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NATIONAL IRANIAN OIL REFINING & DISTRIBUTION COMPANY
NATIONAL IRANIAN OIL ENGINEERING
& CONSTRUCTION COMPANY

NIOEC SP

NIOEC SPECIFICATION FOR GEOMETRIC DESIGN OF ROADS AND ASPHALTIC CONCRETE PAVING

FIRST EDITION

JULY, 2005

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IN THE NAME OF GOD**FOREWORD**

By their very nature, technical standard specifications are continuously subject to modifications and revisions. To strengthen their merit and usefulness, continuous improvements, addendum, deletion of disparate information and consequently provision of updated revisions are to be made in order to ascertain that such standard specifications meet the current requirements, inclusive of Iranian Petroleum Standards (IPS) and the recognized and acceptable national and international standards, as well as the optimal codes and practices based on the accumulated in-house know-how and plant knowledge and experiences.

However, in reality, due to several reasons, not to mention the complexity of the matter, the ultimate goal of continuous direct embedment of the required changes on the relevant standard specifications may be far reaching. Therefore, in the interim periods between the officially issued revisions, the required changes will appear in other documents related to the engineering and design work of the on going projects.

In response to the initiative of the Design Division of the Engineering and Construction Directorate, and considering that the task of the execution of several important and mega projects for the realization of the new oil refineries, pipelines and oil terminals as well as improvements of the existing facilities, has been assigned to NIOEC, it was decided to update the NIOEC Specifications and to issue new official revisions.

The Design Division of the Engineering and Construction Directorate was itself entrusted to carry out this important task, and as such by forming several special technical committees, working in close co-operation and cohesion and sharing their expertise and knowledge, the updated and revised NIOEC Specifications were successfully prepared and complied.

These Specifications are intended to be used for Oil Refineries, Distribution Depots, Oil Terminals, Pipelines and Pump Stations within NIOEC's projects, and have been proven to be of high value for such purposes. It must however be appreciated that these Specifications represent the minimum requirements and should in no way be interpreted as a restriction on the use of better procedures, engineering and design practices or materials.

We encourage and highly appreciate the users and other clear sighted and experts to send their comments on the Specifications to the Design Deputy of the Engineering and Construction Director of NIOEC for evaluation and consideration.

S. R. KASAEIZADEH

EXECUTIVE DIRECTOR

REVISION INDEX

REV. PAGE	1	2	3	4	5	REV. PAGE	1	2	3	4	5	REV. PAGE	1	2	3	4	5	REV. PAGE	1	2	3	4	5
1						26						51						76					
2						27						52						77					
3						28						53						78					
4						29						54						79					
5						30						55						80					
6						31						56						81					
7						32						57						82					
8						33						58						83					
9						34						59						84					
10						35						60						85					
11						36						61						86					
12						37						62						87					
13						38						63						88					
14						39						64						89					
15						40						65						90					
16						41						66						91					
17						42						67						92					
18						43						68						93					
19						44						69						94					
20						45						70						95					
21						46						71						96					
22						47						72						97					
23						48						73						98					
24						49						74						99					
25						50						75						100					

NOTES:

- 1) THIS SHEET IS A RECORD OF ALL REVISIONS TO THIS SPECIFICATION.
- 2) REMARKS RELATED TO EACH REVISION SHOW A BRIEF DESCRIPTION. THESE REMARKS SHALL BE INTERPRETED IN CONJUNCTION WITH THE REVISED TEXT MARKED BY REVISION NUMBERS.
- 3) WHEN APPROVED EACH REVISION SHALL BE CONSIDERED AS A PART OF THE ORIGINAL DOCUMENT.
- 4) NUMBER OF PAGES EXCLUDES THIS SHEET AND THE COVER SHEET.

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0	JULY, 2005	S.M.J.SHEYDI		M.R.FARZAM	M.A.A.SAJEDI
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CONTENTS:	PAGE NO.
1. SCOPE	4
2. REFERENCES.....	4
3. UNITS	4
4. TYPES OF ROADS AND STREETS	5
4.1 CLASSIFICATION OF ROADS AND STREETS.....	5
5. PRELIMINARY CONSIDERATIONS.....	5
5.1 GENERAL FACTORS.....	5
5.2 SPECIFIC REQUIREMENTS.....	6
6. DESIGN SPEED	6
7. DESIGN VEHICLES.....	6
7.1 MINIMUM TURNING PATHS OF DESIGN VEHICLES.....	6
8. ELEMENTS OF DESIGN	7
8.1 DESIGN RELATED TO VERTICAL ALIGNMENT.....	7
8.2 DESIGN RELATED TO HORIZONTAL ALIGNMENT	9
9. CROSS SECTION ELEMENTS.....	9
9.1 PAVEMENT.....	9
9.2 ROAD AND STREET WIDTH.....	10
9.3 EROSION CONTROL.....	11
9.4 DRAINAGE.....	11
9.5 SIDE SLOPES.....	11
10. TRAFFIC CONTROL AND LIGHTING	12
10.1 LIGHTING.....	12
10.2 POLE LOCATIONS IN OPEN AREAS.....	12
10.3 POLE LOCATION IN BUILT-UP AREAS.....	12
10.4 MOUNTING HEIGHTS	13
10.5 GUARD RAILS.....	13
11. SIDEWALKS	13

12. CONSTRUCTION OF ASPHALTIC CONCRETE PAVED ROADS, DRIVE WAYS AND PARKING AREAS	14
12.1 SUBGRADE AND SUB-BASE	14
12.2 BASE COURSE	14
12.3 ASPHALTIC CONCRETE PAVING	15
13. TESTING RESPONSIBILITIES	18

1. SCOPE

NIOEC specifications cover the general requirements for detailed engineering, procurements, testing inspection & construction of refinery/ oil plant, distribution depots, pump stations and pipelines.

- This specification includes:

- a) Geometric design of roads and streets
- b) Preparation of existing surface to the proper compaction, elevation and shape to receive base course or paving.
- c) Crushed stone base course only for those areas as indicated on the drawings.
- d) Asphaltic concrete road, walkways and area paving.

Asphaltic concrete road, walkway and area paving shall be installed in accordance with lines, grades, typical cross sections and details shown on the plan and detail drawings.

2. REFERENCES

Throughout this standard the following dated and undated standards/ codes are referred to. These referenced documents shall, to the extent specified herein, form a part of this standard.

For undated references, the latest edition of the referenced document (including any supplements and amendments) applies. For dated references, the edition cited applies.

The applicability of changes in dated references that occur after the cited date, shall mutually be agreed upon by NIOEC and the vendor/contractor

NIOEC-SP (NIOEC-SPECIFICATION)

[NIOEC-SP-00-10](#) " NIOEC Specification for Units "

ASTM (AMERICAN SOCIETY OF TESTING AND MATERIALS)

ASTM (M 57-80)- D 1557 02el " Laboratory Compaction Characteristics of Soil "

**AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY AND
TRANSPORTATION OFFICIAL)**

AASHTO M 147-65 " Base Course "

AASHTO M 57-80 " Material for Backfilling "

3. UNITS

International system of units (SI) shall be used in accordance with [NIOEC-SP-00-10](#), unless otherwise specified.