.50	305.56	13.67	2550.97
1612	72	66	267.397	20	3337	307.40	259.78	234.32	203.02	178.02	158.09	142.00	117.56	99.66	72.89	67.89	272.83	20.16	3294.01
1613	82	68	308.655	17	3461	298.27	245.74	216.90	183.15	158.16	139.41	124.87	103.35	87.65	83.68	69.49	315.90	17.28	3212.20
1614	71	61	254.499	20	1133	430.18	319.24	272.77	225.98	193.80	170.31	152.11	124.82	104.76	71.44	63.36	257.49	19.45	1156.45
1615	93	62	335.807	18	2683	291.05	232.44	202.96	169.97	146.09	128.31	114.50	93.98	79.02	93.00	64.32	339.75	17.63	2851.40
1616	82	69	310.689	21	1648	325.21	248.39	215.42	181.01	156.61	138.58	124.59	103.66	88.18	83.43	71.34	318.75	19.59	2162.96
1617	65	64	238.081	15	3833	382.77	321.68	284.68	239.91	206.35	181.05	161.42	132.48	111.58	63.12	65.62	231.47	15.67	3408.90
1618	90	68	338.767	18	2525	291.99	231.07	201.07	168.14	144.77	127.62	114.42	94.84	80.44	90.64	69.45	341.60	17.75	2694.63
1619	69	69	261.433	18	1646	395.01	305.79	263.71	219.13	188.34	166.10	149.08	123.79	105.09	68.74	72.00	265.53	17.69	1903.94
1620	79	63	287.316	14	1270	440.81	315.87	259.99	208.43	177.03	155.40	138.80	113.64	94.99	80.64	66.24	296.92	12.47	1605.31
1621	99	70	377.537	20	1692	287.16	213.01	182.09	151.21	130.26	115.17	103.58	86.26	73.37	97.08	70.76	368.19	19.02	2085.61
1622	98	67	366.429	15	2541	300.19	230.63	195.76	159.80	136.21	119.70	107.20	88.59	74.80	96.78	68.35	362.05	15.42	2531.80
1623	89	70	339.402	17	3980	267.80	221.60	196.02	165.89	143.48	126.65	113.59	94.27	80.18	89.85	70.69	341.20	17.43	3345.22
1624	103	67	385.124	21	1797	273.19	204.60	176.10	147.16	126.99	112.20	100.74	83.58	70.86	99.63	68.58	373.26	19.26	2326.20
1625	72	67	269.213	18	2579	345.14	281.31	247.93	209.46	181.03	159.65	143.01	118.30	100.24	72.64	69.40	274.74	17.81	2885.89
1626	97	62	350.250	14	1485	365.64	260.46	213.94	171.34	145.46	127.58	113.84	93.01	77.59	95.86	65.15	351.27	13.40	2008.01
1627	77	65	284.009	14	3837	346.01	283.37	246.55	204.33	174.43	152.77	136.27	112.05	94.43	78.90	66.96	292.98	14.29	3222.29
1628	84	65	309.828	14	2531	354.21	274.98	233.33	189.89	161.40	141.50	126.44	104.07	87.57	85.98	67.28	319.75	13.72	2532.28

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1629	101	66	375.099	19	3849	236.85	195.44	173.81	148.29	128.83	113.85	102.03	84.34	71.42	98.46	67.22	366.11	18.64	3318.73
1630	67	65	247.125	20	1253	424.80	321.57	276.90	230.79	198.65	175.11	156.89	129.65	109.54	65.91	68.13	247.14	19.21	1474.97
1631	71	61	254.499	18	3947	326.33	278.92	251.38	216.69	188.92	166.82	149.01	122.13	102.63	71.62	61.93	255.79	18.99	3506.02
1632	67	67	250.518	16	1896	417.01	326.53	280.58	231.40	197.88	173.95	155.75	128.76	108.87	66.16	69.90	251.57	15.63	2080.14
1633	91	62	328.585	16	3884	287.67	236.77	208.04	174.41	149.68	131.21	116.90	95.74	80.43	91.55	63.88	333.44	16.59	3269.99
1634	95	67	355.212	18	2590	280.34	221.27	192.32	160.65	138.22	121.77	109.10	90.29	76.47	94.42	68.42	353.52	17.77	2717.30
1635	65	62	234.704	16	870	536.64	379.96	314.35	253.68	215.83	189.42	169.11	138.40	115.66	63.12	64.19	227.43	15.41	236.98
1636	62	69	234.911	20	3699	329.28	284.16	258.96	226.85	200.42	178.88	161.23	134.14	114.18	58.92	71.04	227.67	21.34	3375.44
1637	88	65	324.581	19	1774	323.82	247.03	212.57	176.66	151.76	133.64	119.66	98.81	83.43	89.00	67.17	330.84	18.26	2182.41
1638	66	67	246.779	19	3089	342.18	288.09	258.62	222.66	194.44	172.29	154.60	127.99	108.56	64.55	69.36	244.76	19.31	3264.73
1639	73	68	274.778	17	882	464.34	321.83	265.61	215.05	183.88	162.29	145.75	120.65	101.80	73.83	70.44	280.56	17.72	261.87
1640	78	63	283.679	19	3828	293.16	248.62	223.91	193.27	168.85	149.44	133.80	110.15	92.90	79.81	64.53	291.65	19.29	3446.28
1641	74	60	263.287	19	2751	337.58	279.19	248.43	211.80	183.59	161.68	144.26	118.13	99.16	75.18	61.77	268.53	18.80	3051.68
1642	77	64	282.034	18	1766	368.49	285.27	245.94	204.10	175.01	153.85	137.55	113.30	95.48	78.54	66.38	290.24	17.59	2073.62
1643	103	63	374.602	16	1777	314.65	231.52	194.12	157.62	134.19	117.76	105.20	86.34	72.39	99.88	65.11	366.48	16.37	1997.15
1644	65	62	234.704	17	789	539.46	377.59	312.51	252.87	215.42	189.16	168.95	138.36	115.70	63.08	63.93	226.66	17.29	-157.34
1645	96	67	358.951	14	2474	316.87	240.91	202.68	164.21	139.68	122.74	109.94	90.80	76.58	95.46	68.68	357.74	14.29	2469.26
1646	99	60	352.236	17	3538	270.51	220.47	193.50	162.30	139.34	122.11	108.69	88.80	74.40	97.25	62.50	351.72	17.16	3170.66
1647	91	65	335.647	19	1364	341.11	248.46	210.16	172.84	148.09	130.42	116.84	96.45	81.32	91.44	66.94	339.17	18.73	1564.17
1648	84	64	307.674	20	2097	313.96	247.85	216.96	182.96	158.12	139.44	124.83	102.98	86.97	85.38	66.51	316.08	18.96	2576.21
1649	100	66	371.385	19	2692	261.80	207.48	181.30	152.39	131.50	115.95	103.87	85.89	72.70	97.78	67.60	364.36	18.27	2860.72
1650	94	62	339.417	14	1814	357.25	263.02	218.52	175.74	149.07	130.61	116.51	95.28	79.62	93.88	64.96	343.63	13.55	2150.09
1651	69	68	259.722	16	3930	341.67	287.74	255.86	217.13	187.78	165.49	148.11	122.42	103.77	68.85	69.93	261.72	16.79	3457.60
1652	65	63	236.400	18	2642	379.78	314.73	279.45	237.47	205.53	181.03	161.72	132.92	112.00	62.96	64.97	229.70	18.03	3031.40
1653	72	70	274.572	20	3851	289.71	247.47	224.41	195.59	172.28	153.54	138.33	115.17	98.15	73.12	71.48	281.01	20.40	3416.66
1654	91	61	326.189	21	1333	337.79	247.70	211.44	175.51	150.76	132.62	118.52	97.34	81.75	91.43	63.93	333.01	19.68	1693.67
1655	65	68	244.665	19	2527	361.85	298.75	265.78	226.90	197.30	174.57	156.64	129.86	110.28	62.92	70.99	241.97	18.81	2977.11
1656	99	63	360.055	18	772	397.81	255.34	206.39	166.14	141.87	124.90	111.71	91.55	76.49	97.33	64.70	355.79	19.46	326.24
1657	98	63	356.418	16	2818	291.28	229.42	197.58	163.05	139.20	122.01	108.87	89.38	75.13	96.72	64.99	354.83	16.34	2745.45
1658	96	67	358.951	19	2515	273.08	215.46	187.94	157.78	136.13	120.09	107.66	89.16	75.57	95.07	68.50	356.15	18.31	2755.68
1659	94	70	358.469	17	883	385.15	253.45	205.82	165.86	142.08	125.72	113.13	93.85	79.26	93.62	70.54	354.34	18.51	587.95
1660	64	66	237.687	18	2928	367.82	307.73	274.53	234.46	203.64	179.84	161.05	132.98	112.54	61.49	68.23	230.98	18.41	3161.70
1661	78	61	279.591	21	2743	305.88	253.07	226.67	195.26	170.53	150.94	135.14	111.16	93.62	79.72	63.43	289.09	20.04	3104.74
1662	97	65	357.777	19	862	378.31	249.43	203.98	165.25	141.38	124.68	111.77	92.10	77.38	95.89	66.52	354.48	19.84	529.62
1663	89	64	325.988	18	2563	300.48	239.47	208.94	174.95	150.48	132.35	118.30	97.42	82.16	89.82	66.08	331.62	17.67	2776.13
1664	98	68	368.880	19	1277	325.03	230.07	192.69	157.77	135.28	119.42	107.28	88.98	75.29	96.51	69.00	362.20	19.09	1389.04
1665	75	64	274.709	20	1235	396.36	294.48	251.79	208.86	179.43	158.04	141.50	116.73	98.43	76.25	66.69	282.47	19.22	1426.15
1666	95	60	338.004	18	3018	281.62	227.87	200.08	168.23	144.72	126.99	113.14	92.53	77.58	94.47	62.48	341.31	17.85	2992.50
1667	82	62	296.088	16	1284	407.93	296.16	247.12	200.14	170.26	149.34	133.30	109.16	91.33	83.77	64.33	304.73	15.84	1326.28
1668	65	61	232.992	14	3280	419.97	345.42	301.11	249.71	212.84	185.86	165.20	134.85	112.94	63.46	62.31	225.85	13.56	3132.86
1669	100	63	363.692	21	876	362.28	239.50	197.18	160.76	137.70	121.34	108.66	89.42	75.07	97.95	65.35	359.87	20.67	663.20

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1670	81	66	300.822	17	2297	336.78	265.86	230.16	191.24	164.00	144.21	129.05	106.56	90.05	82.74	68.05	309.34	16.87	2538.73
1671	82	70	312.707	16	977	420.54	288.95	236.99	191.30	163.78	144.89	130.41	108.29	91.56	82.58	72.03	316.59	16.65	804.86
1672	69	63	250.947	16	1119	477.31	347.95	290.77	235.73	200.67	176.15	157.38	129.14	108.23	68.96	65.35	251.94	15.45	898.06
1673	86	62	310.531	20	1758	328.28	252.68	218.94	183.13	157.63	138.71	123.97	101.94	85.78	87.31	64.63	319.35	18.86	2239.90
1674	83	68	312.419	21	2331	293.41	234.96	207.64	176.98	154.02	136.47	122.63	101.87	86.61	84.44	70.26	320.36	19.53	2822.42
1675	64	64	234.418	14	2136	457.49	359.67	306.87	250.55	212.95	186.47	166.41	136.71	114.91	62.00	66.78	229.59	12.61	2245.04
1676	98	65	361.466	15	3873	275.90	222.91	193.42	160.26	136.95	120.08	107.21	88.24	74.39	96.78	66.53	358.42	15.69	3168.25
1677	77	65	284.009	16	2110	370.28	289.38	248.42	204.65	174.81	153.46	137.18	113.03	95.28	78.72	67.26	292.73	15.80	2292.23
1678	71	63	258.221	18	866	480.27	337.30	280.61	228.18	194.78	171.25	153.15	125.79	105.48	71.51	65.00	260.54	18.63	155.64
1679	75	64	274.709	19	2003	354.03	280.85	245.47	206.29	177.86	156.63	140.11	115.48	97.46	76.17	66.52	281.86	18.36	2475.40
1680	84	64	307.674	21	3146	274.33	227.96	204.62	176.72	154.70	137.24	123.16	101.78	86.10	85.68	66.16	316.84	19.97	3227.75
1681	82	61	293.929	21	1607	342.91	263.35	228.75	192.09	165.68	145.89	130.38	107.13	90.09	83.56	63.97	304.06	19.50	2147.17
1682	100	63	363.692	20	730	392.88	248.93	201.51	162.90	139.34	122.77	109.90	90.25	75.56	98.00	64.98	358.98	21.04	85.81
1683	94	70	358.469	19	1575	310.67	228.98	194.57	160.60	138.00	121.92	109.62	91.24	77.52	93.67	70.94	355.88	18.52	1885.66
1684	103	66	382.527	19	2055	275.84	209.87	180.42	149.88	128.79	113.49	101.70	84.11	71.12	99.71	67.54	371.37	18.23	2438.33
1685	103	67	385.124	21	2802	239.90	191.52	169.02	143.88	125.10	110.77	99.47	82.51	70.05	99.64	68.49	373.21	19.13	3051.85
1686	84	63	305.501	19	2898	297.48	243.44	215.64	183.22	158.70	139.90	125.08	102.92	86.78	85.48	65.17	313.72	18.55	3064.55
1687	94	65	346.712	14	3385	304.28	241.02	206.35	168.92	143.71	125.91	112.44	92.53	77.91	94.13	66.82	349.14	14.48	2925.48
1688	68	63	247.310	21	2506	342.36	284.22	255.00	220.09	192.54	170.70	153.08	126.31	106.70	67.49	65.46	247.88	20.51	2995.36
1689	90	65	331.958	16	2304	322.08	249.58	213.51	175.47	149.80	131.52	117.59	96.90	81.65	90.85	66.87	336.94	16.16	2401.17
1690	96	70	366.096	21	2367	260.27	204.49	179.34	151.96	131.97	116.94	105.19	87.64	74.68	95.01	71.06	361.18	19.28	2769.86
1691	68	61	243.746	17	3404	360.99	303.96	271.03	230.73	199.58	175.48	156.41	127.98	107.45	67.39	62.18	240.33	17.53	3380.54
1692	62	67	231.822	16	3377	386.55	324.44	287.97	243.92	210.70	185.53	165.93	136.95	115.92	58.25	69.40	221.24	16.59	3306.93
1693	77	64	282.034	15	1808	398.66	303.41	256.51	208.74	177.59	155.75	139.16	114.38	96.10	78.78	66.41	290.81	14.67	1907.56
1694	97	61	347.696	21	3966	236.31	198.61	179.16	155.38	136.25	120.86	108.32	89.16	75.12	96.12	63.41	350.00	19.98	3392.42
1695	103	63	374.602	16	3079	274.58	217.26	187.47	154.93	132.33	115.99	103.48	84.95	71.42	99.90	65.05	366.79	16.33	2888.64
1696	77	60	273.961	14	3612	362.70	296.48	257.61	212.98	181.26	158.13	140.44	114.44	95.68	78.89	61.74	281.77	14.20	3103.80
1697	77	62	278.033	17	3362	327.16	271.73	240.67	203.62	175.64	154.33	137.63	112.81	94.84	78.53	63.71	284.80	17.32	3248.39
1698	95	67	355.212	17	2778	283.23	224.20	194.34	161.65	138.73	122.08	109.32	90.41	76.52	94.49	68.34	353.63	17.07	2790.02
1699	82	63	298.227	19	3165	296.14	245.29	218.46	186.54	161.98	142.95	127.85	105.20	88.71	83.65	64.98	306.63	18.70	3224.18
1700	63	60	224.150	14	3135	437.64	359.77	313.50	259.83	221.31	193.10	171.47	139.71	116.82	60.33	61.00	211.45	13.22	3119.58
1701	68	60	241.940	19	2089	385.83	312.47	275.44	232.88	201.01	176.72	157.59	129.02	108.27	67.35	61.92	239.66	18.37	2677.49
1702	70	68	263.486	16	3245	353.10	291.65	256.80	215.96	185.99	163.70	146.51	121.17	102.71	70.16	70.35	267.47	16.28	3159.08
1703	85	69	322.056	14	3753	313.61	252.95	218.47	180.14	153.79	135.06	120.92	100.14	84.87	86.86	70.43	329.75	14.56	3071.65
1704	62	68	233.373	19	2410	379.37	313.21	278.64	237.88	206.85	183.01	164.22	136.14	115.61	58.12	71.22	224.61	18.94	2903.63
1705	85	60	302.425	18	2584	318.28	256.24	224.48	188.40	161.94	142.07	126.57	103.51	86.78	86.45	62.30	311.17	17.68	2831.52
1706	68	68	255.958	20	971	446.61	322.21	272.65	224.99	193.37	170.78	153.43	127.37	107.94	67.23	71.29	258.25	19.94	633.65
1707	98	64	358.953	14	867	410.92	266.12	212.69	169.58	144.66	127.38	113.87	93.05	77.53	96.39	66.43	355.97	14.06	1472.21
1708	98	66	363.958	21	2443	259.90	205.33	180.44	153.03	132.79	117.44	105.38	87.29	73.99	96.41	67.90	359.89	19.40	2804.03
1709	73	69	276.589	18	2897	327.93	269.81	238.85	202.64	175.57	155.10	139.13	115.41	98.07	73.89	71.16	282.99	17.96	3074.01
1710	74	66	274.825	18	2268	351.37	281.58	246.31	206.75	178.13	156.89	140.45	116.03	98.15	75.06	68.37	281.59	17.71	2628.28

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1711	95	64	347.964	16	2049	320.32	242.98	206.08	168.42	143.56	126.00	112.61	92.62	77.87	94.62	65.96	348.86	16.22	2208.02
1712	96	69	363.734	14	2728	306.09	235.04	198.57	161.32	137.37	120.84	108.38	89.82	76.01	95.48	70.19	361.03	14.43	2591.44
1713	70	70	266.945	18	1089	435.59	315.95	265.89	217.77	186.67	164.86	148.24	123.29	104.61	70.04	72.90	271.97	18.18	823.40
1714	82	60	291.751	17	2393	343.19	273.42	237.54	197.60	169.08	148.05	131.79	107.69	90.19	83.78	62.20	301.01	16.67	2667.43
1715	92	64	336.976	18	2133	307.53	238.42	205.67	170.75	146.43	128.73	115.09	94.80	79.89	92.25	66.08	340.54	17.66	2417.17
1716	73	60	259.729	15	2805	385.41	311.80	270.61	223.97	190.89	166.74	148.21	120.89	101.12	74.26	61.66	264.50	14.69	2853.85
1717	88	61	315.436	20	2906	282.99	231.77	206.02	175.88	152.73	134.75	120.43	98.90	83.20	89.05	63.49	323.65	19.04	3126.79
1718	81	65	298.762	20	3725	275.41	232.73	209.91	181.82	159.37	141.46	126.98	104.98	88.87	82.86	66.62	307.21	19.96	3352.44
1719	85	69	322.056	17	2857	302.20	242.72	211.75	177.08	152.36	134.26	120.37	99.83	84.76	86.46	70.45	328.20	17.01	2896.11
1720	103	64	377.266	16	1701	316.25	230.88	193.05	156.60	133.39	117.18	104.80	86.15	72.32	99.86	65.83	367.93	16.42	1950.37
1721	97	67	362.690	16	3283	275.97	220.67	191.36	158.88	136.13	119.65	107.07	88.49	74.86	96.01	68.21	359.02	16.40	2978.37
1722	81	64	296.685	16	744	473.65	312.25	252.72	202.72	172.94	152.27	136.23	111.68	93.34	82.68	65.99	303.85	16.89	190.85
1723	75	61	268.837	19	944	446.78	317.53	266.18	217.63	185.88	163.22	145.73	119.40	99.96	76.38	63.12	274.89	19.11	544.50
1724	91	67	340.255	17	3198	282.62	228.53	199.96	167.56	144.18	126.92	113.61	93.93	79.53	91.49	68.44	342.77	17.02	3070.46
1725	86	69	325.845	18	2721	294.59	236.32	206.85	173.81	149.96	132.32	118.70	98.51	83.69	87.26	70.46	331.19	17.73	2878.15
1726	87	62	314.142	15	3727	311.28	254.22	221.68	184.29	157.46	137.78	122.67	100.41	84.28	88.42	63.96	322.05	15.39	3226.12
1727	84	66	311.964	18	2985	298.23	243.06	214.21	180.92	156.29	137.76	123.31	101.85	86.18	85.47	67.86	319.20	17.82	3042.61
1728	63	65	232.371	17	985	508.85	370.05	310.35	252.83	215.82	189.85	169.98	140.09	117.88	59.94	67.77	223.58	16.80	489.80
1729	101	66	375.099	19	3210	248.14	200.66	176.86	149.70	129.56	114.33	102.43	84.68	71.70	98.43	67.40	366.33	18.48	3082.07
1730	103	70	392.791	20	1578	285.37	207.86	176.50	146.00	125.64	111.09	99.94	83.23	70.75	99.66	70.47	377.19	19.05	1989.79
1731	79	64	289.360	14	3404	350.41	283.10	244.64	201.58	171.70	150.27	133.99	110.03	92.55	81.14	65.98	299.19	14.15	2984.49
1732	84	69	318.267	19	3297	277.70	229.32	204.05	174.25	151.58	134.19	120.49	100.02	85.06	85.41	70.37	324.03	18.81	3185.06
1733	65	68	244.665	21	2175	357.06	292.05	260.42	223.68	195.42	173.44	155.93	129.54	110.16	62.91	71.46	242.97	20.30	2772.58
1734	92	68	346.295	21	1734	357.06	292.05	260.42	223.68	195.42	173.44	155.93	129.54	110.16	62.91	71.46	242.97	20.30	2772.58
1735	75	65	276.632	16	2510	362.40	289.94	251.46	208.70	178.65	156.82	140.11	115.41	97.35	76.43	67.23	284.23	15.93	2639.17
1736	69	61	247.330	15	889	526.36	368.47	302.37	242.61	206.08	180.69	161.12	131.41	109.47	68.77	63.44	246.51	13.87	540.41
1737	90	69	341.000	16	1667	340.83	251.57	211.24	171.92	146.85	129.45	116.24	96.42	81.59	90.77	70.32	343.67	16.21	1857.76
1738	74	70	282.199	20	1740	350.13	272.48	237.25	199.48	172.53	152.61	137.19	114.22	97.25	74.95	72.78	290.25	19.04	2228.54
1739	82	67	306.604	14	2328	362.98	279.25	236.08	191.79	163.16	143.31	128.32	105.98	89.42	83.99	69.29	316.38	13.82	2333.93
1740	75	64	274.709	15	2958	363.04	293.50	254.73	211.04	180.28	157.95	140.90	115.77	97.45	76.58	66.07	282.39	15.07	2841.99
1741	78	69	295.533	19	1717	348.35	267.91	231.32	192.84	166.08	146.62	131.67	109.40	92.93	79.47	71.29	303.87	18.50	2065.50
1742	75	68	282.306	16	3086	338.80	276.48	242.03	202.51	174.05	153.13	137.07	113.41	96.11	76.45	70.06	290.30	16.11	3028.34
1743	80	60	284.635	20	2637	313.38	256.83	228.34	194.93	169.21	149.20	133.25	109.24	91.77	81.69	62.33	293.92	19.20	3030.79
1744	70	61	250.915	20	1265	420.49	318.20	273.88	227.97	195.80	172.11	153.70	126.15	105.94	70.10	63.46	252.84	19.23	1483.22
1745	91	64	333.313	15	2888	314.42	248.22	213.10	175.12	149.24	130.77	116.73	95.95	80.72	91.76	65.95	338.44	15.33	2733.63
1746	90	64	329.650	20	3257	265.24	218.88	195.27	167.34	145.75	128.92	115.51	95.31	80.55	90.65	65.97	334.63	19.34	3181.53
1747	79	69	299.322	21	2282	304.15	244.20	216.06	184.36	160.56	142.37	128.02	106.49	90.66	80.47	71.38	307.89	19.65	2806.00
1748	76	70	289.826	14	1980	391.86	297.40	250.06	202.67	172.65	152.05	136.53	113.34	96.01	77.80	72.71	300.59	13.31	2100.68
1749	95	60	338.004	14	3898	302.69	244.15	210.75	173.32	147.25	128.45	114.12	93.02	77.75	94.83	62.42	342.37	14.66	3113.62
1750	68	68	255.958	15	2703	389.58	314.15	272.39	225.70	193.11	169.66	151.84	125.60	106.36	67.69	70.78	259.24	14.78	2748.37
1751	84	62	303.309	17	3435	304.63	251.37	221.94	187.23	161.29	141.65	126.31	103.54	87.04	85.55	63.87	311.17	17.30	3195.90

SI No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1752	86	67	321.560	15	3448	309.39	249.92	216.86	179.76	153.77	135.01	120.73	99.70	84.31	87.58	68.60	328.56	15.44	3036.79
1753	77	70	293.640	16	983	437.56	303.83	249.88	201.67	172.44	152.39	137.06	113.76	96.18	78.47	72.26	301.79	16.24	750.00
1754	84	66	311.964	19	1043	389.23	273.89	228.90	187.15	160.28	141.31	126.74	104.77	88.36	85.61	67.91	319.52	19.06	911.66
1755	73	64	267.383	19	1483	391.84	299.60	258.01	214.49	184.20	162.09	145.02	119.55	100.80	73.92	66.60	273.63	18.31	1818.16
1756	65	70	247.878	21	3067	322.39	273.06	247.32	215.68	190.15	169.64	152.96	127.50	108.73	63.53	72.63	247.98	20.90	3284.41
1757	76	62	274.423	17	2748	346.82	282.53	247.95	208.08	178.82	156.94	139.93	114.73	96.43	77.51	64.00	281.68	16.74	2987.46
1758	62	68	233.373	16	2505	411.59	335.24	293.20	245.15	210.63	185.30	165.88	137.24	116.31	58.28	71.25	225.22	15.79	2775.49
1759	98	63	356.418	20	3410	247.59	203.61	181.35	155.16	134.98	119.28	106.78	87.97	74.23	96.55	65.15	354.90	19.05	3255.81
1760	63	63	229.126	16	897	541.11	386.47	320.69	259.19	220.65	193.78	173.17	142.03	118.93	59.99	65.40	218.43	15.38	258.73
1761	83	68	312.419	18	3344	289.06	238.40	211.26	179.38	155.43	137.25	123.04	101.91	86.49	84.56	69.51	319.24	17.96	3237.08
1762	93	67	347.734	19	2973	267.49	216.26	190.60	161.35	139.70	123.36	110.59	91.56	77.63	92.88	68.49	347.96	18.47	3009.73
1763	79	66	293.394	15	1951	379.07	289.75	245.42	200.03	170.39	149.65	133.93	110.48	93.13	80.90	68.31	302.78	14.87	2038.67
1764	79	66	293.394	19	1840	344.57	267.95	232.33	194.15	167.16	147.32	131.99	109.16	92.35	80.61	68.40	302.28	18.27	2272.62
1765	87	66	323.105	16	3664	294.14	241.00	211.35	177.05	152.13	133.69	119.49	98.54	83.27	88.28	67.55	329.00	16.46	3210.35
1766	73	69	276.589	15	3148	354.06	287.71	250.39	208.12	178.32	156.76	140.37	116.27	98.61	74.24	71.20	284.43	15.19	2956.18
1767	68	65	250.813	16	1008	489.85	351.18	291.82	236.13	201.27	177.04	158.50	130.50	109.64	67.51	67.68	251.35	15.67	608.15
1768	95	61	340.527	19	2080	300.37	232.88	201.60	168.08	144.29	126.72	113.08	92.74	77.86	94.47	63.64	343.81	18.14	2506.00
1769	87	70	331.775	20	2568	279.72	224.27	197.66	167.79	145.70	129.02	115.98	96.53	82.23	88.06	71.43	336.19	18.88	2918.28
1770	100	60	355.794	16	1095	373.50	256.22	209.80	168.58	143.27	125.58	111.89	91.11	75.79	97.91	62.73	353.67	16.36	1283.85
1771	65	63	236.400	18	2986	368.58	309.17	276.10	235.91	204.77	180.57	161.37	132.63	111.77	62.98	64.70	229.21	18.46	3195.87
1772	74	63	269.132	18	1244	419.79	311.09	263.72	216.49	185.03	162.56	145.30	119.45	100.37	75.19	65.27	275.20	17.83	1232.00
1773	79	63	287.316	21	991	404.53	287.70	242.95	200.51	172.13	151.62	135.75	111.85	94.13	80.68	65.66	296.58	20.39	847.65
1774	91	64	333.313	20	3559	257.08	213.91	191.54	164.72	143.74	127.26	114.06	94.12	79.55	91.49	65.86	337.58	19.37	3308.97
1775	78	67	291.648	20	1842	337.42	263.58	229.80	193.30	167.06	147.54	132.36	109.71	93.04	79.42	69.63	300.38	18.99	2334.71
1776	63	61	225.823	21	2159	381.35	314.61	281.44	242.16	211.35	187.01	167.41	137.69	115.96	59.97	63.16	215.29	20.46	2841.21
1777	95	62	343.028	20	2477	277.62	220.84	193.90	163.83	141.60	124.75	111.52	91.70	77.23	94.38	64.55	345.43	18.93	2813.02
1778	99	66	367.671	15	2585	298.55	229.81	195.20	159.37	135.78	119.23	106.69	88.01	74.20	97.45	67.50	362.74	15.48	2547.60
1779	77	63	280.043	19	3423	304.36	255.71	229.27	197.01	171.66	151.74	135.78	111.75	94.25	78.60	64.79	287.62	19.00	3353.91
1780	100	64	366.278	21	1167	325.61	228.07	191.57	157.71	135.37	119.34	106.94	88.24	74.34	97.85	66.27	361.67	19.90	1403.31
1781	90	64	329.650	19	3230	273.17	224.33	199.04	169.39	146.89	129.61	115.98	95.58	80.71	90.61	65.90	334.23	18.68	3144.22
1782	63	65	232.371	18	2607	385.29	319.38	283.65	241.20	208.96	184.28	164.87	135.93	114.88	59.70	67.49	222.73	18.12	3016.84
1783	62	64	227.092	19	2430	387.76	321.43	286.41	244.70	212.62	187.77	168.05	138.50	116.96	58.16	66.38	214.93	18.95	2953.47
1784	100	67	373.907	21	2326	258.34	201.97	176.75	149.45	129.55	114.59	102.88	85.34	72.43	97.71	68.66	366.31	19.24	2754.47
1785	91	65	335.647	18	3152	278.75	226.74	199.63	168.44	145.40	128.06	114.55	94.47	79.82	91.42	66.76	339.00	17.86	3077.88
1786	96	70	366.096	20	2640	258.42	205.35	180.32	152.60	132.34	117.14	105.30	87.65	74.65	95.02	70.83	360.67	18.92	2861.85
1787	66	62	238.314	20	1139	449.38	337.23	289.37	240.45	206.49	181.62	162.34	133.47	112.23	64.54	64.54	234.46	19.32	1211.62
1788	85	64	311.336	20	2648	292.17	237.07	209.93	178.72	155.13	137.02	122.70	101.23	85.53	86.36	66.32	319.44	19.02	2980.42
1789	77	65	284.009	16	1410	409.33	303.09	254.74	207.22	176.63	155.24	138.92	114.44	96.28	78.67	67.37	292.46	15.71	1490.38
1790	102	69	386.467	15	2858	279.74	216.55	184.41	150.89	128.77	113.30	101.60	84.24	71.36	99.37	69.67	374.53	15.54	2702.44
1791	94	66	349.102	21	2074	280.64	218.02	190.31	160.57	139.02	122.86	110.22	91.30	77.37	93.60	68.17	350.08	19.27	2587.71
1792	66	63	240.036	20	2262	369.10	303.03	269.70	230.59	200.53	177.19	158.61	130.66	110.26	64.42	65.48	236.30	19.57	2830.02

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1793	102	62	368.304	14	1990	328.39	242.14	201.28	161.91	137.33	120.32	107.33	87.78	73.35	99.29	64.92	363.74	13.87	2324.02
1794	82	68	308.655	14	901	452.44	302.88	244.24	195.16	166.72	147.26	132.18	109.00	91.55	83.40	70.91	317.29	12.91	1319.15
1795	68	60	241.940	20	2709	350.87	293.41	263.25	226.64	197.67	174.70	156.17	128.10	107.64	67.63	61.48	240.21	19.90	3101.31
1796	78	68	293.598	16	3017	330.51	267.96	233.85	195.18	167.58	147.42	131.98	109.21	92.55	79.72	69.94	302.19	16.08	2996.94
1797	97	70	369.910	20	1415	307.68	222.21	188.11	155.33	133.63	118.16	106.31	88.53	75.24	95.74	70.81	363.21	19.33	1700.95
1798	94	65	346.712	18	745	412.09	264.47	213.79	172.21	147.25	129.86	116.38	95.73	80.25	93.78	66.33	346.01	19.75	122.48
1799	89	64	325.988	15	2459	331.97	257.84	219.80	179.77	153.05	134.16	119.81	98.48	82.81	90.14	66.07	332.55	15.16	2481.77
1800	89	68	335.003	14	1888	355.09	262.96	219.01	176.62	150.35	132.36	118.73	98.20	82.85	90.04	70.07	340.37	13.76	2124.16
1801	78	62	281.644	20	1278	386.17	287.43	245.88	203.91	175.01	153.92	137.58	113.11	95.09	79.61	64.61	290.56	19.15	1515.20
1802	63	61	225.823	14	2292	465.37	370.36	317.69	260.12	220.86	192.86	171.57	140.14	117.28	60.37	62.83	215.11	12.72	2370.46
1803	102	60	362.909	19	1205	337.07	237.18	198.13	161.65	137.94	121.03	107.96	88.27	73.75	99.24	62.67	358.94	18.95	1311.81
1804	90	67	336.516	19	965	378.69	258.70	214.07	174.29	149.30	131.78	118.32	97.92	82.62	90.67	68.46	339.23	19.59	685.20
1805	69	61	247.330	20	3411	325.20	277.43	251.29	218.46	191.72	170.06	152.37	125.30	105.49	69.22	62.23	247.83	20.68	3299.16
1806	66	60	234.824	16	851	540.76	381.61	315.31	254.14	215.91	189.15	168.53	137.36	114.40	64.63	61.74	227.62	15.39	205.01
1807	92	62	332.196	19	3354	269.47	222.04	197.27	168.03	145.67	128.41	114.74	94.26	79.36	92.22	64.18	336.79	18.51	3255.56
1808	98	66	363.958	16	2936	282.97	223.31	192.52	159.11	136.08	119.54	106.92	88.24	74.51	96.69	67.45	359.93	16.31	2814.47
1809	103	70	392.791	18	3523	239.77	193.92	170.35	143.59	124.09	109.58	98.36	81.73	69.54	99.71	70.15	376.71	17.83	3165.58
1810	87	69	329.633	17	2685	301.51	239.77	208.27	173.58	149.17	131.43	117.85	97.77	82.99	88.25	70.39	334.72	16.92	2790.13
1811	89	61	319.020	14	2713	342.54	267.32	227.28	184.98	156.88	137.05	121.99	99.65	83.34	90.24	63.56	327.52	13.98	2602.28
1812	72	62	259.979	17	2360	374.93	302.16	263.88	220.54	189.22	165.99	148.01	121.37	101.99	72.79	64.05	264.14	16.67	2689.70
1813	98	63	356.418	18	2980	270.81	217.43	190.30	159.71	137.44	120.83	107.91	88.71	74.72	96.52	65.15	354.62	17.61	3019.12
1814	66	62	238.314	21	2544	350.64	292.71	263.25	227.69	199.38	176.79	158.48	130.60	110.17	64.75	64.16	235.23	20.66	3038.04
1815	85	68	319.947	18	1368	359.26	262.72	221.71	181.78	155.71	137.32	123.27	102.20	86.49	86.40	69.76	326.30	17.99	1492.92
1816	77	65	284.009	21	2653	304.24	250.31	223.72	192.48	168.17	149.11	133.83	110.73	93.78	78.59	67.46	293.18	19.84	3087.49
1817	69	61	247.330	17	3129	364.18	303.82	269.66	228.54	197.24	173.25	154.39	126.33	106.05	68.81	62.31	245.79	17.41	3190.73
1818	62	65	228.682	19	1842	413.88	332.33	291.99	246.46	212.97	187.76	168.09	138.75	117.30	57.98	68.07	217.43	18.71	2331.14
1819	101	70	385.164	16	2594	278.13	214.51	183.20	150.56	128.81	113.48	101.88	84.65	71.85	98.65	70.31	373.08	16.51	2563.14
1820	96	61	344.112	17	1792	326.37	245.05	207.86	170.16	145.03	127.08	113.32	92.75	77.66	95.31	63.40	345.99	17.08	2007.29
1821	91	69	344.789	17	2949	284.81	227.79	198.36	165.64	142.44	125.51	112.53	93.34	79.25	91.50	70.11	346.24	17.00	2925.21
1822	94	66	349.102	15	847	413.17	269.15	216.30	173.03	147.80	130.38	116.84	96.00	80.36	93.62	67.69	348.34	15.82	974.61
1823	97	68	365.116	17	1379	333.44	237.78	198.10	161.01	137.65	121.40	109.00	90.28	76.26	95.90	69.01	359.91	17.44	1544.12
1824	90	68	338.767	21	2927	259.88	211.86	188.64	161.83	141.29	125.36	112.69	93.62	79.61	90.62	69.62	342.09	19.50	3134.14
1825	77	66	285.967	15	2830	354.70	284.11	245.55	202.87	173.29	152.05	135.89	112.06	94.60	78.84	68.15	295.19	14.96	2777.27
1826	82	61	293.929	17	1775	367.62	281.78	240.93	198.21	169.11	148.16	132.08	108.13	90.59	83.85	63.18	303.15	16.71	2031.13
1827	72	69	272.800	19	2391	338.13	274.11	241.89	205.07	177.76	157.16	141.09	117.15	99.61	72.55	71.55	278.78	18.60	2805.19
1828	81	69	306.900	17	1106	401.62	284.05	236.00	191.63	163.91	144.70	130.03	107.87	91.22	82.72	70.81	314.71	17.29	989.25
1829	73	69	276.589	15	960	471.03	327.11	267.86	215.31	183.87	162.37	145.90	120.78	101.86	73.80	72.02	283.78	14.53	795.81
1830	81	62	292.477	14	3885	338.41	276.78	240.60	199.11	169.67	148.26	131.92	107.90	90.51	83.07	63.85	301.85	14.43	3201.41
1831	98	60	348.678	17	2169	307.84	236.93	202.89	167.03	142.46	124.70	111.06	90.75	75.92	96.68	62.59	349.47	17.01	2374.66
1832	72	67	269.213	14	915	499.48	343.22	278.85	223.05	190.23	167.78	150.47	123.96	104.07	72.46	70.74	276.10	12.11	1104.13
1833	72	62	259.979	18	2931	344.90	286.10	254.12	215.97	186.88	164.50	146.85	120.50	101.38	72.69	63.74	263.25	18.16	3095.73

SI No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1834	80	68	301.127	16	3767	307.85	254.66	224.40	188.84	162.68	143.20	128.16	105.99	89.84	81.76	69.57	308.98	16.47	3306.20
1835	77	65	284.009	19	824	447.78	306.76	254.05	206.81	176.96	155.96	139.79	115.29	97.00	78.53	67.12	291.20	19.79	127.57
1836	91	70	347.029	14	1375	371.82	261.57	214.06	171.64	146.49	129.42	116.37	96.46	81.44	91.36	71.88	348.98	13.51	1886.59
1837	96	62	346.639	16	3897	275.89	225.92	198.02	165.66	142.05	124.49	110.91	90.85	76.31	95.27	64.02	347.55	16.53	3252.55
1838	78	70	297.453	16	1919	363.97	279.16	237.87	195.22	166.97	147.12	132.10	109.76	93.15	79.82	72.00	306.72	15.91	2094.27
1839	98	67	366.429	18	2262	283.86	219.24	188.87	156.77	134.59	118.56	106.25	87.96	74.45	96.55	68.38	361.42	17.56	2552.18
1840	80	60	284.635	14	861	490.31	331.11	267.56	213.27	181.08	158.70	141.28	114.70	95.13	81.50	63.37	293.69	12.05	1251.38
1841	93	69	352.367	14	1502	360.16	256.27	210.50	168.92	144.04	127.10	114.18	94.51	79.72	92.94	70.84	352.59	13.81	1915.34
1842	79	64	289.360	21	2417	308.06	250.22	222.39	190.34	165.79	146.74	131.55	108.66	91.89	80.59	66.67	298.91	19.63	2948.36
1843	75	67	280.430	19	1955	350.01	275.98	240.67	202.01	174.27	153.74	137.83	114.15	96.74	76.19	69.53	288.20	18.36	2401.81
1844	100	70	381.350	17	2780	267.64	209.94	181.31	150.49	129.21	113.90	102.24	84.97	72.20	97.92	70.35	370.47	17.20	2743.05
1845	64	64	234.418	20	3775	329.36	284.81	259.74	227.56	200.85	178.92	160.85	132.98	112.46	62.22	65.19	228.20	21.44	3386.79
1846	82	62	296.088	20	2417	329.36	284.81	259.74	227.56	200.85	178.92	160.85	132.98	112.46	62.22	65.19	228.20	21.44	3386.79
1847	97	64	355.290	21	2030	279.37	215.88	188.01	158.30	136.84	120.76	108.19	89.34	75.47	95.74	66.44	354.39	19.36	2533.42
1848	96	64	351.627	17	3379	272.85	221.24	193.78	162.42	139.63	122.68	109.57	90.15	75.99	95.20	65.79	350.97	17.21	3089.72
1849	95	62	343.028	16	2660	304.39	239.22	205.80	169.67	144.74	126.77	113.02	92.62	77.72	94.64	64.21	345.46	16.15	2702.94
1850	64	70	244.064	19	3515	333.32	284.26	256.83	222.64	195.33	173.64	156.20	129.86	110.58	61.77	72.26	240.39	19.81	3406.54
1851	94	66	349.102	16	1561	341.79	249.10	208.19	168.93	144.07	126.77	113.57	93.71	78.90	93.83	67.68	349.42	16.29	1743.18
1852	101	65	372.531	19	999	350.36	236.25	194.63	158.11	135.27	119.25	106.89	88.13	74.10	98.56	66.51	364.55	19.38	941.51
1853	76	66	282.253	14	1300	442.86	319.00	263.07	211.23	179.73	158.15	141.67	116.68	98.02	77.49	69.22	291.73	12.56	1566.00
1854	79	65	291.386	17	1913	361.53	280.05	240.54	198.69	170.03	149.42	133.64	110.19	92.93	80.75	67.23	300.23	16.75	2167.39
1855	90	67	336.516	21	3019	259.17	212.23	189.32	162.65	142.08	126.05	113.26	93.96	79.80	90.64	68.74	340.34	19.63	3153.45
1856	83	68	312.419	14	3732	321.93	260.35	225.15	185.79	158.59	139.18	124.50	102.93	87.11	85.01	69.65	321.24	14.55	3055.22
1857	80	66	297.108	15	3415	330.01	268.54	233.82	194.32	166.30	145.92	130.36	107.45	90.74	81.89	67.90	305.95	15.35	3074.67
1858	85	66	315.678	15	3331	316.66	255.40	221.44	183.40	156.78	137.56	122.92	101.35	85.57	86.74	67.73	323.66	15.35	2991.87
1859	75	69	284.167	17	2071	359.57	282.09	243.62	202.18	173.52	152.87	137.12	113.78	96.55	76.37	71.31	292.48	16.81	2330.69
1860	67	64	245.406	21	1134	431.08	322.48	277.39	231.55	199.52	175.94	157.62	130.14	109.86	65.82	67.27	244.94	20.11	1268.72
1861	75	70	286.013	19	2959	308.82	254.97	226.85	193.75	168.59	149.32	134.15	111.52	94.96	76.21	72.04	293.45	18.63	3173.40
1862	84	67	314.082	18	1109	387.35	274.30	228.89	186.59	159.65	140.78	126.33	104.53	88.22	85.60	68.74	321.14	18.24	1025.61
1863	72	67	269.213	20	2980	314.57	262.68	235.64	203.09	177.59	157.55	141.50	117.28	99.54	72.77	69.19	275.00	19.76	3168.46
1864	83	68	312.419	19	3758	272.73	228.71	204.95	176.16	153.73	136.23	122.30	101.38	86.11	84.57	69.31	318.82	19.08	3353.22
1865	82	68	308.655	18	2063	329.68	257.30	222.60	185.36	159.36	140.46	125.96	104.42	88.54	83.60	69.98	316.55	17.67	2381.45
1866	100	69	378.889	21	3909	221.37	184.07	165.33	142.98	125.41	111.55	100.41	83.55	71.15	97.98	69.53	369.27	19.58	3401.52
1867	95	66	352.816	21	1167	333.26	235.02	197.91	163.22	140.29	123.84	111.15	92.04	77.79	94.40	67.99	352.43	20.02	1345.28
1868	81	61	290.344	15	1960	383.82	294.18	249.36	203.05	172.45	150.84	134.36	109.83	91.86	83.02	63.36	300.27	14.50	2142.59
1869	78	62	281.644	17	3830	314.10	263.82	234.96	199.84	172.84	152.02	135.60	111.14	93.45	79.64	63.53	288.59	17.57	3426.50
1870	101	70	385.164	17	1725	300.89	220.47	185.44	151.46	129.64	114.42	102.85	85.49	72.50	98.52	70.37	372.61	17.31	1959.22
1871	91	67	340.255	14	3533	305.16	243.25	208.90	171.45	146.09	128.15	114.61	94.63	79.94	91.88	68.47	344.22	14.68	2923.04
1872	87	63	316.412	16	1582	367.51	272.51	229.13	186.32	158.63	139.18	124.33	102.05	85.59	88.40	65.13	323.87	16.02	1746.74
1873	103	65	379.908	17	3966	247.28	202.29	177.91	149.68	128.92	113.39	101.34	83.50	70.51	99.77	66.47	369.46	17.17	3326.68
1874	96	68	361.352	15	3241	286.43	226.87	195.11	160.67	137.24	120.60	107.99	89.37	75.64	95.43	69.07	358.63	15.60	2866.96

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1875	102	61	365.619	17	813	393.53	254.19	205.17	164.64	140.28	123.23	109.94	89.64	74.58	99.21	63.18	359.40	18.37	583.23
1876	70	61	250.915	15	3717	371.18	309.67	272.94	228.99	196.32	171.81	152.80	124.78	104.60	70.28	62.26	251.07	15.41	3354.70
1877	86	64	314.999	17	2873	308.47	248.68	217.25	181.70	156.06	137.10	122.45	100.75	84.93	87.36	65.99	322.30	16.97	2926.13
1878	81	62	292.477	21	2986	289.11	240.22	215.58	186.09	162.76	144.23	129.26	106.50	89.83	82.83	64.33	302.53	20.04	3199.30
1879	65	64	238.081	17	3063	375.76	313.94	278.90	236.73	204.67	180.16	160.93	132.34	111.60	63.05	65.81	231.74	17.37	3211.27
1880	92	64	336.976	16	3006	299.02	238.81	206.93	171.59	146.78	128.75	114.94	94.52	79.60	92.39	65.92	340.79	16.21	2885.18
1881	62	68	233.373	18	1020	489.47	359.20	303.52	249.02	213.33	188.12	168.87	140.01	118.50	58.14	71.61	225.07	18.07	570.87
1882	86	60	305.982	17	1964	348.00	268.95	230.69	190.13	162.21	141.99	126.44	103.32	86.45	87.48	62.39	314.93	16.69	2248.10
1883	63	64	230.755	19	1576	428.90	337.40	293.89	246.32	212.14	186.78	167.07	137.72	116.20	59.81	66.90	222.07	18.19	2059.83
1884	83	67	310.343	16	3893	298.84	247.30	217.95	183.40	157.94	138.94	124.26	102.61	86.85	84.73	68.44	317.69	16.56	3314.96
1885	96	64	351.627	18	3474	262.99	215.13	189.88	160.53	138.64	122.07	109.11	89.83	75.80	95.15	65.82	350.96	17.81	3227.98
1886	88	70	335.588	21	724	406.99	261.87	213.71	173.94	149.50	132.43	119.30	99.30	84.17	88.96	71.47	339.21	21.51	7.56
1887	67	60	238.382	15	2358	428.39	343.36	296.71	244.73	208.35	181.97	161.78	131.97	110.37	66.30	61.53	234.47	14.38	2521.16
1888	73	65	269.255	18	2864	336.90	277.74	246.04	208.72	180.61	159.21	142.43	117.44	99.24	73.86	67.10	274.55	18.01	3064.62
1889	94	66	349.102	19	1467	324.42	237.58	201.36	165.82	142.18	125.30	112.33	92.90	78.46	93.72	67.74	349.42	18.57	1741.40
1890	90	64	329.650	18	3640	272.91	225.87	200.45	170.28	147.41	129.90	116.13	95.60	80.67	90.65	65.72	333.98	18.14	3252.54
1891	63	66	233.973	20	1672	406.81	323.06	283.53	239.68	207.50	183.26	164.30	135.97	115.17	59.70	69.46	226.91	19.24	2229.32
1892	96	64	351.627	19	1854	302.22	229.38	196.98	163.44	140.28	123.44	110.45	91.04	76.75	95.14	66.09	351.30	18.38	2220.78
1893	78	66	289.681	20	3873	278.84	237.18	214.60	186.51	163.86	145.66	130.89	108.40	91.89	79.95	67.47	298.29	20.13	3402.51
1894	74	67	276.691	19	3447	305.55	257.13	230.78	198.65	173.45	153.68	137.90	114.16	96.83	75.15	68.83	282.97	19.21	3335.21
1895	63	65	232.371	19	3579	345.88	296.80	268.90	233.61	204.99	181.98	163.30	134.88	114.10	60.23	66.49	223.09	20.18	3435.38
1896	103	61	369.203	20	1840	286.74	216.60	186.31	155.01	133.12	117.01	104.49	85.76	72.02	99.73	63.87	363.72	18.85	2274.05
1897	93	60	330.888	15	3691	300.32	243.77	211.91	175.61	149.74	130.80	116.26	94.82	79.32	93.23	62.26	336.15	15.56	3125.14
1898	71	61	254.499	15	3138	381.32	312.64	273.13	227.35	194.27	169.87	151.10	123.45	103.46	71.71	62.57	257.01	14.98	3051.19
1899	96	68	361.352	14	2023	329.71	243.95	203.10	163.77	139.41	122.74	110.10	91.06	76.83	95.33	69.72	359.34	13.93	2305.50
1900	91	64	333.313	17	2745	298.92	238.17	206.99	172.41	147.86	129.86	116.00	95.46	80.44	91.52	65.97	337.67	16.96	2816.35
1901	99	68	372.644	14	3135	291.55	226.98	192.88	157.21	133.85	117.59	105.34	87.15	73.67	97.55	69.10	366.48	14.76	2737.56
1902	83	63	301.864	17	762	456.85	302.81	246.37	198.26	169.10	148.77	133.02	108.98	91.07	84.68	64.78	308.76	18.23	94.48
1903	68	69	257.645	14	2696	401.36	320.10	274.99	225.84	192.61	169.19	151.55	125.54	106.37	67.90	72.00	262.50	13.61	2600.79
1904	79	60	281.077	15	1360	430.03	315.18	262.62	211.87	179.71	157.23	140.01	114.13	95.12	80.86	62.55	290.02	14.11	1517.35
1905	93	66	345.388	15	882	411.53	270.76	218.19	174.62	149.11	131.52	117.86	96.87	81.12	92.88	67.84	345.90	15.53	1059.75
1906	68	67	254.257	15	2533	397.87	318.88	275.69	227.88	194.76	171.00	152.95	126.33	106.81	67.67	69.76	257.00	14.71	2611.49
1907	94	64	344.301	14	3382	306.36	242.86	207.99	170.25	144.78	126.74	113.08	92.89	78.10	94.13	65.98	347.27	14.57	2878.17
1908	69	64	252.732	17	1500	428.18	327.29	279.61	230.10	196.63	172.68	154.36	127.05	106.94	68.91	66.41	254.36	16.67	1621.75
1909	72	69	272.800	18	2912	330.94	272.83	241.75	205.27	177.92	157.19	141.00	116.96	99.39	72.65	71.27	278.63	17.96	3090.20
1910	75	67	280.430	19	3411	303.27	254.62	228.28	196.28	171.28	151.72	136.12	112.69	95.58	76.33	68.84	287.39	19.07	3317.77
1911	94	65	346.712	21	1894	289.86	222.49	193.28	162.47	140.41	123.96	111.13	91.91	77.75	93.61	67.36	348.42	19.37	2408.32
1912	95	70	362.283	19	2438	272.73	213.97	186.23	156.18	134.82	119.13	107.02	89.04	75.77	94.36	70.89	358.47	18.15	2756.80
1913	85	67	317.821	17	3005	302.13	244.47	213.97	179.34	154.33	135.86	121.62	100.54	85.13	86.40	68.68	324.27	17.12	2973.59
1914	82	65	302.451	19	1000	403.24	283.23	236.55	193.28	165.44	145.76	130.62	107.78	90.76	83.66	67.07	310.37	19.27	724.06
1915	78	63	283.679	20	1543	363.20	277.92	240.27	200.71	172.75	152.10	136.05	112.06	94.42	79.56	65.67	292.75	18.94	1990.36

SI No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1916	90	62	324.974	16	888	422.36	283.29	230.42	184.93	157.48	138.36	123.54	100.93	84.15	90.67	64.18	329.70	16.70	717.66
1917	66	67	246.779	17	1069	475.35	346.72	291.13	237.42	202.90	178.74	160.30	132.58	111.92	64.51	70.02	245.27	17.01	693.93
1918	71	60	252.613	20	2413	350.27	288.03	256.47	219.24	190.45	167.99	150.05	123.02	103.35	71.44	61.98	255.16	19.45	2935.37
1919	100	69	378.889	21	3777	223.40	185.07	165.96	143.30	125.58	111.66	100.49	83.61	71.20	97.92	69.60	369.15	19.56	3361.60
1920	89	69	337.211	16	2180	321.24	246.50	210.07	172.39	147.38	129.78	116.44	96.59	81.86	90.03	70.31	341.07	16.13	2342.70
1921	85	62	306.920	21	3034	277.89	230.09	206.18	177.71	155.31	137.56	123.26	101.55	85.65	86.59	64.34	316.44	20.01	3147.89
1922	73	60	259.729	19	3135	329.96	276.90	248.07	212.88	185.18	163.35	145.85	119.46	100.30	74.04	61.46	263.78	19.16	3254.92
1923	74	70	282.199	16	3395	330.74	272.49	239.65	201.40	173.51	152.87	137.01	113.66	96.61	75.20	72.01	289.57	16.35	3178.68
1924	103	66	382.527	16	2743	276.99	215.49	184.65	151.97	129.83	114.06	102.06	84.24	71.10	99.92	67.31	371.65	16.34	2715.52
1925	98	70	373.723	18	1622	305.66	223.96	189.15	155.22	133.08	117.51	105.65	87.88	74.58	96.54	70.53	365.67	17.94	1915.13
1926	92	60	327.330	21	2161	291.70	230.06	201.92	170.87	147.81	130.21	116.31	95.43	80.18	92.20	63.08	334.40	19.32	2699.77
1927	85	62	306.920	20	1003	392.65	276.01	231.33	189.65	162.32	142.77	127.65	104.87	87.99	86.51	64.42	315.54	19.66	880.28
1928	97	60	345.120	16	767	424.13	273.15	219.53	175.57	149.40	131.07	116.75	94.86	78.68	95.91	62.40	345.27	17.22	566.28
1929	65	62	234.704	17	3981	357.84	306.49	275.72	236.87	206.01	181.67	162.19	132.95	111.80	63.12	62.67	225.59	18.37	3547.56
1930	85	65	313.516	17	3500	294.86	242.89	214.33	180.84	155.95	137.22	122.64	101.04	85.32	86.49	66.71	320.66	17.13	3265.28
1931	77	64	282.034	19	2725	320.44	262.75	232.96	198.14	171.77	151.54	135.60	111.75	94.36	78.48	66.13	289.72	18.70	2994.89
1932	70	70	266.945	21	3526	294.36	250.87	227.89	199.32	176.05	157.22	141.83	118.25	100.86	70.60	71.97	272.82	21.03	3351.42
1933	92	69	348.578	17	1891	316.18	238.45	202.71	166.50	142.55	125.65	112.80	93.63	79.36	92.31	70.11	349.10	17.09	2109.40
1934	86	61	308.267	17	2636	321.17	257.11	223.85	186.58	159.84	140.09	124.81	102.17	85.71	87.43	63.26	316.89	16.71	2836.86
1935	98	66	363.958	21	1823	283.15	214.47	185.38	155.32	134.11	118.44	106.26	88.02	74.54	96.39	68.03	360.08	19.35	2337.03
1936	102	68	383.936	18	3698	241.45	196.89	173.58	146.70	126.85	111.94	100.34	83.13	70.54	99.08	68.73	371.48	17.91	3221.43
1937	98	69	371.311	19	1934	285.86	216.39	185.69	154.17	132.62	117.07	105.15	87.38	74.19	96.50	69.95	364.39	18.36	2287.79
1938	73	64	267.383	17	2280	369.44	295.56	257.33	214.63	184.16	161.75	144.48	118.89	100.20	73.97	66.26	273.09	16.81	2551.34
1939	92	63	334.596	19	1079	368.03	257.42	214.64	175.16	149.74	131.73	117.84	96.88	81.32	92.31	65.13	338.45	18.97	1064.79
1940	63	69	238.700	20	1261	433.02	329.62	284.51	237.71	205.07	181.22	162.84	135.40	115.07	59.71	73.02	234.15	19.37	1467.65
1941	88	65	324.581	17	1782	339.88	256.96	218.60	179.47	153.37	134.81	120.63	99.46	83.81	89.13	66.94	330.62	16.98	2003.29
1942	96	63	349.144	16	2508	304.32	236.91	203.02	166.97	142.42	124.85	111.42	91.48	76.87	95.35	65.12	350.04	16.07	2612.51
1943	101	60	359.351	20	2229	276.87	215.90	188.00	157.74	135.82	119.39	106.53	87.30	73.26	98.47	63.04	357.40	18.76	2644.42
1944	96	62	346.639	17	1431	344.63	249.71	209.12	170.08	144.92	127.17	113.55	93.07	77.94	95.29	64.20	347.46	17.26	1579.09
1945	72	67	269.213	17	3144	339.02	280.50	248.06	209.79	181.24	159.71	142.95	118.12	100.04	72.65	69.14	274.22	17.22	3164.31
1946	87	66	323.105	14	3162	325.96	258.21	221.10	181.04	154.11	135.12	120.77	99.56	83.96	88.60	67.84	330.67	14.42	2774.62
1947	80	67	299.126	21	802	422.36	285.49	236.90	194.03	166.64	147.24	132.29	109.66	92.70	81.59	69.51	307.86	20.97	249.57
1948	78	65	287.697	19	3645	293.14	247.11	221.95	191.11	166.82	147.68	132.36	109.27	92.42	79.73	66.58	295.40	19.29	3336.99
1949	89	66	330.533	17	3530	282.38	231.53	203.87	171.72	148.02	130.29	116.54	96.17	81.32	89.87	67.49	334.75	17.24	3215.08
1950	81	63	294.590	14	1205	438.01	310.25	254.40	203.71	173.09	151.99	135.76	111.11	92.82	82.62	66.26	304.31	12.53	1582.31
1951	100	67	373.907	21	1488	295.76	215.68	183.82	152.67	131.50	116.16	104.31	86.53	73.32	97.75	68.69	366.48	19.47	1951.32
1952	85	62	306.920	16	1258	399.44	287.45	239.12	193.40	164.53	144.34	128.85	105.50	88.23	86.60	64.28	315.17	15.94	1316.43
1953	86	69	325.845	15	1741	358.51	265.97	222.73	180.57	154.00	135.69	121.82	100.99	85.41	87.48	70.78	332.37	14.99	1919.48
1954	76	63	276.406	17	3884	317.29	267.30	238.44	203.14	175.91	154.87	138.26	113.51	95.59	77.48	64.45	282.52	17.69	3431.56
1955	103	70	392.791	19	1835	278.50	207.29	176.78	146.22	125.70	111.04	99.83	83.09	70.62	99.69	70.32	376.89	18.59	2145.16
1956	81	66	300.822	15	1396	403.36	293.46	243.99	197.03	167.80	147.62	132.24	109.02	91.71	82.78	68.43	309.81	14.65	1536.45

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1957	93	69	352.367	15	1189	372.50	257.46	210.51	169.14	144.46	127.59	114.65	94.90	80.02	92.89	70.46	351.62	15.22	1481.58
1958	88	65	324.581	16	1991	339.56	258.95	220.09	180.16	153.68	134.96	120.71	99.47	83.77	89.25	66.96	331.17	15.96	2202.72
1959	85	70	324.148	19	1776	322.51	245.92	211.64	176.07	151.59	133.91	120.34	100.15	85.17	86.36	71.64	330.26	18.30	2160.90
1960	81	60	288.193	17	1693	377.98	288.68	246.46	202.49	172.62	151.11	134.58	109.97	91.97	82.89	62.20	297.42	16.68	1911.07
1961	82	67	306.604	14	3310	335.77	268.76	231.26	190.07	162.00	142.10	127.07	104.91	88.63	84.13	68.81	316.17	14.36	2877.06
1962	102	62	368.304	21	1925	277.14	211.40	183.16	153.57	132.43	116.66	104.35	85.88	72.32	99.07	64.80	363.33	19.34	2424.60
1963	74	65	272.943	15	1991	399.15	308.70	262.72	214.69	182.85	160.42	143.40	118.09	99.43	75.45	67.42	280.75	14.67	2069.93
1964	89	68	335.003	14	1233	393.07	273.51	223.06	178.62	152.35	134.43	120.67	99.64	83.83	89.75	70.41	339.85	13.26	1757.25
1965	101	69	382.678	15	3877	262.74	210.90	182.48	150.98	129.18	113.56	101.73	84.29	71.47	98.73	69.46	371.67	15.97	3071.89
1966	101	69	382.678	17	3802	247.41	201.24	176.57	148.35	127.87	112.71	101.03	83.77	71.14	98.54	69.44	370.98	17.25	3231.59
1967	97	62	350.250	14	3175	307.26	241.49	205.99	168.05	142.66	124.72	111.10	90.93	76.19	96.21	64.38	351.51	14.51	2787.75
1968	80	70	305.080	16	1955	355.46	272.39	232.02	190.38	162.83	143.47	128.82	107.04	90.83	81.91	71.86	314.18	15.91	2135.88
1969	74	64	271.046	18	1417	402.49	303.80	259.34	213.83	183.03	160.89	143.90	118.53	99.81	75.20	66.34	277.64	17.77	1528.61
1970	83	66	308.250	20	3539	272.40	228.32	205.16	177.08	154.93	137.44	123.38	102.13	86.57	84.71	67.69	316.30	19.53	3344.59
1971	87	70	331.775	17	2889	294.37	235.89	205.60	171.84	147.87	130.37	116.96	97.16	82.60	88.23	71.20	336.33	16.96	2911.84
1972	98	67	366.429	21	3724	230.19	191.12	171.53	148.19	129.85	115.36	103.72	86.07	73.10	96.62	68.18	361.38	19.80	3314.16
1973	96	63	349.144	16	2158	315.75	241.11	205.01	167.76	142.95	125.34	111.91	91.88	77.15	95.35	65.09	349.81	16.22	2307.46
1974	90	69	341.000	14	945	414.70	274.97	221.15	176.69	151.09	133.59	120.02	99.12	83.34	90.43	71.12	343.94	13.54	1499.58
1975	86	65	317.205	18	2189	319.07	250.15	216.79	180.63	155.14	136.49	122.12	100.75	85.06	87.36	66.98	324.33	17.67	2492.82
1976	64	67	239.301	18	3099	360.59	303.12	271.05	232.05	201.87	178.47	159.94	132.26	112.09	61.51	69.36	233.45	18.41	3267.01
1977	64	64	234.418	17	3538	367.54	311.62	278.90	238.44	206.93	182.43	163.02	134.05	113.05	61.55	65.44	225.51	17.85	3426.91
1978	76	62	274.423	17	3101	336.88	277.91	245.35	206.96	178.27	156.56	139.61	114.44	96.21	77.42	63.78	280.75	17.27	3100.01
1979	100	63	363.692	21	2051	274.19	211.49	184.05	154.84	133.75	117.96	105.59	87.05	73.43	97.76	65.66	360.35	19.19	2577.56
1980	83	64	304.011	15	1131	423.07	297.60	244.64	196.61	167.34	147.12	131.58	107.98	90.41	84.63	66.54	312.48	14.58	1259.02
1981	64	61	229.408	14	971	559.09	398.25	327.10	261.87	222.13	194.65	173.50	141.46	117.82	61.48	64.17	221.08	10.73	1018.88
1982	97	65	357.777	14	3122	302.28	236.45	201.30	164.17	139.58	122.33	109.29	89.95	75.71	96.25	66.85	356.99	14.46	2803.51
1983	83	70	316.521	19	3299	278.53	230.14	204.84	175.00	152.31	134.90	121.20	100.76	85.79	84.61	71.23	322.91	18.71	3206.95
1984	98	60	348.678	17	1708	327.69	243.88	206.17	168.40	143.38	125.55	111.85	91.37	76.34	96.69	62.64	349.50	16.93	1978.51
1985	63	64	230.755	21	734	517.13	362.10	304.12	250.35	214.89	189.43	169.76	140.08	118.01	59.84	67.11	222.11	21.23	-217.74
1986	69	67	257.996	15	3825	358.56	299.03	263.62	221.49	190.44	167.34	149.54	123.36	104.35	68.98	69.02	260.37	15.57	3346.61
1987	71	64	260.057	17	3193	347.84	289.30	256.45	217.22	187.61	165.08	147.45	121.26	102.25	71.48	65.74	262.87	17.39	3185.62
1988	75	63	272.769	20	2712	320.28	264.49	236.02	202.28	176.13	155.71	139.42	114.86	96.93	76.27	65.21	279.73	19.58	3036.79
1989	63	63	229.126	20	1273	446.94	343.05	296.94	248.25	213.74	188.20	168.34	138.65	116.84	59.73	65.91	219.50	19.34	1492.34
1990	74	60	263.287	18	2257	365.29	294.20	257.78	216.38	186.00	163.18	145.37	118.89	99.67	75.16	61.98	268.63	17.51	2685.43
1991	62	62	223.871	17	3879	373.30	320.30	288.40	248.02	215.83	190.38	169.98	139.35	117.18	58.40	62.55	208.00	18.21	3631.66
1992	80	62	288.866	16	1172	425.55	305.75	254.20	205.55	174.87	153.42	136.96	112.13	93.77	81.81	64.26	297.25	15.86	1117.97
1993	72	61	258.084	15	3363	371.39	306.14	268.17	223.74	191.36	167.36	148.86	121.60	101.92	72.92	62.51	261.34	15.20	3152.58
1994	65	63	236.400	19	3246	350.28	297.53	268.18	231.66	202.48	179.25	160.51	132.14	111.46	63.19	64.48	229.82	19.77	3300.85
1995	83	67	310.343	17	907	423.18	288.33	236.65	191.19	163.41	144.17	129.38	106.87	89.97	84.56	68.75	316.97	17.83	539.06
1996	95	67	355.212	17	856	392.51	257.38	208.77	168.07	143.74	126.91	113.91	94.00	79.01	94.43	68.02	352.05	18.49	553.96
1997	89	61	319.020	16	2346	331.86	259.17	222.35	182.90	155.86	136.40	121.50	99.40	83.26	90.08	63.34	326.65	15.93	2496.33

Sl No	Actual/ Seed Value					Deflection Values									Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	D0 (µm)	D200 (µm)	D300 (µm)	D450 (µm)	D600 (µm)	D750 (µm)	D900 (µm)	D1200 (µm)	D1500 (µm)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1998	66	69	250.067	19	800	491.05	342.46	285.38	233.17	199.97	176.69	158.87	131.96	111.76	64.40	72.28	249.57	19.74	-94.45
1999	63	62	227.482	17	2556	406.94	335.52	296.12	249.73	215.09	188.89	168.43	138.07	116.07	59.86	63.68	215.43	16.91	2944.28
2000	92	69	348.578	20	3426	250.11	206.20	183.94	157.75	137.64	122.06	109.71	91.17	77.58	92.21	69.94	348.49	19.25	3228.03
2001	95	70	362.283	20	3507	241.39	198.66	177.08	151.79	132.43	117.49	105.65	87.92	74.91	94.43	70.60	358.16	18.97	3304.33

SI No	Actual/ Seed Value					Basin Parameters			Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1301	89	70	339.402	14	1262	166.73	69.32	30.83	93.86	66.89	-0.42	16.22	1139.58
1302	85	64	311.336	16	2939	96.31	64.36	34.43	84.00	65.77	-14.74	16.97	2870.75
1303	93	60	330.888	20	3427	67.67	49.16	30.61	87.98	65.54	76.41	20.61	3191.72
1304	96	66	356.530	15	2958	97.02	59.83	30.04	94.58	66.72	49.29	16.13	2764.29
1305	89	63	323.686	19	2249	95.22	58.21	32.29	86.80	65.77	26.86	18.70	2716.87
1306	66	70	251.691	17	3265	90.68	68.93	40.10	69.82	64.45	-93.08	18.45	3094.11
1307	97	70	369.910	20	3604	62.70	43.65	26.21	98.33	66.42	144.36	19.92	3209.22
1308	62	67	231.822	15	3329	107.74	82.07	45.57	60.20	64.00	-196.09	16.47	2994.40
1309	64	65	236.059	20	2091	105.37	71.24	42.42	63.27	63.79	-130.16	19.99	2725.22
1310	63	67	235.561	17	3970	81.79	68.64	42.62	62.46	63.65	-120.51	19.98	3288.62
1311	83	60	295.309	20	3413	70.21	53.16	33.88	80.30	64.88	26.42	21.09	3207.61
1312	99	60	352.236	21	3380	63.93	45.01	28.30	92.70	65.86	115.55	20.89	3187.23
1313	91	70	347.029	20	3446	65.95	46.25	27.89	94.60	66.13	116.84	20.00	3182.55
1314	68	69	257.645	18	1997	116.48	73.19	39.64	72.32	64.86	-104.36	17.46	2532.95
1315	88	63	320.049	16	1393	148.35	70.83	33.96	86.33	66.19	-37.57	16.55	1654.26
1316	94	66	349.102	19	2893	78.27	51.25	29.20	92.96	66.16	85.55	19.04	2994.80
1317	103	63	374.602	18	3561	70.44	48.72	27.93	95.74	66.37	109.03	18.94	3145.15
1318	72	64	263.720	17	2694	101.40	71.17	39.97	70.96	64.66	-99.70	17.82	2876.83
1319	78	61	279.591	16	2470	111.94	73.33	39.09	74.36	65.11	-97.08	16.63	2674.84
1320	80	69	303.111	16	1454	147.41	72.61	34.43	86.05	66.25	-47.53	15.84	1736.59
1321	70	65	258.190	21	2248	93.15	62.46	38.04	71.96	64.35	-52.45	20.68	2827.53
1322	66	60	234.824	16	2085	133.00	87.50	46.83	58.20	63.97	-230.86	16.14	2460.47
1323	65	67	243.040	16	3637	92.43	73.17	42.64	64.57	64.08	-134.75	18.16	3153.58
1324	88	68	331.239	16	843	195.74	70.43	31.93	89.45	66.36	-23.11	18.49	347.51
1325	62	61	222.239	21	1607	123.88	77.50	45.83	55.61	63.20	-191.27	20.41	2372.72
1326	64	70	244.064	14	2471	135.79	87.18	43.08	69.31	65.18	-185.72	13.56	2436.41
1327	89	69	337.211	17	1050	164.91	66.60	30.88	92.13	66.56	6.34	17.69	1091.56
1328	66	67	246.779	17	781	223.33	91.42	42.74	67.73	64.93	-212.59	17.00	142.47
1329	89	60	316.656	20	3843	63.26	48.78	31.41	85.56	65.26	68.81	21.15	3287.57
1330	78	64	285.697	19	1485	130.76	69.97	36.74	78.34	65.32	-64.66	18.00	2067.43
1331	73	60	259.729	18	1782	125.88	76.53	41.56	67.95	64.51	-138.06	17.73	2356.45
1332	68	67	254.257	19	984	178.37	82.11	40.80	70.59	64.92	-155.25	17.63	1100.31
1333	91	70	347.029	19	3672	66.53	47.70	28.34	94.09	66.14	107.62	19.57	3210.73
1334	85	66	315.678	16	957	185.43	73.50	33.87	86.03	66.17	-51.83	17.55	713.19

SI No	Actual/ Seed Value					Basin Parameters			Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1335	102	69	386.467	15	2864	95.22	55.61	27.17	100.85	67.20	94.88	16.14	2712.72
1336	83	70	316.521	21	1100	145.37	62.97	31.70	88.55	66.04	10.26	19.04	1493.74
1337	67	61	240.161	17	1507	151.42	87.32	45.30	61.67	64.28	-216.29	16.32	1964.63
1338	68	67	254.257	21	1971	102.62	65.34	38.64	71.35	64.40	-69.16	20.18	2655.59
1339	100	67	373.907	20	3768	60.70	43.05	26.23	98.02	66.36	146.11	20.14	3243.26
1340	100	67	373.907	15	3819	81.88	54.78	28.43	97.29	66.81	84.95	16.68	3034.50
1341	65	64	238.081	14	2263	144.88	91.89	45.83	63.27	64.72	-232.79	13.68	2303.49
1342	77	67	287.908	18	2004	111.91	67.41	35.97	80.24	65.46	-44.57	17.54	2516.72
1343	81	60	288.193	15	2742	111.41	73.62	38.54	76.26	65.34	-91.10	15.99	2709.79
1344	62	70	236.437	17	1431	156.27	86.91	43.57	66.41	64.77	-195.62	15.53	1844.24
1345	82	66	304.536	16	985	185.05	75.81	35.07	83.82	66.04	-72.02	17.16	786.17
1346	71	69	269.011	14	2704	123.79	79.41	39.31	76.75	65.65	-117.94	14.17	2558.32
1347	77	70	293.640	19	2462	92.08	60.12	33.98	83.00	65.46	2.45	18.73	2844.18
1348	65	66	241.400	19	2519	96.83	69.56	41.59	65.28	63.96	-113.96	19.70	2918.43
1349	85	65	313.516	17	1267	151.48	70.48	34.00	85.80	66.10	-37.87	17.00	1553.23
1350	80	62	288.866	14	2456	127.19	77.49	38.26	78.57	65.74	-101.24	14.67	2412.16
1351	98	67	366.429	20	1112	141.84	57.61	28.20	96.15	66.63	66.70	19.08	1460.55
1352	86	69	325.845	16	3338	87.19	59.59	31.91	89.30	66.15	29.74	17.06	2998.32
1353	84	69	318.267	20	2485	85.07	54.18	31.12	88.49	65.79	53.50	19.37	2876.36
1354	100	64	366.278	20	1948	96.63	52.40	28.28	95.38	66.43	89.43	18.95	2537.96
1355	63	66	233.973	17	3481	89.49	72.02	43.59	61.13	63.65	-142.53	19.36	3177.83
1356	97	64	355.290	19	1904	103.04	55.93	29.52	93.39	66.36	64.08	18.36	2464.00
1357	96	68	361.352	16	1777	121.94	60.90	29.07	96.72	66.92	52.46	16.50	2121.62
1358	63	68	237.137	16	2723	111.75	80.01	43.96	63.61	64.26	-172.46	16.66	2835.91
1359	93	62	335.807	19	2337	91.75	56.26	31.29	88.86	65.92	44.62	18.78	2761.26
1360	68	64	249.069	21	1088	157.57	77.67	41.38	67.31	64.40	-146.10	19.16	1512.78
1361	86	67	321.560	19	1666	116.20	61.69	32.07	88.37	66.06	15.80	18.02	2258.43
1362	81	68	304.891	17	2364	104.05	64.72	34.08	84.83	65.86	-13.24	17.03	2673.00
1363	80	60	284.635	18	2504	97.78	65.97	37.54	75.39	64.90	-56.47	18.61	2833.20
1364	87	70	331.775	17	3601	77.18	54.82	30.69	90.68	66.09	58.83	18.11	3128.06
1365	94	62	339.417	17	3881	73.45	54.06	31.24	88.75	65.85	55.04	18.72	3195.52
1366	80	69	303.111	18	1405	137.81	68.63	34.00	85.47	66.02	-30.01	17.10	1869.51
1367	92	64	336.976	16	1288	151.88	67.95	32.07	90.11	66.45	-8.37	16.95	1484.53
1368	63	63	229.126	18	2770	98.24	74.56	44.94	58.05	63.41	-167.20	19.59	3000.66

SI No	Actual/ Seed Value					Basin Parameters			Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1369	77	64	282.034	19	2377	95.94	63.51	36.49	77.19	64.98	-37.18	19.05	2814.38
1370	71	68	267.250	15	3763	94.50	71.33	39.34	73.40	64.96	-90.96	16.75	3086.97
1371	103	60	366.467	18	2527	88.93	54.18	29.45	93.37	66.32	72.63	18.32	2797.45
1372	75	60	266.845	17	2959	95.45	69.74	40.26	69.55	64.45	-98.16	18.45	2986.88
1373	87	63	316.412	15	2595	110.26	68.10	34.47	85.36	66.07	-27.96	15.84	2614.11
1374	73	61	261.668	21	1128	151.67	74.81	40.10	69.81	64.55	-122.10	19.36	1597.32
1375	96	68	361.352	15	1366	148.42	64.11	29.24	96.60	66.99	36.15	16.66	1492.49
1376	75	63	272.769	14	3842	101.28	74.91	40.19	72.62	65.03	-111.84	15.85	3011.28
1377	96	65	354.089	17	2032	108.19	59.37	30.00	93.75	66.56	48.37	17.14	2435.41
1378	85	61	304.682	17	742	213.50	77.33	36.31	79.26	65.52	-97.30	19.26	22.13
1379	83	60	295.309	14	2883	115.52	74.77	37.94	78.56	65.64	-87.78	15.15	2646.62
1380	66	62	238.314	14	3704	109.56	84.18	46.20	59.48	64.02	-209.45	15.89	3008.50
1381	77	68	289.834	16	3621	86.77	64.14	35.87	80.03	65.35	-29.25	17.56	3104.91
1382	96	63	349.144	20	3868	61.03	45.21	28.37	92.79	65.89	114.87	20.62	3274.48
1383	91	68	342.531	17	2767	90.26	57.13	30.31	92.49	66.37	54.49	17.41	2851.56
1384	87	67	325.299	16	1712	130.25	67.28	32.49	89.71	66.44	-6.73	16.15	2059.08
1385	100	68	376.408	21	3453	61.42	41.84	25.59	99.18	66.43	156.71	20.38	3190.64
1386	79	66	293.394	16	719	226.24	80.23	36.60	79.40	65.64	-111.11	18.73	-235.29
1387	62	62	223.871	14	1645	177.62	101.91	49.35	56.75	64.39	-308.08	13.04	1686.00
1388	96	64	351.627	15	2656	103.91	61.87	30.82	93.05	66.63	33.15	16.07	2631.17
1389	79	67	295.387	18	1217	152.65	72.09	35.36	82.57	65.82	-58.56	17.24	1554.72
1390	78	70	297.453	20	1793	108.78	61.72	33.56	84.28	65.63	-0.44	18.66	2441.33
1391	77	69	291.745	17	1422	144.78	73.03	35.57	82.98	65.94	-61.66	16.32	1805.48
1392	103	68	387.700	17	3737	71.34	48.53	26.66	99.45	66.77	124.51	18.10	3135.28
1393	68	61	243.746	14	1000	221.90	99.00	45.79	63.18	64.81	-268.16	14.99	402.62
1394	95	69	359.945	16	3412	82.76	54.84	28.93	95.74	66.64	78.60	17.10	3003.25
1395	76	62	274.423	18	2838	91.05	65.24	38.14	73.51	64.67	-60.25	19.03	2984.93
1396	62	70	236.437	19	1077	171.85	85.23	42.99	66.21	64.61	-187.96	17.12	1357.23
1397	101	65	372.531	18	2538	87.81	52.63	28.13	96.51	66.59	92.67	18.08	2796.02
1398	88	66	326.819	16	1585	136.10	67.86	32.55	89.53	66.44	-10.27	16.27	1915.04
1399	67	67	250.518	15	1107	196.49	91.61	42.42	70.43	65.33	-203.06	14.76	906.98
1400	62	69	234.911	19	3770	73.74	61.68	40.29	65.76	63.69	-72.97	21.54	3303.86
1401	102	66	378.813	21	2583	75.50	45.59	26.31	98.46	66.49	135.27	19.79	2918.81
1402	87	65	320.893	16	2103	116.21	66.50	33.34	87.47	66.20	-11.70	16.28	2409.45

SI No	Actual/ Seed Value					Basin Parameters			Predicted Value				
	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1403	92	65	339.335	18	876	179.68	66.83	31.41	89.77	66.26	-4.00	19.01	676.72
1404	99	66	367.671	16	962	173.65	63.76	29.16	95.11	66.72	32.19	18.56	774.32
1405	76	60	270.403	15	3379	101.13	74.24	40.87	70.13	64.72	-118.25	16.76	2979.40
1406	80	67	299.126	16	1719	134.52	72.31	35.33	83.88	66.04	-54.59	15.82	2071.19
1407	100	65	368.843	15	2638	102.10	59.27	29.19	96.53	66.89	59.74	16.13	2616.62
1408	85	66	315.678	18	2390	96.73	60.54	32.91	86.26	65.83	13.13	17.97	2747.77
1409	66	65	243.436	14	2989	122.59	85.73	44.55	64.70	64.63	-196.61	14.62	2728.22
1410	68	66	252.542	15	2648	119.47	80.93	42.33	68.71	64.84	-157.04	15.38	2681.33
1411	81	66	300.822	20	3265	71.68	52.41	32.52	83.91	65.24	44.30	20.54	3163.17
1412	97	60	345.120	14	3433	97.82	63.79	32.47	89.55	66.36	9.87	15.85	2842.20
1413	101	70	385.164	20	1243	129.13	53.85	26.31	100.36	66.95	101.88	18.84	1714.12
1414	71	63	258.221	17	3569	85.32	67.25	40.35	68.33	64.22	-90.56	19.23	3179.31
1415	80	69	303.111	21	1742	106.33	59.11	32.71	85.41	65.63	16.97	19.30	2430.69
1416	78	60	277.519	19	967	175.97	78.14	39.15	73.32	65.03	-124.79	18.42	1053.22
1417	81	60	288.193	17	3860	78.26	61.35	36.83	75.87	64.78	-31.68	19.31	3225.89
1418	89	61	319.020	19	1997	103.72	60.85	33.28	84.90	65.67	6.30	18.58	2556.62
1419	67	69	253.856	17	1976	124.56	77.46	40.70	71.24	64.93	-129.81	16.43	2442.05
1420	76	68	286.070	15	2890	107.62	71.54	36.94	80.09	65.67	-65.74	15.65	2768.95
1421	86	69	325.845	14	3998	91.31	63.32	32.49	89.59	66.36	12.33	15.68	3007.30
1422	95	67	355.212	21	3400	63.18	43.84	27.13	95.60	66.12	132.74	20.58	3186.52
1423	88	64	322.325	21	721	196.48	67.66	32.62	85.57	65.78	-24.49	20.67	214.75
1424	94	61	336.943	14	839	208.20	73.27	33.58	85.41	66.01	-53.00	19.05	71.95
1425	64	67	239.301	14	1440	184.14	95.84	44.57	67.22	65.23	-236.79	13.18	1368.00
1426	96	61	344.112	17	3202	82.67	56.27	31.29	89.41	66.01	46.68	18.14	3016.04
1427	81	70	308.894	18	1557	128.10	66.25	33.14	87.21	66.12	-11.40	17.10	2070.78
1428	63	64	230.755	19	2530	98.10	72.09	43.77	60.10	63.51	-146.84	20.06	2935.95
1429	74	64	271.046	16	1799	136.65	78.82	39.71	74.39	65.31	-124.19	15.72	2169.69
1430	84	69	318.267	21	3502	63.69	46.50	29.54	89.85	65.62	96.94	21.00	3226.00
1431	65	65	239.748	16	1146	187.24	92.94	44.68	64.90	64.81	-231.43	15.14	1174.58
1432	101	64	369.941	15	2230	112.19	60.63	29.30	96.43	66.91	52.63	16.15	2381.04
1433	82	67	306.604	21	1492	118.38	61.11	32.92	85.28	65.68	6.58	19.17	2161.53
1434	64	65	236.059	17	2062	124.98	82.20	44.65	62.07	64.15	-189.36	16.88	2532.13
1435	63	69	238.700	15	1207	191.13	94.35	43.92	67.86	65.20	-226.80	14.01	1129.77
1436	77	69	291.745	17	3181	87.58	62.43	35.08	81.34	65.41	-15.60	17.97	3034.35

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1437	70	69	265.222	17	2094	118.17	73.93	38.95	74.79	65.17	-98.36	16.61	2524.38
1438	66	61	236.577	20	3192	78.48	62.76	41.27	63.15	63.43	-88.57	22.03	3192.85
1439	86	66	319.391	21	3561	62.99	46.47	29.79	89.10	65.54	94.18	21.17	3240.15
1440	91	65	335.647	16	2468	103.75	62.40	31.84	90.26	66.34	19.61	16.56	2636.92
1441	103	67	385.124	21	1199	129.41	53.21	26.58	99.12	66.77	100.21	19.44	1678.45
1442	83	61	297.513	17	2329	106.57	67.58	36.39	79.38	65.39	-48.81	17.40	2665.13
1443	91	65	335.647	15	2593	107.38	64.39	32.08	90.54	66.47	10.82	15.87	2602.80
1444	71	69	269.011	20	2701	84.47	59.61	36.12	76.59	64.75	-20.16	20.18	3001.54
1445	62	66	230.259	20	760	213.07	90.74	45.06	60.82	64.16	-236.31	18.50	364.80
1446	100	65	368.843	14	2900	103.68	60.72	29.36	96.81	66.99	53.64	15.55	2621.69
1447	80	65	295.074	19	3550	71.93	54.64	33.77	81.45	65.08	23.57	20.28	3214.74
1448	64	62	231.093	20	1274	149.63	82.88	45.28	59.08	63.77	-204.32	18.71	1854.95
1449	99	60	352.236	16	3395	84.37	57.36	31.16	90.38	66.17	45.07	17.54	3010.01
1450	101	62	364.693	15	2009	119.86	62.58	30.14	94.61	66.78	35.82	16.24	2221.78
1451	85	65	313.516	14	3836	95.37	66.62	34.59	84.97	66.00	-22.20	15.74	2975.83
1452	62	66	230.259	16	3510	96.51	77.04	45.20	58.89	63.63	-176.25	18.26	3134.06
1453	81	70	308.894	21	2532	81.02	52.52	31.21	87.43	65.60	57.58	20.10	2928.37
1454	83	64	304.011	19	2974	80.47	56.57	33.53	82.87	65.30	19.56	19.59	3049.29
1455	92	60	327.330	21	2596	78.82	51.38	31.04	87.37	65.54	63.03	20.46	2951.86
1456	83	64	304.011	21	2745	77.13	52.59	32.35	84.22	65.26	44.63	20.69	3019.94
1457	80	67	299.126	17	2380	104.42	65.80	34.92	82.91	65.70	-26.15	17.10	2686.89
1458	81	67	302.865	16	2038	121.03	69.75	34.88	84.48	66.02	-39.56	15.98	2364.69
1459	94	66	349.102	16	2464	102.13	60.23	30.44	93.30	66.58	42.30	16.58	2628.53
1460	100	62	361.082	15	2009	120.39	63.13	30.44	94.00	66.74	30.70	16.20	2221.52
1461	103	61	369.203	19	1852	103.81	55.03	28.97	94.47	66.44	72.80	18.50	2419.58
1462	97	63	352.781	15	2322	112.06	63.08	30.93	92.97	66.65	26.87	16.03	2444.54
1463	90	69	341.000	15	735	215.21	69.74	31.11	90.36	66.36	-15.99	19.60	-208.58
1464	102	64	373.604	18	3319	73.77	49.55	27.94	96.03	66.43	106.03	18.70	3081.62
1465	100	67	373.907	16	3363	82.38	53.65	28.18	97.32	66.75	90.72	17.16	2984.09
1466	62	63	225.489	14	2629	136.55	94.04	48.71	56.29	64.08	-270.89	14.15	2564.04
1467	99	66	367.671	19	3848	63.45	45.62	27.30	96.17	66.28	126.10	19.72	3240.20
1468	102	65	376.219	16	1890	115.90	58.87	28.47	97.66	66.95	66.22	16.76	2228.12
1469	75	62	270.812	20	2190	98.07	64.26	37.81	73.49	64.60	-55.41	19.82	2758.65
1470	77	66	285.967	21	2953	74.36	53.26	33.58	81.03	64.95	28.81	21.09	3100.19

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1471	92	61	329.774	20	1349	128.73	61.94	32.27	87.16	65.89	9.88	18.91	1912.85
1472	97	61	347.696	16	1481	138.48	65.81	31.70	90.72	66.45	4.60	16.93	1789.27
1473	76	62	274.423	14	2078	142.57	82.83	40.26	74.83	65.55	-142.38	14.28	2138.86
1474	97	66	360.244	15	1059	171.35	65.76	29.86	94.35	66.75	19.23	17.81	898.67
1475	91	68	342.531	21	2388	82.09	49.85	28.76	93.21	66.10	93.52	19.76	2844.96
1476	84	69	318.267	16	944	186.00	72.33	32.91	88.21	66.35	-37.46	17.50	671.81
1477	100	60	355.794	19	3935	63.46	47.17	28.96	92.05	65.90	102.24	20.14	3266.77
1478	82	62	296.088	14	2740	118.44	74.68	37.34	80.16	65.80	-81.03	14.93	2572.06
1479	66	68	248.429	17	2994	96.50	71.63	41.21	67.75	64.34	-114.61	18.19	3009.01
1480	80	65	295.074	19	2362	94.86	61.34	34.79	81.11	65.30	-11.02	18.87	2796.12
1481	85	67	317.821	21	934	163.42	65.13	32.25	87.12	65.94	-6.00	19.50	1056.28
1482	98	67	366.429	21	2774	72.42	45.64	26.86	96.99	66.34	129.26	19.98	2997.28
1483	88	63	320.049	15	1237	166.07	73.46	34.20	86.16	66.25	-51.23	16.48	1248.43
1484	102	61	365.619	15	1885	124.14	63.10	30.28	94.25	66.76	31.84	16.35	2118.16
1485	70	69	265.222	15	788	230.98	88.40	39.69	74.73	65.52	-170.08	16.85	-127.44
1486	69	67	257.996	14	759	248.21	93.02	41.63	70.62	65.25	-209.08	16.95	-477.50
1487	65	69	246.278	18	1673	132.72	78.78	41.61	68.78	64.70	-145.97	16.97	2245.10
1488	79	62	285.255	14	2802	118.94	76.81	38.76	77.11	65.57	-103.60	14.87	2610.04
1489	82	60	291.751	20	1192	145.72	70.26	36.70	77.75	65.22	-68.36	18.86	1659.41
1490	62	70	236.437	19	2337	102.29	71.40	41.80	65.45	64.05	-122.43	19.19	2828.15
1491	65	62	234.704	14	3595	112.20	85.75	46.93	58.06	63.93	-222.81	15.76	2978.39
1492	102	60	362.909	15	3802	83.64	57.40	30.57	92.26	66.38	52.21	17.00	3042.24
1493	103	65	379.908	19	1946	99.23	52.62	27.47	97.84	66.70	97.98	18.36	2487.23
1494	84	63	305.501	19	984	168.12	71.10	34.94	82.31	65.69	-54.55	18.55	1092.89
1495	101	63	367.328	14	3226	98.17	60.46	29.89	95.36	66.83	49.22	15.73	2757.42
1496	92	69	348.578	16	2229	108.24	60.74	29.94	94.78	66.75	45.59	16.32	2484.49
1497	78	62	281.644	19	2200	101.26	65.22	37.10	76.06	64.92	-50.08	18.93	2716.33
1498	65	66	241.400	20	1351	141.39	78.18	42.36	65.60	64.29	-155.43	18.51	1967.38
1499	68	69	257.645	17	2935	96.41	69.91	39.64	71.49	64.67	-91.38	17.93	2976.97
1500	63	63	229.126	20	2370	97.57	70.42	43.54	59.80	63.39	-139.71	20.80	2894.58
1501	83	67	310.343	16	1454	146.16	71.53	34.07	86.55	66.26	-40.17	16.08	1738.95
1502	86	64	314.999	21	1527	115.75	60.02	32.58	85.80	65.69	14.04	19.34	2201.85
1503	71	68	267.250	15	1079	193.51	86.25	39.51	76.19	65.70	-153.82	15.31	848.05
1504	102	70	388.977	15	3644	82.60	53.05	26.86	100.97	67.13	108.02	16.47	2979.39

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1505	65	68	244.665	20	1848	113.32	71.29	40.76	67.90	64.28	-112.22	19.21	2533.33
1506	86	61	308.267	19	955	171.21	71.31	35.11	81.73	65.63	-57.84	18.78	1010.90
1507	97	66	360.244	15	1468	143.00	64.35	29.72	95.60	66.91	31.02	16.52	1644.61
1508	92	67	343.994	20	3742	62.54	45.68	28.30	93.20	65.95	114.16	20.41	3250.35
1509	92	63	334.596	16	2593	101.02	62.41	32.32	88.96	66.21	14.45	16.74	2705.37
1510	80	63	290.953	19	920	178.72	74.85	36.69	78.64	65.44	-87.54	18.54	900.53
1511	72	60	256.171	15	973	209.94	92.93	43.70	66.53	64.91	-224.87	15.96	555.33
1512	93	64	340.639	18	1983	106.32	59.56	31.06	90.73	66.24	35.61	17.74	2476.10
1513	101	65	372.531	21	3450	61.77	42.47	26.20	97.68	66.29	147.71	20.52	3192.88
1514	89	66	330.533	21	2139	89.80	52.98	30.26	90.09	65.89	65.78	19.70	2715.59
1515	96	69	363.734	17	1690	119.59	58.96	28.54	97.28	66.90	64.30	17.02	2126.75
1516	87	60	309.540	18	3717	73.25	55.79	33.82	81.94	65.18	19.74	19.76	3218.37
1517	96	63	349.144	15	1855	127.65	65.40	31.27	92.43	66.66	13.29	16.07	2085.46
1518	92	65	339.335	18	1468	128.95	62.67	31.15	91.03	66.36	21.39	17.62	1952.64
1519	96	64	351.627	15	1521	141.94	66.03	30.86	93.22	66.73	13.32	16.39	1714.97
1520	103	60	366.467	16	2417	101.79	59.13	30.14	93.55	66.55	48.78	16.94	2603.62
1521	76	63	276.406	17	3732	80.93	63.25	37.76	74.04	64.66	-48.29	19.15	3203.34
1522	103	69	390.256	14	986	177.56	61.38	27.22	99.34	67.06	60.62	18.66	612.86
1523	102	64	373.604	20	3920	59.20	42.88	26.53	97.08	66.25	143.30	20.37	3273.91
1524	84	69	318.267	16	733	216.11	73.50	33.07	86.64	66.14	-49.29	19.07	-132.46
1525	74	65	272.943	17	1769	130.20	75.45	38.85	75.32	65.26	-103.81	16.51	2243.89
1526	69	62	249.147	15	1195	189.48	92.94	44.15	66.39	64.97	-225.59	14.88	1121.10
1527	67	64	245.406	21	1738	113.61	70.00	40.93	66.57	64.07	-111.03	20.10	2475.68
1528	63	70	240.251	21	1424	131.18	73.82	40.99	67.70	64.33	-125.53	19.20	2120.15
1529	102	69	386.467	21	2739	71.87	43.87	25.34	100.57	66.65	152.10	19.76	2975.41
1530	102	63	370.965	18	1941	104.61	55.92	28.76	95.62	66.61	72.86	17.88	2432.95
1531	76	61	272.422	14	2547	128.13	81.32	40.85	72.96	65.31	-142.28	14.60	2478.66
1532	65	60	231.266	19	1548	136.95	82.94	46.05	57.52	63.65	-210.79	18.40	2198.92
1533	95	68	357.588	16	1350	143.81	63.30	29.41	95.85	66.88	37.23	16.93	1589.46
1534	96	64	351.627	14	3209	100.33	62.60	31.02	93.10	66.68	29.71	15.56	2754.32
1535	98	70	373.723	15	2997	94.05	56.67	27.94	99.23	67.08	83.21	16.06	2770.26
1536	87	63	316.412	20	3514	67.21	49.86	31.29	86.36	65.39	66.58	20.71	3217.96
1537	85	61	304.682	15	2160	124.64	72.78	36.29	81.83	65.87	-65.02	15.62	2348.17
1538	64	64	234.418	21	1639	120.01	73.55	42.88	62.42	63.77	-144.94	20.06	2390.30

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1539	76	68	286.070	19	1325	140.63	70.61	35.93	80.62	65.57	-58.85	17.69	1828.14
1540	94	66	349.102	18	3416	73.99	51.45	29.44	92.60	66.14	83.15	18.82	3117.74
1541	100	62	361.082	14	3317	97.52	61.31	30.61	93.72	66.69	38.57	15.77	2793.69
1542	75	70	286.013	15	2046	131.19	75.32	36.48	82.43	66.04	-75.28	14.78	2252.96
1543	103	67	385.124	19	1653	109.94	53.30	26.88	99.43	66.88	100.86	18.26	2222.00
1544	100	68	376.408	18	3517	70.62	48.03	27.08	97.91	66.57	120.94	18.67	3130.10
1545	78	66	289.681	18	3689	74.86	57.59	34.86	79.77	65.03	2.31	19.66	3219.99
1546	67	62	241.925	17	2008	126.24	81.83	44.41	62.50	64.18	-185.83	16.99	2487.68
1547	86	66	319.391	20	3631	65.35	48.62	30.49	88.15	65.53	79.76	20.66	3239.34
1548	80	67	299.126	19	2196	99.02	61.48	34.10	83.06	65.51	-4.06	18.54	2696.69
1549	68	64	249.069	14	1451	180.37	93.27	43.72	68.45	65.24	-219.18	13.71	1395.80
1550	83	70	316.521	14	3519	99.34	66.18	33.24	88.59	66.37	-5.80	15.20	2872.36
1551	65	69	246.278	15	3735	97.92	75.82	42.35	66.77	64.44	-139.29	16.80	3100.44
1552	67	60	238.382	19	3181	83.27	66.33	42.38	61.68	63.44	-112.08	21.21	3168.01
1553	70	66	259.970	18	3126	86.67	65.28	39.01	71.13	64.42	-69.78	19.39	3093.86
1554	72	70	274.572	19	2961	83.00	59.96	35.76	78.00	64.93	-16.40	19.59	3061.66
1555	103	61	369.203	18	846	178.89	62.99	29.78	92.42	66.36	25.52	19.85	588.85
1556	68	60	241.940	20	3833	68.50	58.03	39.57	66.01	63.54	-53.83	22.69	3331.60
1557	64	62	231.093	15	3827	99.51	80.59	46.74	56.20	63.50	-204.45	17.66	3151.12
1558	82	65	302.451	20	1582	118.28	63.51	34.09	83.19	65.57	-13.54	18.72	2230.44
1559	86	65	317.205	21	3637	62.21	46.45	30.02	88.44	65.47	91.65	21.30	3257.26
1560	71	64	260.057	15	2698	116.94	79.23	41.61	70.01	64.91	-143.49	15.61	2703.49
1561	99	70	377.537	16	2195	105.65	56.71	27.48	99.96	67.13	85.95	16.49	2454.73
1562	68	60	241.940	16	1650	151.15	89.09	45.64	61.74	64.38	-224.82	15.56	2030.11
1563	71	63	258.221	17	1804	131.58	79.13	41.52	69.34	64.78	-145.52	16.62	2291.24
1564	87	64	318.662	20	2922	76.26	52.38	31.50	86.74	65.53	55.56	20.08	3051.62
1565	82	70	312.707	21	2175	89.96	54.38	31.20	88.08	65.74	50.90	19.66	2745.16
1566	76	62	274.423	17	2551	103.63	70.36	39.00	73.30	64.87	-86.51	17.67	2802.11
1567	71	64	260.057	21	2518	85.76	60.13	37.54	72.49	64.31	-38.81	21.10	2959.29
1568	91	70	347.029	15	1279	156.56	66.47	30.03	95.16	66.92	18.78	16.51	1335.72
1569	87	67	325.299	20	959	163.01	65.19	31.78	88.62	66.11	-0.42	19.07	1078.17
1570	87	64	318.662	16	3961	79.44	59.08	33.36	85.01	65.67	15.44	17.95	3171.68
1571	64	70	244.064	18	2332	79.44	59.08	33.36	85.01	65.67	15.44	17.95	3171.68
1572	101	63	367.328	18	2034	101.89	55.90	29.02	94.97	66.54	70.42	17.91	2503.89

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1573	102	63	370.965	16	2242	105.60	58.61	29.22	95.82	66.76	60.26	16.78	2494.21
1574	67	66	248.828	16	758	234.58	93.22	42.96	67.49	64.95	-222.40	16.93	-111.66
1575	63	60	224.150	21	2263	96.87	69.57	44.20	57.30	63.07	-145.29	21.75	2871.97
1576	92	64	336.976	17	2204	104.95	61.19	31.66	89.99	66.25	24.57	17.19	2562.79
1577	70	61	250.915	19	3955	70.40	59.34	39.23	67.75	63.80	-53.53	21.81	3331.58
1578	67	61	240.161	21	1973	104.69	69.10	41.95	63.42	63.70	-118.91	20.79	2675.29
1579	69	64	252.732	20	814	197.65	83.49	41.59	67.87	64.62	-172.67	18.81	596.05
1580	63	62	227.482	21	2579	87.67	65.54	42.52	60.49	63.25	-112.76	22.08	3013.76
1581	101	70	385.164	15	3675	82.53	53.40	27.12	100.40	67.08	104.03	16.47	2989.43
1582	85	63	309.138	17	785	204.77	75.41	35.23	81.89	65.74	-77.45	18.89	216.38
1583	71	69	269.011	18	2101	111.01	69.98	37.95	75.83	65.10	-74.65	17.57	2599.99
1584	70	68	263.486	19	2917	85.08	62.29	37.55	73.84	64.58	-44.28	19.82	3056.10
1585	72	62	259.979	19	1429	138.66	76.51	40.78	69.56	64.65	-131.59	18.02	2011.29
1586	65	68	244.665	19	867	196.44	86.26	42.20	67.79	64.76	-186.77	17.63	719.21
1587	67	62	241.925	14	2202	146.28	91.63	45.69	63.45	64.72	-230.77	13.82	2257.33
1588	93	61	333.358	17	1447	136.75	66.56	32.81	87.89	66.18	-10.22	17.26	1845.37
1589	82	65	302.451	21	3415	65.97	48.98	31.55	85.10	65.21	65.99	21.33	3216.40
1590	90	64	329.650	16	2036	117.24	65.54	32.66	88.89	66.31	-1.34	16.36	2357.86
1591	63	61	225.823	21	3837	65.80	56.82	40.28	63.25	63.19	-58.63	23.75	3351.17
1592	80	60	284.635	15	905	208.43	84.69	39.47	74.45	65.38	-152.79	17.21	374.41
1593	82	62	296.088	18	2030	110.29	66.72	36.02	79.76	65.38	-43.03	17.86	2536.34
1594	65	70	247.878	18	3649	79.09	63.69	39.44	69.29	64.16	-69.14	20.10	3241.36
1595	67	70	255.505	21	3945	61.95	51.04	34.89	76.39	64.36	21.62	22.52	3344.88
1596	103	63	374.602	21	873	164.17	58.04	28.22	95.01	66.45	60.23	20.41	850.03
1597	85	60	302.425	15	3185	100.06	68.81	36.67	79.68	65.51	-53.80	16.46	2887.01
1598	84	62	303.309	17	3861	76.70	58.78	34.73	80.80	65.20	0.41	19.01	3213.65
1599	62	70	236.437	21	2958	78.06	59.70	38.94	68.40	63.86	-52.73	21.91	3135.02
1600	83	68	312.419	21	3060	70.60	49.36	30.63	87.87	65.52	74.99	20.71	3116.49
1601	103	66	382.527	15	1697	128.49	60.16	27.97	99.23	67.14	66.03	16.51	1930.65
1602	74	69	280.378	21	1523	119.63	64.79	35.46	79.71	65.24	-33.54	19.17	2214.81
1603	64	60	227.708	17	1956	131.50	86.85	47.70	55.23	63.61	-239.29	17.09	2463.81
1604	67	60	238.382	21	2461	89.64	64.93	41.45	63.27	63.52	-98.82	21.72	2955.29
1605	77	68	289.834	14	1916	144.51	78.14	36.58	83.07	66.21	-86.74	14.18	1979.73
1606	76	69	287.956	19	1438	132.82	69.00	35.44	81.59	65.62	-47.07	17.67	1997.47

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1607	76	66	282.253	16	2989	98.86	68.86	37.43	77.46	65.27	-62.77	16.95	2909.13
1608	72	68	271.014	18	2261	105.63	68.59	37.79	75.78	65.05	-67.95	17.86	2703.39
1609	99	62	357.472	19	2801	79.61	51.35	29.23	92.85	66.15	84.63	19.10	2960.34
1610	84	64	307.674	21	1912	99.41	57.84	32.93	84.36	65.47	19.16	19.71	2574.91
1611	83	60	295.309	14	2582	122.75	76.03	37.94	78.91	65.72	-92.66	14.94	2489.50
1612	72	66	267.397	20	3337	73.08	56.30	36.02	75.53	64.50	-7.90	21.19	3203.01
1613	82	68	308.655	17	3461	81.37	58.74	33.29	84.90	65.64	16.70	18.22	3106.56
1614	71	61	254.499	20	1133	157.41	78.97	41.69	67.18	64.45	-153.09	18.65	1558.74
1615	93	62	335.807	18	2683	88.09	56.87	31.59	88.54	65.92	40.31	18.42	2880.57
1616	82	69	310.689	21	1648	109.79	58.81	32.02	87.12	65.79	25.21	19.17	2335.00
1617	65	64	238.081	15	3833	98.09	78.33	44.93	60.42	63.86	-176.66	17.42	3141.06
1618	90	68	338.767	18	2525	90.92	56.30	30.35	91.81	66.25	55.98	17.96	2802.42
1619	69	69	261.433	18	1646	131.30	75.37	39.26	73.95	65.10	-108.77	16.96	2203.00
1620	79	63	287.316	14	1270	180.82	82.96	38.23	78.83	65.87	-127.16	15.28	1107.33
1621	99	70	377.537	20	1692	105.07	51.83	26.68	99.42	66.82	108.12	18.60	2308.92
1622	98	67	366.429	15	2541	104.43	59.55	29.01	97.11	66.96	60.65	15.99	2564.59
1623	89	70	339.402	17	3980	71.78	52.54	29.89	92.03	66.14	75.48	18.40	3211.11
1624	103	67	385.124	21	1797	97.09	49.11	26.25	99.53	66.72	122.05	19.25	2441.91
1625	72	67	269.213	18	2579	97.21	66.90	38.02	74.53	64.85	-64.46	18.42	2874.32
1626	97	62	350.250	14	1485	151.70	68.48	31.62	91.83	66.67	-4.29	16.28	1516.58
1627	77	65	284.009	14	3837	99.46	72.12	38.16	77.21	65.41	-79.97	15.71	2997.16
1628	84	65	309.828	14	2531	120.88	71.93	34.96	85.60	66.26	-46.04	14.79	2446.15
1629	101	66	375.099	19	3849	63.04	44.98	26.80	97.33	66.38	133.82	19.66	3237.35
1630	67	65	247.125	20	1253	147.90	78.25	41.76	67.09	64.43	-149.91	18.45	1798.00
1631	71	61	254.499	18	3947	74.95	62.46	39.91	67.33	63.90	-70.68	20.88	3304.75
1632	67	67	250.518	16	1896	136.43	82.70	42.13	69.40	64.96	-163.05	15.40	2273.47
1633	91	62	328.585	16	3884	79.63	58.36	32.78	86.33	65.78	24.18	17.92	3150.54
1634	95	67	355.212	18	2590	88.02	54.10	29.12	94.38	66.43	77.00	18.04	2825.84
1635	65	62	234.704	16	870	222.29	98.52	46.72	60.01	64.43	-278.18	16.02	358.09
1636	62	69	234.911	20	3699	70.32	58.54	39.19	67.38	63.72	-50.99	22.22	3305.66
1637	88	65	324.581	19	1774	111.25	60.81	32.10	88.03	65.99	18.82	18.19	2364.85
1638	66	67	246.779	19	3089	83.56	64.18	39.84	68.10	64.04	-76.21	20.45	3126.78
1639	73	68	274.778	17	882	198.73	81.73	38.13	77.30	65.58	-126.95	17.16	562.87
1640	78	63	283.679	19	3828	69.25	55.06	35.05	77.96	64.72	7.77	20.86	3282.57

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1641	74	60	263.287	19	2751	89.15	64.84	39.33	69.73	64.24	-73.06	20.06	3002.90
1642	77	64	282.034	18	1766	122.55	70.93	37.46	77.23	65.27	-73.85	17.45	2319.50
1643	103	63	374.602	16	1777	120.53	59.93	28.99	96.45	66.85	56.22	16.89	2127.53
1644	65	62	234.704	17	789	226.95	97.09	46.47	59.61	64.30	-272.60	16.97	180.30
1645	96	67	358.951	14	2474	114.19	63.00	29.74	96.43	67.03	40.85	15.29	2402.81
1646	99	60	352.236	17	3538	77.01	54.16	30.65	90.40	66.03	61.04	18.44	3109.71
1647	91	65	335.647	19	1364	130.95	62.07	31.25	90.23	66.23	21.27	18.18	1873.20
1648	84	64	307.674	20	2097	97.00	58.84	33.29	84.02	65.49	12.85	19.26	2672.22
1649	100	66	371.385	19	2692	80.50	49.80	27.63	96.73	66.50	107.56	18.79	2907.49
1650	94	62	339.417	14	1814	138.73	69.45	32.56	90.33	66.60	-15.05	15.56	1898.54
1651	69	68	259.722	16	3930	85.81	68.08	39.67	70.90	64.54	-84.63	18.25	3207.43
1652	65	63	236.400	18	2642	100.33	73.92	43.81	60.98	63.69	-152.50	19.21	2938.79
1653	72	70	274.572	20	3851	65.30	52.13	33.95	79.75	64.78	29.34	21.39	3306.80
1654	91	61	326.189	21	1333	126.35	60.68	32.24	86.62	65.78	14.00	19.44	1934.61
1655	65	68	244.665	19	2527	96.07	68.48	40.66	67.50	64.15	-99.88	19.52	2917.04
1656	99	63	360.055	18	772	191.42	64.52	30.16	91.46	66.29	14.18	20.16	286.31
1657	98	63	356.418	16	2818	93.70	58.38	30.33	92.99	66.48	50.27	16.95	2799.92
1658	96	67	358.951	19	2515	85.14	51.81	28.47	95.13	66.41	91.30	18.63	2835.29
1659	94	70	358.469	17	883	179.33	63.74	28.95	95.40	66.73	33.46	18.80	618.12
1660	64	66	237.687	18	2928	93.29	70.89	42.59	63.26	63.81	-128.53	19.48	3048.09
1661	78	61	279.591	21	2743	79.21	56.14	35.39	76.99	64.63	-1.35	21.21	3036.51
1662	97	65	357.777	19	862	174.33	62.60	29.61	92.98	66.42	29.60	19.62	705.53
1663	89	64	325.988	18	2563	91.54	58.46	32.18	87.51	65.88	28.38	18.22	2830.93
1664	98	68	368.880	19	1277	132.34	57.41	28.00	97.20	66.77	71.80	18.37	1723.03
1665	75	64	274.709	20	1235	144.57	72.36	37.93	75.35	65.06	-88.20	18.55	1745.86
1666	95	60	338.004	18	3018	81.54	55.36	31.58	88.03	65.81	45.78	18.81	3009.79
1667	82	62	296.088	16	1284	160.81	76.86	36.96	80.14	65.77	-91.78	16.35	1470.16
1668	65	61	232.992	14	3280	118.86	88.27	47.64	57.05	63.93	-239.28	15.35	2870.27
1669	100	63	363.692	21	876	165.10	59.48	29.04	93.34	66.33	46.51	20.31	861.57
1670	81	66	300.822	17	2297	106.62	66.16	34.95	82.91	65.71	-27.93	17.07	2637.71
1671	82	70	312.707	16	977	183.55	73.21	33.37	87.50	66.32	-44.66	17.19	764.16
1672	69	63	250.947	16	1119	186.54	90.10	43.29	67.43	64.95	-207.36	15.61	1116.07
1673	86	62	310.531	20	1758	109.34	61.31	33.66	83.68	65.54	-0.72	19.01	2409.09
1674	83	68	312.419	21	2331	85.77	53.62	31.39	87.27	65.62	51.53	19.95	2831.82

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1675	64	64	234.418	14	2136	150.62	93.92	46.54	62.01	64.66	-247.80	13.49	2203.47
1676	98	65	361.466	15	3873	82.48	56.47	29.74	94.29	66.56	64.80	16.79	3055.72
1677	77	65	284.009	16	2110	121.86	73.61	37.63	78.41	65.54	-82.57	16.01	2432.55
1678	71	63	258.221	18	866	199.66	85.83	41.63	69.08	64.87	-179.58	17.65	623.45
1679	75	64	274.709	19	2003	108.56	67.61	37.75	75.12	64.91	-65.65	18.59	2586.64
1680	84	64	307.674	21	3146	69.71	49.92	31.54	85.49	65.29	62.86	21.05	3145.69
1681	82	61	293.929	21	1607	114.16	63.07	35.30	79.47	65.14	-25.98	19.64	2308.82
1682	100	63	363.692	20	730	191.37	62.17	29.44	92.21	66.26	28.82	20.93	215.53
1683	94	70	358.469	19	1575	116.10	56.57	28.38	96.49	66.70	73.12	18.01	2141.11
1684	103	66	382.527	19	2055	95.42	51.63	27.09	98.62	66.75	105.94	18.36	2564.92
1685	103	67	385.124	21	2802	70.88	43.92	25.63	99.77	66.57	148.70	19.89	2999.84
1686	84	63	305.501	19	2898	81.84	56.94	33.62	82.75	65.30	17.23	19.54	3022.67
1687	94	65	346.712	14	3385	97.93	62.64	31.27	92.50	66.63	27.17	15.56	2818.63
1688	68	63	247.310	21	2506	87.36	62.46	39.46	67.97	63.93	-68.14	21.40	2964.91
1689	90	65	331.958	16	2304	108.57	63.71	32.21	89.65	66.33	10.72	16.44	2542.65
1690	96	70	366.096	21	2367	80.93	47.37	26.78	97.80	66.49	123.85	19.53	2822.65
1691	68	61	243.746	17	3404	89.96	71.45	43.17	62.03	63.72	-136.15	19.39	3151.45
1692	62	67	231.822	16	3377	98.58	77.27	44.77	60.23	63.78	-172.15	17.94	3091.89
1693	77	64	282.034	15	1808	142.15	78.92	38.43	78.04	65.70	-110.37	15.04	2041.60
1694	97	61	347.696	21	3966	57.15	42.91	27.93	92.94	65.80	126.90	21.32	3307.92
1695	103	63	374.602	16	3079	87.11	55.14	28.85	95.91	66.66	77.80	17.17	2893.59
1696	77	60	273.961	14	3612	105.09	76.35	40.82	71.35	64.95	-123.95	15.79	2945.45
1697	77	62	278.033	17	3362	86.49	65.03	38.01	74.05	64.74	-57.11	18.73	3107.40
1698	95	67	355.212	17	2778	88.89	55.61	29.41	94.38	66.50	69.47	17.47	2850.86
1699	82	63	298.227	19	3165	77.68	56.48	34.13	81.15	65.12	13.24	19.92	3113.71
1700	63	60	224.150	14	3135	124.14	92.19	49.84	52.43	63.60	-276.87	15.23	2825.23
1701	68	60	241.940	19	2089	110.39	74.43	43.42	61.89	63.78	-151.44	19.31	2682.14
1702	70	68	263.486	16	3245	96.30	70.81	39.48	72.55	64.83	-91.73	17.28	3015.32
1703	85	69	322.056	14	3753	95.14	64.68	32.87	89.04	66.35	3.42	15.47	2942.40
1704	62	68	233.373	19	2410	100.73	71.79	42.63	63.25	63.83	-133.02	19.52	2871.40
1705	85	60	302.425	18	2584	93.80	62.54	35.37	80.14	65.26	-20.79	18.57	2858.96
1706	68	68	255.958	20	971	173.96	79.28	39.94	71.73	64.91	-136.71	18.25	1136.83
1707	98	64	358.953	14	867	198.23	68.03	30.79	91.30	66.43	-3.89	19.13	211.10
1708	98	66	363.958	21	2443	79.46	47.65	27.41	96.13	66.32	115.92	19.77	2862.91

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1709	73	69	276.589	18	2897	89.08	63.28	36.44	77.61	65.03	-34.42	18.66	2999.18
1710	74	66	274.825	18	2268	105.06	68.18	37.68	75.90	65.04	-65.46	17.97	2706.50
1711	95	64	347.964	16	2049	114.24	62.52	30.95	92.43	66.56	27.56	16.52	2362.90
1712	96	69	363.734	14	2728	107.52	61.20	28.99	98.01	67.13	55.97	15.25	2537.89
1713	70	70	266.945	18	1089	169.70	79.22	38.43	76.57	65.46	-117.47	16.79	1280.47
1714	82	60	291.751	17	2393	105.65	68.46	37.29	77.23	65.20	-61.63	17.54	2706.90
1715	92	64	336.976	18	2133	101.86	59.24	31.34	89.95	66.15	34.09	17.83	2584.62
1716	73	60	259.729	15	2805	114.80	79.72	42.68	67.17	64.63	-157.07	16.02	2762.39
1717	88	61	315.436	20	2906	76.97	53.29	32.30	84.81	65.36	43.48	20.24	3050.55
1718	81	65	298.762	20	3725	65.50	50.54	32.39	83.52	65.12	52.05	21.08	3271.14
1719	85	69	322.056	17	2857	90.45	59.39	31.99	88.74	66.07	28.54	17.46	2898.36
1720	103	64	377.266	16	1701	123.20	59.66	28.59	97.34	66.93	61.09	16.91	2049.98
1721	97	67	362.690	16	3283	84.61	55.23	29.06	95.47	66.62	75.62	17.11	2963.21
1722	81	64	296.685	16	744	220.93	79.78	36.71	79.11	65.60	-110.06	18.70	-104.67
1723	75	61	268.837	19	944	180.60	80.30	40.15	71.32	64.90	-143.35	18.30	983.91
1724	91	67	340.255	17	3198	82.66	55.78	30.57	91.31	66.19	56.56	17.85	3011.25
1725	86	69	325.845	18	2721	87.74	56.89	31.26	89.58	66.04	44.29	18.12	2896.87
1726	87	62	314.142	15	3727	89.60	64.22	34.79	83.21	65.70	-17.15	16.86	3047.41
1727	84	66	311.964	18	2985	84.02	57.92	32.98	85.18	65.62	21.90	18.63	3008.15
1728	63	65	232.371	17	985	198.50	94.53	45.84	61.66	64.49	-251.98	15.94	896.13
1729	101	66	375.099	19	3210	71.28	47.30	27.13	97.26	66.46	122.05	19.17	3084.39
1730	103	70	392.791	20	1578	108.87	50.86	25.70	101.58	67.00	121.45	18.65	2184.57
1731	79	64	289.360	14	3404	105.77	72.94	37.71	78.71	65.59	-78.12	15.33	2857.82
1732	84	69	318.267	19	3297	73.65	52.47	31.09	88.21	65.71	60.84	19.52	3135.18
1733	65	68	244.665	21	2175	96.64	65.00	39.49	68.89	64.13	-77.11	20.62	2796.00
1734	92	68	346.295	21	1734	96.64	65.00	39.49	68.89	64.13	-77.11	20.62	2796.00
1735	75	65	276.632	16	2510	110.94	72.81	38.54	75.78	65.24	-88.93	16.42	2693.73
1736	69	61	247.330	15	889	223.99	96.29	44.96	63.91	64.75	-251.78	16.02	260.81
1737	90	69	341.000	16	1667	129.59	64.39	30.61	93.71	66.74	23.34	16.26	2006.22
1738	74	70	282.199	20	1740	112.88	64.72	35.34	80.44	65.34	-30.38	18.64	2403.52
1739	82	67	306.604	14	2328	126.90	72.92	34.84	86.22	66.36	-48.51	14.55	2315.29
1740	75	64	274.709	15	2958	108.31	74.45	39.38	74.39	65.18	-102.58	15.97	2811.89
1741	78	69	295.533	19	1717	117.03	65.24	34.41	83.36	65.68	-21.50	17.90	2322.28
1742	75	68	282.306	16	3086	96.77	67.98	36.98	78.41	65.34	-54.65	16.95	2943.82

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	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)	BLI (D0-D300)	MLI (D300-D600)	LLI (D600-D900)	MR Subgrade (Mpa)	H Base (cm) (60-70)	MR Base (Mpa)	H HMA (cm) (14-21)	MR HMA (Mpa) (700-4000)
1743	80	60	284.635	20	2637	85.04	59.13	35.96	76.75	64.74	-17.15	20.37	2971.05
1744	70	61	250.915	20	1265	146.61	78.08	42.10	66.02	64.31	-153.25	18.73	1822.06
1745	91	64	333.313	15	2888	101.32	63.86	32.51	89.26	66.32	8.41	16.09	2745.95
1746	90	64	329.650	20	3257	69.97	49.52	30.24	89.20	65.68	79.40	20.27	3146.74
1747	79	69	299.322	21	2282	88.09	55.50	32.54	84.78	65.44	32.41	19.95	2814.50
1748	76	70	289.826	14	1980	141.80	77.41	36.12	84.19	66.31	-78.74	14.05	2037.38
1749	95	60	338.004	14	3898	91.94	63.50	33.13	87.71	66.16	4.05	16.12	2984.93
1750	68	68	255.958	15	2703	117.19	79.28	41.27	71.07	65.03	-139.60	15.33	2704.24
1751	84	62	303.309	17	3435	82.69	60.65	34.98	80.83	65.28	-8.74	18.56	3108.90
1752	86	67	321.560	15	3448	92.53	63.09	33.04	87.69	66.13	6.04	16.33	2955.19
1753	77	70	293.640	16	983	187.68	77.44	35.38	83.72	66.11	-80.49	16.66	765.86
1754	84	66	311.964	19	1043	160.33	68.62	33.54	85.52	65.95	-29.65	18.32	1246.20
1755	73	64	267.383	19	1483	133.83	73.81	39.18	73.07	64.92	-104.41	17.96	2077.23
1756	65	70	247.878	21	3067	75.07	57.17	37.19	72.37	64.19	-24.61	21.76	3158.16
1757	76	62	274.423	17	2748	98.87	69.13	38.89	73.16	64.80	-80.96	17.95	2893.03
1758	62	68	233.373	16	2505	118.39	82.57	44.75	62.39	64.23	-189.99	16.28	2728.39
1759	98	63	356.418	20	3410	66.24	46.37	28.20	93.71	66.03	112.75	20.19	3173.32
1760	63	63	229.126	16	897	220.42	100.04	47.48	58.74	64.38	-290.73	15.63	452.02
1761	83	68	312.419	18	3344	77.80	55.83	32.39	86.06	65.63	35.73	18.92	3117.36
1762	93	67	347.734	19	2973	76.89	50.90	29.11	93.10	66.16	87.84	19.08	3022.42
1763	79	66	293.394	15	1951	133.65	75.03	36.46	82.16	65.99	-74.87	15.10	2173.91
1764	79	66	293.394	19	1840	112.24	65.17	35.17	81.28	65.46	-29.34	18.20	2440.66
1765	87	66	323.105	16	3664	82.79	59.22	32.64	87.10	65.90	22.94	17.54	3095.48
1766	73	69	276.589	15	3148	103.67	72.07	37.95	77.57	65.43	-78.29	15.87	2881.07
1767	68	65	250.813	16	1008	198.03	90.55	42.77	68.61	65.06	-204.91	15.75	819.46
1768	95	61	340.527	19	2080	98.77	57.31	31.21	89.33	66.00	41.28	18.61	2603.84
1769	87	70	331.775	20	2568	82.06	51.96	29.72	91.58	66.03	76.64	19.32	2905.12
1770	100	60	355.794	16	1095	163.70	66.53	31.38	90.63	66.40	0.80	18.04	1114.18
1771	65	63	236.400	18	2986	92.48	71.33	43.40	61.10	63.60	-139.18	19.81	3072.48
1772	74	63	269.132	18	1244	156.07	78.69	39.73	73.08	65.09	-128.57	17.17	1620.50
1773	79	63	287.316	21	991	161.58	70.82	36.38	78.12	65.23	-69.60	19.39	1240.82
1774	91	64	333.313	20	3559	65.54	47.80	29.68	90.11	65.71	91.52	20.50	3218.62
1775	78	67	291.648	20	1842	107.62	62.74	34.70	81.49	65.37	-16.44	18.89	2490.67
1776	63	61	225.823	21	2159	99.91	70.09	43.94	58.23	63.19	-144.20	21.47	2810.10

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1777	95	62	343.028	20	2477	83.72	52.30	30.08	90.59	65.93	71.07	19.52	2864.57
1778	99	66	367.671	15	2585	103.35	59.42	29.09	96.85	66.93	60.27	16.06	2588.76
1779	77	63	280.043	19	3423	75.09	57.61	35.88	76.65	64.68	-10.03	20.47	3196.41
1780	100	64	366.278	21	1167	134.04	56.20	28.43	95.04	66.46	69.34	19.52	1624.21
1781	90	64	329.650	19	3230	74.13	52.15	30.91	88.53	65.73	63.71	19.59	3113.34
1782	63	65	232.371	18	2607	101.64	74.69	44.09	60.52	63.68	-158.13	19.08	2924.97
1783	62	64	227.092	19	2430	101.35	73.79	44.57	58.51	63.41	-161.52	19.95	2892.22
1784	100	67	373.907	21	2326	81.59	47.20	26.67	97.99	66.50	125.45	19.59	2799.95
1785	91	65	335.647	18	3152	79.12	54.23	30.85	89.70	65.95	57.97	18.71	3049.61
1786	96	70	366.096	20	2640	78.10	47.98	27.04	97.55	66.50	119.83	19.19	2919.41
1787	66	62	238.314	20	1139	160.01	82.88	44.15	61.92	64.05	-193.15	18.55	1583.88
1788	85	64	311.336	20	2648	82.24	54.80	32.43	85.04	65.45	36.86	19.85	2955.09
1789	77	65	284.009	16	1410	154.59	78.11	37.71	78.99	65.73	-102.53	15.80	1676.41
1790	102	69	386.467	15	2858	95.33	55.64	27.17	100.87	67.21	94.77	16.13	2710.72
1791	94	66	349.102	21	2074	90.33	51.29	28.80	93.48	66.18	87.47	19.55	2665.33
1792	66	63	240.036	20	2262	99.40	69.17	41.92	63.88	63.77	-117.52	20.36	2826.57
1793	102	62	368.304	14	1990	127.11	63.95	30.00	95.45	66.92	32.34	15.86	2070.51
1794	82	68	308.655	14	901	208.20	77.52	34.54	85.11	66.20	-75.35	17.38	208.48
1795	68	60	241.940	20	2709	87.62	65.58	41.50	63.64	63.60	-100.62	21.25	3034.47
1796	78	68	293.598	16	3017	96.66	66.27	35.60	81.58	65.60	-33.71	16.83	2909.37
1797	97	70	369.910	20	1415	119.57	54.48	27.32	98.23	66.77	90.36	18.61	1987.03
1798	94	65	346.712	18	745	198.30	66.54	30.87	90.12	66.23	-1.07	20.05	153.98
1799	89	64	325.988	15	2459	112.17	66.75	33.24	88.17	66.31	-10.21	15.77	2533.42
1800	89	68	335.003	14	1888	136.08	68.66	31.62	92.88	66.85	-1.16	15.08	1960.75
1801	78	62	281.644	20	1278	140.29	70.87	37.43	76.22	65.10	-77.42	18.70	1820.78
1802	63	61	225.823	14	2292	147.68	96.83	49.29	55.58	64.10	-287.52	13.79	2342.68
1803	102	60	362.909	19	1205	138.94	60.19	29.98	92.47	66.36	39.45	18.81	1603.73
1804	90	67	336.516	19	965	164.62	64.77	30.98	90.71	66.31	9.87	18.79	1031.91
1805	69	61	247.330	20	3411	73.91	59.57	39.35	67.32	63.75	-56.36	22.02	3239.43
1806	66	60	234.824	16	851	225.45	99.40	47.38	58.35	64.28	-289.06	16.26	289.74
1807	92	62	332.196	19	3354	72.20	51.60	30.93	88.24	65.67	65.31	19.79	3147.22
1808	98	66	363.958	16	2936	90.45	56.44	29.16	95.57	66.67	70.00	16.91	2841.47
1809	103	70	392.791	18	3523	69.42	46.26	25.73	101.01	66.83	141.89	18.53	3123.47
1810	87	69	329.633	17	2685	93.24	59.10	31.32	90.44	66.23	36.67	17.29	2821.45

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1811	89	61	319.020	14	2713	115.26	70.40	34.89	85.20	66.15	-40.01	15.21	2549.64
1812	72	62	259.979	17	2360	111.05	74.66	41.21	68.75	64.56	-125.68	17.48	2710.64
1813	98	63	356.418	18	2980	80.51	52.86	29.53	92.81	66.22	76.98	18.54	2984.35
1814	66	62	238.314	21	2544	87.39	63.87	40.90	64.43	63.60	-89.01	21.73	2989.72
1815	85	68	319.947	18	1368	137.55	66.00	32.44	88.63	66.23	-4.54	17.35	1809.22
1816	77	65	284.009	21	2653	80.52	55.55	34.34	79.76	64.91	12.44	20.81	2996.90
1817	69	61	247.330	17	3129	94.52	72.42	42.85	63.34	63.90	-135.83	18.90	3064.28
1818	62	65	228.682	19	1842	121.89	79.02	44.88	59.58	63.72	-183.30	18.66	2499.96
1819	101	70	385.164	16	2594	94.93	54.39	26.93	100.85	67.14	100.93	16.63	2681.03
1820	96	61	344.112	17	1792	118.51	62.83	31.71	90.04	66.29	16.67	17.24	2241.13
1821	91	69	344.789	17	2949	86.45	55.92	29.91	93.19	66.40	63.25	17.52	2921.66
1822	94	66	349.102	15	847	196.87	68.50	30.96	91.15	66.44	-6.82	18.90	263.19
1823	97	68	365.116	17	1379	135.34	60.45	28.65	96.92	66.88	55.56	17.36	1737.27
1824	90	68	338.767	21	2927	71.24	47.35	28.60	92.80	65.97	104.31	20.30	3061.58
1825	77	66	285.967	15	2830	109.15	72.26	37.40	79.04	65.58	-73.44	15.71	2744.00
1826	82	61	293.929	17	1775	126.69	71.82	37.03	78.85	65.48	-71.92	16.89	2243.14
1827	72	69	272.800	19	2391	96.24	64.13	36.67	77.01	64.99	-40.99	18.86	2825.19
1828	81	69	306.900	17	1106	165.62	72.09	33.88	86.32	66.20	-43.79	16.98	1217.22
1829	73	69	276.589	15	960	203.17	83.99	37.97	78.93	65.86	-131.81	16.05	522.80
1830	81	62	292.477	14	3885	97.81	70.93	37.75	77.82	65.42	-71.64	15.95	3007.64
1831	98	60	348.678	17	2169	104.95	60.43	31.40	90.32	66.25	29.63	17.42	2539.92
1832	72	67	269.213	14	915	220.63	88.62	39.76	75.27	65.63	-169.10	16.05	169.28
1833	72	62	259.979	18	2931	90.78	67.24	40.03	68.98	64.27	-87.95	19.36	3031.56
1834	80	68	301.127	16	3767	83.45	61.72	34.52	82.86	65.56	-6.12	17.64	3134.26
1835	77	65	284.009	19	824	193.73	77.09	37.17	77.66	65.40	-102.46	18.69	552.37
1836	91	70	347.029	14	1375	157.76	67.57	30.12	95.49	67.01	14.62	16.03	1340.21
1837	96	62	346.639	16	3897	77.87	55.97	31.14	89.97	66.07	50.35	17.86	3142.34
1838	78	70	297.453	16	1919	126.10	70.90	34.87	84.92	66.11	-43.54	15.67	2264.30
1839	98	67	366.429	18	2262	94.99	54.28	28.34	96.46	66.65	84.29	17.81	2650.69
1840	80	60	284.635	14	861	222.75	86.48	39.80	73.69	65.34	-164.61	17.45	31.97
1841	93	69	352.367	14	1502	149.66	66.46	29.86	96.08	67.05	22.43	15.89	1531.68
1842	79	64	289.360	21	2417	85.67	56.60	34.24	80.41	65.01	9.78	20.49	2892.23
1843	75	67	280.430	19	1955	109.34	66.40	36.44	78.33	65.21	-47.03	18.30	2544.06
1844	100	70	381.350	17	2780	86.33	52.10	26.97	99.82	66.94	108.27	17.36	2838.68

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1845	64	64	234.418	20	3775	69.62	58.89	40.00	65.16	63.49	-61.43	22.62	3323.72
1846	82	62	296.088	20	2417	69.62	58.89	40.00	65.16	63.49	-61.43	22.62	3323.72
1847	97	64	355.290	21	2030	91.36	51.17	28.65	93.80	66.21	89.34	19.57	2634.76
1848	96	64	351.627	17	3379	79.07	54.15	30.06	92.08	66.21	67.66	18.13	3061.96
1849	95	62	343.028	16	2660	98.59	61.06	31.72	90.11	66.28	25.65	16.87	2735.26
1850	64	70	244.064	19	3515	76.49	61.50	39.13	69.03	64.03	-59.24	20.92	3240.62
1851	94	66	349.102	16	1561	133.60	64.12	30.50	93.64	66.71	24.42	16.61	1886.04
1852	101	65	372.531	19	999	155.73	59.36	28.38	95.85	66.64	56.89	19.20	1131.34
1853	76	66	282.253	14	1300	179.79	83.34	38.06	79.65	65.98	-125.86	14.86	1152.88
1854	79	65	291.386	17	1913	120.99	70.51	36.39	80.33	65.60	-59.59	16.74	2366.79
1855	90	67	336.516	21	3019	69.85	47.24	28.82	92.14	65.89	102.27	20.44	3092.70
1856	83	68	312.419	14	3732	96.78	66.56	34.09	86.37	66.15	-16.38	15.48	2942.91
1857	80	66	297.108	15	3415	96.19	67.52	35.94	81.34	65.64	-40.87	16.35	2961.69
1858	85	66	315.678	15	3331	95.22	64.66	33.86	85.99	66.01	-8.42	16.27	2922.10
1859	75	69	284.167	17	2071	115.95	70.10	36.40	80.35	65.60	-57.51	16.63	2493.05
1860	67	64	245.406	21	1134	153.69	77.87	41.90	66.07	64.28	-151.95	19.18	1619.61
1861	75	70	286.013	19	2959	81.97	58.26	34.44	81.05	65.18	4.00	19.45	3052.30
1862	84	67	314.082	18	1109	158.46	69.24	33.32	86.69	66.12	-28.16	17.66	1324.82
1863	72	67	269.213	20	2980	78.93	58.05	36.09	76.05	64.63	-14.55	20.66	3101.01
1864	83	68	312.419	19	3758	67.78	51.22	31.43	86.74	65.50	61.30	20.09	3248.60
1865	82	68	308.655	18	2063	107.08	63.24	33.40	85.81	65.88	-2.01	17.54	2546.60
1866	100	69	378.889	21	3909	56.04	39.92	25.00	100.12	66.45	169.91	20.63	3282.44
1867	95	66	352.816	21	1167	135.35	57.62	29.14	93.67	66.37	56.90	19.36	1626.30
1868	81	61	290.344	15	1960	134.46	76.91	38.09	78.29	65.65	-99.40	15.37	2190.51
1869	78	62	281.644	17	3830	79.14	62.12	37.24	75.04	64.72	-38.77	19.26	3221.83
1870	101	70	385.164	17	1725	115.45	55.80	26.79	100.92	67.15	94.29	17.15	2159.38
1871	91	67	340.255	14	3533	96.26	62.81	31.48	92.07	66.59	24.60	15.52	2867.88
1872	87	63	316.412	16	1582	138.38	70.50	34.30	85.68	66.13	-38.51	16.31	1915.76
1873	103	65	379.908	17	3966	69.37	48.99	27.58	97.05	66.53	112.79	18.43	3191.01
1874	96	68	361.352	15	3241	91.32	57.87	29.25	96.13	66.81	65.07	16.22	2867.12
1875	102	61	365.619	17	813	188.36	64.89	30.34	91.32	66.31	11.78	19.88	382.25
1876	70	61	250.915	15	3717	98.24	76.62	43.52	63.67	64.14	-155.43	17.29	3099.85
1877	86	64	314.999	17	2873	91.22	61.19	33.61	84.85	65.72	4.35	17.77	2913.36
1878	81	62	292.477	21	2986	73.53	52.82	33.50	81.06	64.93	31.08	21.21	3108.97

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1879	65	64	238.081	17	3063	96.86	74.23	43.74	61.60	63.79	-151.66	18.73	3048.43
1880	92	64	336.976	16	3006	92.09	60.15	31.84	89.57	66.19	28.03	17.02	2882.45
1881	62	68	233.373	18	1020	185.95	90.19	44.46	63.94	64.57	-221.48	16.44	1115.36
1882	86	60	305.982	17	1964	117.31	68.48	35.77	81.19	65.60	-46.14	17.15	2407.52
1883	63	64	230.755	19	1576	135.01	81.75	45.07	59.90	63.86	-195.55	18.17	2227.50
1884	83	67	310.343	16	3893	80.89	60.01	33.68	84.52	65.66	8.90	17.77	3159.01
1885	96	64	351.627	18	3474	73.11	51.24	29.53	92.25	66.10	82.81	18.95	3133.25
1886	88	70	335.588	21	724	193.28	64.21	30.20	91.03	66.22	14.06	20.50	222.31
1887	67	60	238.382	15	2358	131.68	88.36	46.57	59.61	64.17	-229.63	15.35	2533.03
1888	73	65	269.255	18	2864	90.86	65.43	38.18	73.51	64.68	-61.17	18.94	2996.41
1889	94	66	349.102	19	1467	123.06	59.18	29.85	93.20	66.44	47.24	18.17	2014.52
1890	90	64	329.650	18	3640	72.46	53.04	31.28	88.05	65.73	57.38	19.26	3185.76
1891	63	66	233.973	20	1672	123.28	76.03	43.20	62.78	63.92	-155.85	19.13	2382.54
1892	96	64	351.627	19	1854	105.24	56.70	29.83	92.79	66.33	57.90	18.32	2424.71
1893	78	66	289.681	20	3873	64.24	50.74	32.97	81.95	64.96	44.88	21.33	3303.51
1894	74	67	276.691	19	3447	74.77	57.33	35.55	77.51	64.76	-5.28	20.35	3201.05
1895	63	65	232.371	19	3579	76.98	63.91	41.69	62.66	63.44	-96.19	21.61	3269.02
1896	103	61	369.203	20	1840	100.43	53.19	28.63	94.57	66.36	82.34	19.04	2453.86
1897	93	60	330.888	15	3691	88.41	62.17	33.48	86.02	65.91	4.06	16.91	3029.73
1898	71	61	254.499	15	3138	108.19	78.86	43.17	65.53	64.42	-159.24	16.44	2908.00
1899	96	68	361.352	14	2023	126.61	63.69	29.31	97.43	67.13	41.39	15.42	2087.22
1900	91	64	333.313	17	2745	91.93	59.13	31.86	88.88	66.06	30.42	17.61	2849.78
1901	99	68	372.644	14	3135	98.67	59.03	28.51	98.67	67.12	69.29	15.49	2715.98
1902	83	63	301.864	17	762	210.48	77.27	36.08	80.10	65.62	-93.70	18.90	108.61
1903	68	69	257.645	14	2696	126.37	82.38	41.06	73.08	65.38	-147.09	14.04	2562.54
1904	79	60	281.077	15	1360	167.41	82.91	39.70	75.11	65.50	-141.58	15.53	1455.54
1905	93	66	345.388	15	882	193.34	69.08	31.25	90.83	66.45	-10.96	18.56	377.95
1906	68	67	254.257	15	2533	122.18	80.93	41.81	70.14	64.99	-151.42	15.16	2614.50
1907	94	64	344.301	14	3382	98.37	63.21	31.70	91.52	66.54	20.46	15.61	2819.34
1908	69	64	252.732	17	1500	148.57	82.98	42.27	68.42	64.82	-168.24	16.20	1940.96
1909	72	69	272.800	18	2912	89.19	63.83	36.92	76.48	64.93	-41.60	18.74	3007.53
1910	75	67	280.430	19	3411	74.99	57.00	35.16	78.48	64.86	0.18	20.25	3189.81
1911	94	65	346.712	21	1894	96.58	52.87	29.28	92.62	66.14	76.25	19.47	2538.81
1912	95	70	362.283	19	2438	86.50	51.41	27.80	96.85	66.57	100.04	18.42	2794.48

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1913	85	67	317.821	17	3005	88.16	59.64	32.71	86.82	65.87	19.80	17.73	2958.94
1914	82	65	302.451	19	1000	166.69	71.11	34.82	82.77	65.75	-52.81	18.35	1135.42
1915	78	63	283.679	20	1543	122.93	67.52	36.70	77.41	65.12	-56.13	18.82	2199.13
1916	90	62	324.974	16	888	191.94	72.94	33.94	85.08	66.01	-52.73	18.38	509.35
1917	66	67	246.779	17	1069	184.22	88.23	42.60	68.52	64.98	-193.78	15.97	1125.69
1918	71	60	252.613	20	2413	93.80	66.02	40.40	66.91	63.97	-89.97	20.56	2896.44
1919	100	69	378.889	21	3777	57.44	40.38	25.09	100.04	66.46	167.34	20.54	3258.24
1920	89	69	337.211	16	2180	111.17	62.69	30.94	92.75	66.61	27.95	16.20	2455.23
1921	85	62	306.920	21	3034	71.71	50.87	32.05	84.39	65.21	53.86	21.05	3115.00
1922	73	60	259.729	19	3135	81.89	62.89	39.33	68.96	64.08	-66.42	20.67	3135.97
1923	74	70	282.199	16	3395	91.09	66.14	36.50	79.08	65.34	-42.89	17.22	3044.99
1924	103	66	382.527	16	2743	92.34	54.82	27.77	98.70	66.93	90.36	16.86	2754.41
1925	98	70	373.723	18	1622	116.51	56.07	27.43	99.07	66.96	85.69	17.58	2128.22
1926	92	60	327.330	21	2161	89.78	54.11	31.50	87.00	65.61	48.04	20.04	2735.21
1927	85	62	306.920	20	1003	161.32	69.01	34.67	82.25	65.60	-44.42	19.06	1212.74
1928	97	60	345.120	16	767	204.60	70.13	32.65	86.53	65.99	-33.01	19.85	75.82
1929	65	62	234.704	17	3981	82.12	69.71	43.82	59.43	63.37	-137.70	20.34	3296.97
1930	85	65	313.516	17	3500	80.53	58.38	33.31	84.67	65.59	17.57	18.39	3116.76
1931	77	64	282.034	19	2725	87.48	61.19	36.17	77.24	64.89	-25.48	19.53	2973.33
1932	70	70	266.945	21	3526	66.47	51.84	34.22	78.67	64.64	26.57	21.85	3258.83
1933	92	69	348.578	17	1891	113.47	60.16	29.75	94.69	66.69	48.14	16.86	2320.34
1934	86	61	308.267	17	2636	97.32	64.01	35.03	81.89	65.52	-21.27	17.71	2819.32
1935	98	66	363.958	21	1823	97.77	51.27	27.85	95.93	66.43	97.20	19.33	2472.77
1936	102	68	383.936	18	3698	67.87	46.73	26.51	99.01	66.64	131.72	18.77	3170.23
1937	98	69	371.311	19	1934	100.17	53.07	27.47	98.07	66.75	96.62	18.17	2477.12
1938	73	64	267.383	17	2280	112.11	73.17	39.68	72.45	64.89	-103.78	17.20	2653.97
1939	92	63	334.596	19	1079	153.39	64.90	31.90	88.65	66.13	1.09	18.66	1335.16
1940	63	69	238.700	20	1261	148.51	79.44	42.23	66.35	64.41	-158.72	18.19	1815.62
1941	88	65	324.581	17	1782	121.28	65.23	32.74	88.21	66.20	-2.43	16.88	2232.08
1942	96	63	349.144	16	2508	101.30	60.60	31.00	91.86	66.44	34.83	16.75	2655.33
1943	101	60	359.351	20	2229	88.87	52.18	29.29	92.62	66.13	79.66	19.33	2729.77
1944	96	62	346.639	17	1431	135.51	64.20	31.37	90.91	66.40	13.35	17.38	1820.18
1945	72	67	269.213	17	3144	90.96	66.82	38.29	74.03	64.81	-66.06	18.24	3041.83
1946	87	66	323.105	14	3162	104.86	66.99	33.34	88.45	66.37	-10.34	15.20	2745.16

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1947	80	67	299.126	21	802	185.46	70.26	34.35	82.55	65.62	-49.33	19.78	587.04
1948	78	65	287.697	19	3645	71.19	55.13	34.46	79.69	64.91	14.22	20.49	3241.07
1949	89	66	330.533	17	3530	78.51	55.85	31.48	88.82	65.93	46.43	18.24	3114.12
1950	81	63	294.590	14	1205	183.61	81.31	37.33	80.40	65.95	-112.81	15.71	985.38
1951	100	67	373.907	21	1488	111.94	52.32	27.19	97.75	66.63	99.18	19.20	2125.17
1952	85	62	306.920	16	1258	160.32	74.59	35.68	82.68	65.94	-70.53	16.60	1424.40
1953	86	69	325.845	15	1741	135.78	68.73	32.18	91.23	66.67	-7.98	15.46	1961.87
1954	76	63	276.406	17	3884	78.85	62.53	37.65	74.06	64.63	-44.66	19.33	3237.57
1955	103	70	392.791	19	1835	101.72	51.08	25.87	101.65	67.04	120.57	18.15	2389.98
1956	81	66	300.822	15	1396	159.37	76.19	35.56	84.09	66.18	-72.95	15.53	1510.85
1957	93	69	352.367	15	1189	161.99	66.05	29.81	95.24	66.89	21.24	16.95	1172.27
1958	88	65	324.581	16	1991	119.47	66.41	32.97	88.35	66.28	-7.78	16.27	2321.34
1959	85	70	324.148	19	1776	110.87	60.05	31.25	90.18	66.19	31.03	17.93	2362.96
1960	81	60	288.193	17	1693	131.52	73.84	38.04	76.72	65.33	-90.29	16.88	2163.00
1961	82	67	306.604	14	3310	104.51	69.26	34.93	85.01	66.11	-35.11	15.14	2809.03
1962	102	62	368.304	21	1925	93.98	50.73	28.08	95.12	66.32	96.69	19.56	2555.46
1963	74	65	272.943	15	1991	136.43	79.87	39.45	75.85	65.53	-123.70	14.90	2218.29
1964	89	68	335.003	14	1233	170.01	70.71	31.68	91.93	66.73	-14.91	16.33	1082.94
1965	101	69	382.678	15	3877	80.26	53.30	27.45	99.46	66.98	100.85	16.63	3043.65
1966	101	69	382.678	17	3802	70.84	48.70	26.84	99.04	66.73	122.06	18.11	3152.31
1967	97	62	350.250	14	3175	101.27	63.33	31.56	91.84	66.58	21.16	15.63	2744.87
1968	80	70	305.080	16	1955	123.44	69.19	34.01	86.65	66.23	-28.26	15.78	2292.19
1969	74	64	271.046	18	1417	143.15	76.31	39.13	74.22	65.14	-112.33	17.15	1907.16
1970	83	66	308.250	20	3539	67.24	50.23	31.55	85.80	65.35	62.51	20.71	3225.91
1971	87	70	331.775	17	2889	88.77	57.73	30.91	91.11	66.25	46.11	17.44	2904.45
1972	98	67	366.429	21	3724	58.66	41.68	26.13	97.59	66.25	151.28	20.70	3252.74
1973	96	63	349.144	16	2158	110.74	62.06	31.04	92.08	66.51	28.46	16.61	2442.80
1974	90	69	341.000	14	945	193.55	70.06	31.07	91.98	66.63	-11.35	17.87	410.58
1975	86	65	317.205	18	2189	102.28	61.65	33.02	86.28	65.87	7.71	17.81	2630.39
1976	64	67	239.301	18	3099	89.54	69.18	41.93	64.44	63.87	-115.39	19.67	3103.03
1977	64	64	234.418	17	3538	88.64	71.97	43.91	60.17	63.54	-146.04	19.58	3194.24
1978	76	62	274.423	17	3101	91.53	67.08	38.66	73.03	64.71	-71.29	18.42	3028.76
1979	100	63	363.692	21	2051	90.14	50.30	28.16	94.84	66.28	97.71	19.60	2646.14
1980	83	64	304.011	15	1131	178.43	77.30	35.76	83.02	66.05	-82.57	16.39	1013.34

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1981	64	61	229.408	14	971	231.99	104.97	48.63	57.58	64.46	-319.75	14.53	285.57
1982	97	65	357.777	14	3122	100.98	61.72	30.29	94.75	66.82	40.56	15.53	2717.14
1983	83	70	316.521	19	3299	73.69	52.53	31.11	88.18	65.71	60.44	19.50	3135.87
1984	98	60	348.678	17	1708	121.52	62.79	31.53	90.39	66.32	18.24	17.33	2158.50
1985	63	64	230.755	21	734	213.01	89.23	45.13	59.67	63.95	-233.29	19.41	310.77
1986	69	67	257.996	15	3825	94.94	73.18	40.90	69.75	64.65	-114.49	16.95	3114.08
1987	71	64	260.057	17	3193	91.39	68.84	40.16	69.54	64.41	-93.73	18.59	3069.92
1988	75	63	272.769	20	2712	84.26	59.89	36.71	74.97	64.58	-27.90	20.47	3007.19
1989	63	63	229.126	20	1273	150.00	83.20	45.40	58.89	63.77	-206.66	18.65	1854.02
1990	74	60	263.287	18	2257	107.51	71.78	40.63	68.96	64.44	-110.57	18.42	2716.08
1991	62	62	223.871	17	3879	84.90	72.57	45.85	54.83	62.99	-169.97	20.51	3286.71
1992	80	62	288.866	16	1172	171.35	79.33	37.91	78.13	65.64	-111.89	16.44	1247.32
1993	72	61	258.084	15	3363	103.22	76.81	42.50	66.61	64.46	-144.83	16.73	2985.03
1994	65	63	236.400	19	3246	82.10	65.70	41.97	62.61	63.51	-105.29	21.16	3185.24
1995	83	67	310.343	17	907	186.53	73.24	34.03	85.32	66.07	-53.33	17.90	670.18
1996	95	67	355.212	17	856	183.74	65.03	29.83	93.24	66.54	18.60	19.07	525.68
1997	89	61	319.020	16	2346	109.51	66.49	34.36	84.74	65.92	-22.36	16.62	2578.97
1998	66	69	250.067	19	800	205.67	85.41	41.10	70.08	64.94	-173.54	17.89	449.18
1999	63	62	227.482	17	2556	110.82	81.03	46.66	56.04	63.47	-207.22	18.14	2851.49
2000	92	69	348.578	20	3426	66.17	46.30	27.93	94.50	66.12	116.19	20.02	3177.49
2001	95	70	362.283	20	3507	64.31	44.65	26.78	97.11	66.33	134.61	19.92	3190.21